

Research Article

Practice Patterns of Medical Oncologists: A Survey of Advance Care Planning in the Outpatient Setting

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Introduction. Advance care planning (ACP) is an important part of cancer care. We determined the ACP practice patterns of medical oncologists at our academic cancer centre in Canada. **Methods.** Medical oncologists were invited to participate in a questionnaire in August 2019. Questions were validated by a local survey expert. Twelve multiple-choice questions were included. **Results.** Seventeen of the 23 eligible oncologists responded. 64% were male, and 76% were in practice for <16 years. Common tumour sites treated by respondents included breast (53%), lung (24%), gastrointestinal (24%), and genitourinary (24%) cancers. Oncologists responded that components of ACP included designating a substitute decision-maker (100%), determining goals of care (100%), making decisions about cardiopulmonary resuscitation (94%), and disposition of property/finances (88%). They discuss ACP with curable vs. incurable patients 6% vs. 93% of the time. While 88% of oncologists reported it would be desirable to initiate ACP discussions in the first 3 visits, in the incurable setting, only 29% reported doing so. Patient characteristics that prompt oncologists to discuss ACP in the first 3 visits in the curative vs. incurable settings include elderly age (23% vs. 59%), poor performance status (47% vs. 88%), and short prognosis (47% vs. 88%). Oncologists thought the most appropriate time to discuss ACP in the curative setting was at the time the patient initiates it (35%), and during visits 2-3 in the incurable setting (41%). The most common barriers to discussing ACP include insufficient time (71%) and too much information for the patient (71%). **Conclusions.** While medical oncologists believe that discussing ACP with cancer patients in the first few outpatient visits is important, this seldom occurs due to the presence of several barriers.

1. Introduction

Advance care planning (ACP) is an ongoing process designed to ensure patients receive future medical treatment that aligns with their unique values, goals, and preferences [1, 2]. It involves revisiting patients' future wishes continuously as their circumstances change to prepare for a possible scenario involving a loss of decision-making capacity [3]. ACP represents collaboration among the patient, family members, substitute decision-makers, and healthcare professionals (HCPs) [4, 5].

ACP is a multifaceted process. It may include the designation of a substitute decision-maker, the determination of goals of care in case of future incapacity, and the arrangement of property and finances [6, 7]. ACP can also include discussing and documenting preferences for cardiopulmonary resuscitation (CPR), intubation, and intensive care, which may take the form of an advance directive (AD) dictating the type and extent of medical care the patient desires [6, 7]. The process should involve open longitudinal communication between all stakeholders to avoid medical decisions that do not reflect the patient's goals and preferences [8, 9].

Cancer care guidelines emphasize the importance of ACP in oncologists' practices. Recent updates to the NCCN Clinical Practice Guidelines in Oncology support the initiation of ACP at earlier disease stages, when the estimated life expectancy of the patient is months to years [6]. However, studies in the United States and Australia have reported low rates of ACP discussions between oncologists and their patients in the outpatient setting [10, 11]. In an American prospective cohort study of patients with advanced lung and colorectal cancer, end-of-life (EOL) discussions among patients and their oncologists were documented in only 27% of cases [12]. A study among cancer patients admitted to the inpatient service found that only 7% discussed advance directives with their oncologists, despite 48% expressing a preference to do so [13]. Similarly, the primary setting of ACP discussions may conflict with their intended goals. For example, it is been shown that for 63% of advanced cancer patients, the first ACP discussion by any physician occurred while they were admitted to hospital [12]. This may be contrary to the purpose of identifying future goals and needs before one's decision-making capacity is at risk of becoming impaired [1], given that at the time of inpatient admission, it may already be too late for this discussion.

ACP is an important aspect of cancer care with documented benefits for patients, caregivers, healthcare professionals, and institutions. ACP has been associated with increased patient knowledge and satisfaction with their medical care without inciting feelings of hopelessness or anxiety [14, 15]. Caregivers of patients who engaged in ACP have reported improved mental health, characterized by decreased rates of major depressive disorder, prolonged grief, and bereavement [16, 17]. In addition, ACP is associated with reduced ICU admissions, less intensive care at the end of life, and reduced healthcare costs [18].

With increasing evidence supporting ACP in cancer care, there is a need to identify and address the barriers inhibiting synchrony among the recommended, desired, and actual ACP practices of oncologists. Furthermore, understanding oncologists' current approach to ACP is critical to developing strategies to guide future discussions [19, 20]. Issues related to the setting, timing, and initiation of ACP discussions must be addressed to improve patient-centred cancer care [20].

To understand the current ACP practices, values, barriers, and facilitators among medical oncologists, we performed a cross-sectional survey of practicing oncologists at The Ottawa Hospital Cancer Centre (TOHCC), a large, tertiary academic hospital in Ottawa, Ontario, Canada. TOHCC serves approximately 1.2 million people, with approximately 8,000 new referrals to the cancer centre each year, including approximately 5000–6000 yearly referrals to medical oncologists.

2. Methods

2.1. Questionnaire. A questionnaire was developed to assess the ACP practice patterns of medical oncologists, including current practices, desired practices, beliefs and values, and

the barriers inhibiting successful advance care planning in outpatient cancer clinics. The survey included 12 multiple-choice questions that were reviewed for clarity and wording by a local survey expert from the Ottawa Hospital Research Institute prior to its distribution. Questions were developed by the authors based on the research topics of interest in order to encompass the various facets of ACP. The questionnaire was not piloted. Within the questionnaire, oncologists were instructed to answer based on their routine practices, defined as their practice >50% of the time. The questionnaire was paper-based and hand-delivered to all eligible oncologists. It was done anonymously (no identifying information was collected) and voluntarily. Open answers were generally avoided, and those included were incorporated into the analysis qualitatively. See Table 1 for the list of questions included in the survey.

2.2. Respondents. All medical oncologists practicing at The Ottawa Hospital Cancer Centre (TOHCC) were invited to participate in the questionnaire in August 2019 over a 1-month period. Primary investigators and other oncology specialists (such as radiation oncologists and surgeons) were excluded.

2.3. Ethical Approval and Informed Consent Statement. The project and questionnaire obtained Research Ethics Board (REB) approval at The Ottawa Hospital (TOH). Informed consent was obtained for respondents consistent with the requirements of the REB.

2.4. Statistical Analysis. The statistical analyses were conducted in Stata (16.1, StataCorp) at The Ottawa Hospital. Comparisons were done using Fisher's exact test.

3. Results

3.1. Respondents. Of the 23 eligible medical oncologists surveyed, 17 (74%) responses were obtained. The characteristics of the study participants are listed in Table 2. The most common tumour sites treated by the respondents were breast (53%), gastrointestinal (24%), genitourinary (24%), and lung (24%) cancer. Almost half (47%) of the participants stated that they had received formal training in ACP.

3.2. Oncologists' Beliefs about ACP. All oncologists stated that the process of ACP included designating a substitute decision-maker (100%) and determining goals of care in the case of incapacity (100%). Most oncologists believed ACP included making decisions about CPR, intubation, and intensive care unit (ICU) admission (94%), and the disposition of property and finances (88%). Respondents also stated that ACP included patients' preferred end-of-life location and care (24%), and personal and spiritual goals (6%).

When asked about the early initiation of ACP in an ideal scenario, 88% of oncologists responded that it would be desirable to initiate ACP discussions within the first 3 visits.

TABLE 1: Survey questions.

Questions
(1) What tumour site (s) do you treat?
(2) What is your gender?
(3) How many years have you been in practice as a medical oncologist?
(4) Do you have any formal training in advance care planning or palliative care?
(5) In your opinion, which of the following elements are parts of advance care planning? (MC: designating a substitute decision-maker; determining goals of care in the case of incapacity; deciding about provision of CPR, intubation and ICU admission; disposition of finances/property)
(6) *In your outpatient clinical practice, for typical patients, when do you initiate routine discussions about advance care planning? (in the curative vs incurable setting: (MC) visits 1–3; after visit 3, when there are no treatment options left or patient is imminently dying; not routinely)
(7) If you ever bring up advance care planning in your outpatient clinic at the beginning of the treatment trajectory (first 1–3 visits), are there certain patient characteristics that prompt you to initiate the discussion? (in the curative vs incurable setting: (MC) elderly age, poor ECOG, anticipated short prognosis, other (specify); none)
(8) In your opinion, when is the most appropriate time for medical oncologists to initiate advance care planning discussions with their patients? (in the curative vs incurable setting: (MC) visit 1 (consultation); visits 2–3, after visit 3; when the patient initiates it; when patient is admitted to the hospital; when patient is nearing the end of life; medical oncologists should not initiate ACP in this setting)
(9) What are the barriers to initiating advance care planning discussions with patients in the outpatient clinic setting? (MC: not enough time; too much information for the patient; too emotionally difficult for the patient; these discussions shouldn't occur in a cancer clinic; these discussions should only occur when there are no treatment options left or patient is imminently dying)
(10) If there were no barriers to initiating advance care planning discussions in the outpatient setting, in your opinion, is it desirable to initiate advance care planning discussions with patients within the first 1–3 visits? (yes or no)
(11) In your outpatient practice, what proportion of patients initiate advance care planning discussions with you in each of the following 4 settings? (ECOG 0–2 curative setting; ECOG 0–2 incurable setting; ECOG 3–4 curative setting; ECOG 3–4 incurable setting: (MC) none, few, some, many, all)
(12) In your outpatient practice, among patients who initiate advance care planning discussions with you, when do they typically initiate the discussion in each of the following 4 settings? (ECOG 0–2 curative setting; ECOG 0–2 incurable setting; ECOG 3–4 curative setting; ECOG 3–4 incurable setting: (MC) none, few, some, many, all)

MC: multiple choice. *For the remainder of the questions, please assume that our definition of advance care planning is the process of planning for future healthcare decisions including designating a substitute decision-maker, determining goals of care in the case of incapacity, making decisions about heroic measures (CPR, intubation, and ICU admission), and thinking about disposition of finances/property (i.e., writing a will).

Regarding incurable patients, all respondents thought that they should initiate the ACP process at some point during patient care, and the initial consultation (35%) and visits 1–3 (41%) were reported to be the most appropriate times (Table 3).

TABLE 2: Demographics of the survey participants.

Characteristic	Value (n (%))
Gender	
Female	11 (65)
Male	6 (35)
Number of years practicing as a medical oncologist	
<5	6 (35)
6–15	7 (41)
>15	4 (24)
Tumour sites treated by participants	
Lung	4 (24)
Breast	9 (53)
GI	4 (24)
GU	4 (24)
Head and neck	3 (18)
Melanoma	3 (18)
Thyroid	0 (0)
CNS	2 (12)
Sarcoma	2 (12)
Other*	1 (6)
Formal training in ACP	
No	9 (53)
Yes**	8 (47)

ACP, advance care planning; CNS, central nervous system; GI, gastrointestinal; GU, genitourinary. *Other was “cancer unknown primary.” **Sources of formal training in ACP reported by oncologists included residency rotations, working (or rotations) in palliative care, working in hospice, and the codevelopment and teaching of an ACP training program.

Regarding curable patients, the largest proportion of respondents (35%) thought that the opportune time for ACP discussions was at the time initiated by the patient, and 12% of oncologists felt they should not engage in ACP at all with curable patients.

The following results were obtained based on the definition of advance care planning given to the oncologists: the process of planning for future healthcare decisions which includes designating a substitute decision-maker, determining goals of care in the case of incapacity, making decisions about heroic measures (CPR, intubation, and ICU admission), and thinking about the disposition of finances/property (i.e., writing a will).

3.3. Oncologists' Practice Patterns. In the incurable setting, 29% of respondents reported discussing ACP for the first time during visits 1–3, 29% after visit 3, and 35% when the patient had no treatment options left or was imminently dying. The most common patient characteristics that prompted medical oncologists to initiate ACP discussions included poor Eastern Cooperative Oncology Group (ECOG) performance status (PS) (88%) and an anticipated short prognosis (88%) (Table 4).

In the curative setting, 94% of respondents did not routinely discuss advance care planning, and 6% initiated ACP discussions during visits 1–3. Patient characteristics that prompted respondents to initiate earlier ACP discussions included patients with a poor ECOG (47%) or an anticipated short prognosis (47%). Over a third of respondents (35%) stated that no patient characteristics prompted them to initiate ACP discussions with curable patients.

TABLE 3: Time oncologists believed to be the most appropriate to initiate ACP discussions.

Time	Outpatient setting (<i>n</i> (%))	
	Curative	Incurable
At the initial outpatient consultation	1 (6)	6 (35)
Visits 1–3	2 (12)	7 (41)
After visit 3	2 (12)	3 (18)
When the patient initiates the discussion	6 (35)	0 (0)
When patients are admitted to the hospital	2 (12)	0 (0)
When patients are nearing the end of life	N/A	0 (0)
Oncologists did not think they should bring up ACP with patients in this setting	2 (12)	0 (0)
Data not available	2 (12)	1 (6)

TABLE 4: Patient characteristics that prompted oncologist to initiate ACP discussions early in a patient's care.

Patient characteristics	Outpatient setting (<i>n</i> (%))	
	Curative	Incurable
Elderly age (>80 years of age)	4 (24)	10 (59)
Poor ECOG (3-4)	8 (47)	15 (88)
Anticipated short prognosis (<3 months)	8 (47)	15 (88)
None	6 (35)	2 (12)

Other characteristics influencing oncologists' timeline for initiating ACP discussions were patient education and insight, declining cognition, major comorbidities, preference for no treatment, or discontinuing treatment early.

3.4. Perceived Barriers to ACP. The most common barriers oncologists identified to engaging in ACP included insufficient time (71%), a belief that ACP is too much information (71%), or too emotionally difficult for the patient (41%). Practicing in a cancer clinic specifically was not felt to be a barrier to ACP discussions by any respondents. Respondents disclosed that additional barriers included a lack of clinical support (such as palliative care or supplementary resources) for patients, physicians' discomfort with ACP discussions, the absence of a clear location to document the discussions, and delays in getting the "feel" for when the patient is ready to discuss.

3.5. Patient-Initiated ACP Discussions. Table 5 outlines respondents' perceptions of the proportion of patients in their practice who initiated ACP discussions (on a scale of few, some, many, or all) in the curative and incurable settings by patient ECOG PS. ECOG PS is a measure of functional status where 0 represents the ability to carry on full strenuous activity, 1 represents restrictions in physically strenuous activity, 2 represents the ability to do all self-care but not work, 3 represents the ability to do only limited self-care, 4 represents complete disability, and 5 represents death. Among incurable patients with an ECOG PS of 0–2, most oncologists reported that few patients initiated ACP discussions; few responded that all patients initiated ACP discussions. When they did take place among incurable ECOG PS 0–2 patients, these patient-initiated discussions reportedly occurred most often at the initial outpatient consultation (29%) or when nearing the end of life (29%) (Table 6). Among incurable patients with an ECOG PS of 3–4, respondents most commonly indicated that these discussions are brought up at the initial consultation (47%) (Table 6).

Oncologists reported that curable patients initiated ACP discussions less frequently, with most respondents reporting that few patients with an ECOG PS of 0–2 initiated ACP discussions. Similarly, most respondents indicated that few curative patients with an ECOG of 3–4 initiated ACP discussions. When curable patients with an ECOG PS of 3–4 did initiate the discussion, respondents stated that it typically occurred when admitted to the hospital (47%) or at the initial outpatient consultation (23%).

4. Discussion

The value of advance care planning is increasingly acknowledged in the setting of outpatient oncology practice [10, 21, 22]. We surveyed the ACP beliefs and practice patterns of local medical oncologists at The Ottawa Hospital Cancer Centre. To our knowledge, this is the first Canadian study assessing the beliefs and practice patterns of medical oncologists regarding ACP. Prior studies have observed low rates of ACP discussions between oncologists and their patients, ranging from 11 to 29% [10, 12, 23]. Evaluating the current state of ACP in the routine practices of medical oncologists may allow for the implementation of interventions promoting ACP in the outpatient cancer care setting.

4.1. Components of ACP. Respondents almost universally agreed on the important components of ACP. A consensus definition of ACP is important in guiding oncology practices and ensuring equity within and across institutions [1]. Our study's definition included designating a substitute decision-maker, determining goals of care in the case of incapacity, treatment preferences regarding CPR, intubation, and intensive care, and the handling of property and finances.

TABLE 5: Proportion of patients that initiate ACP discussions in various settings.

Proportion of patients who initiate ACP discussions	Outpatient setting (<i>n</i> (%))			
	ECOG PS 0–2		ECOG PS 3–4	
	Curative	Incurable	Curative	Incurable
Few	16 (94)	10 (59)	12 (70)	4 (24)
Some	0 (0)	4 (23)	2 (12)	5 (29)
Many	0 (0)	2 (12)	2 (12)	5 (29)
All	1 (6)	1 (6)	1 (6)	3 (18)

TABLE 6: Timing of patient-initiated ACP discussions in different patient settings.

Timing	Outpatient setting (<i>n</i> (%))			
	ECOG PS 0–2		ECOG PS 3–4	
	Curative	Incurable	Curative	Incurable
Initial outpatient consultation (visit 1)	4 (23)	5 (29)	4 (23)	8 (47)
In the first few outpatient visits (visits 2–3)	0 (0)	1 (6)	2 (12)	3 (18)
After visit 3	1 (6)	3 (18)	0 (0)	1 (6)
When admitted to the hospital	2 (12)	2 (12)	8 (47)	2 (12)
When nearing the end of life	N/A	5 (29)	N/A	2 (12)
Never	8 (47)	0 (0)	1 (6)	0 (0)
Data not available	2 (12)	1 (6)	2 (12)	1 (6)

Our respondents universally agreed that designating a substitute decision-maker was an aspect of ACP. This is well supported in other studies [1, 2, 24]. The definition of a substitute decision-maker has been found to be important, with a “trusted person or persons” preferred in the Delphi panel study by Sudore et al. (2017); it was felt that defining the substitute decision-maker as “a family member or friend” could exclude better candidates.

A topic of debate in the literature is whether ACP discussions should solely surround patients’ values and beliefs or whether medically relevant decisions should be included [24]. In our study, the majority of medical oncologists stated that ACP included making medically important decisions about CPR, intubation, and ICU admission. In their definition of ACP, Sinuff et al. (2015) separated clinically relevant decision-making and documentation from ACP discussions on values and beliefs and stated that the elected substitute decision-maker may be different in both cases. In this case, decisions regarding life-sustaining treatments such as CPR or intensive care would not be considered as a part of ACP. However, as patient values and preferences can often influence or involve their future goals of care, our definition, along with multiple others [1, 2, 25], included medically relevant decisions, and our results support that medical oncologists believe medically relevant decisions form part of ACP.

Advance directives or living wills are also often included in the definition of ACP [25, 26]. Newer definitions have focused on a combination of communication surrounding patient wishes and their subsequent documentation, as opposed to previous definitions that only focused on structured documents such as advance directives [1, 2, 27]. For instance, in a Delphi study organized by the European Association for Palliative Care, 94% of panelists agreed that advance directives should be an option discussed during ACP, but not a requirement [2]. Our definition did not specifically include the

completion of advance directives because (1) advance directives are not legally recognized in our jurisdiction of Ontario, Canada, and (2) we believe that ACP can be accomplished in multiple forms, not just written [28]. Even so, patient goals and preferences discussed during ACP can be converted into medical care plans to be actualized [24].

Most of our respondents felt that the disposition of property and finances formed part of ACP. Interestingly, the disposition of property and finances was less commonly included in definitions of ACP in the literature. Perhaps this potential component of ACP is typically felt to be less medically relevant and therefore left to other individuals in the patients’ life, or it may be incorporated in the discussion of patients’ values and wishes in definitions by other studies.

4.2. Formal Training. Less than half of the oncologists surveyed stated they had received any formal training in ACP, and of those who did, about a quarter received their ACP training during residency. A lack of formal training may be contributing to physician discomfort with ACP [29, 30]. An American survey of 736 physicians reported that those who had received formal ACP training found the discussions more rewarding rather than challenging as compared to those without any training ($P < 0.05$) [30]. Given the crucial role of the oncologist in ensuring that patients and families understand and feel comfortable with medical decisions in the context of prognosis and treatment goals [29, 31], it is surprising that so few oncologists report formal training in this matter. This highlights the need for increased and updated training for oncologists [32], as the definition of ACP and the resources available to clinicians continue to evolve [33, 34].

4.3. Timing and Setting for ACP Discussion. In the absence of barriers, the majority of oncologists thought that it would be ideal to initiate ACP discussions with their patients in the

first 1–3 visits. For incurable patients, most respondents felt that ACP should ideally be initiated during the initial consult or the first 3 visits. However, in practice, these discussions were reportedly initiated most commonly after the first three visits or when the patient had no treatment options left or was imminently dying. Deferring such discussions until the end of life can interfere with the main goals of ACP, including assisting patients in making informed and timely medical decisions throughout their treatment trajectory [1, 24, 35].

Among curable patients, few oncologists felt that early initiation of ACP discussions was important. It is therefore unsurprising that almost all the oncologists in our study did not routinely engage in ACP in the curative setting. While curative-intent patients may be less likely to imminently face the end of life, complications from cancer treatment or recurrence can be unexpected [35], and ACP among curable patients remains important [36]. The curative versus noncurative ACP discussions between patients and oncologists may differ; however, there is a need for ACP in both settings.

Interestingly, the seemingly incongruent ACP beliefs and practice patterns of medical oncologists may reflect the diverse preferences of cancer patients. In a study of medical oncology patients, 45.3% preferred the initiation of end-of-life (EOL) discussions at the time when their cancer was deemed incurable, whereas 29.5% preferred to discuss ACP at the time they initiated the discussions themselves. Only 6.9% of patients desired EOL discussions at the time of the initial consultation [10]. The physicians with whom cancer patients prefer to discuss ACP may also vary. Dow et al. (2010) reported that while 48% of cancer patients in an inpatient setting preferred to discuss aspects of ACP with their medical oncologists, 34% preferred their primary care physician, and 11% preferred their admitting physician. Therefore, if physicians are taking cues from their patients, they may perceive significant variation in the preferred timing and setting for ACP discussions. To account for differing patient beliefs, ACP should be treated as a continuous, patient-centred process that considers patient characteristics and wishes when initiating and conducting discussions [1, 37]. Because the optimal timing of ACP discussions may be difficult to determine, the best practice may be to simply ask the patient [38].

4.4. Barriers. Oncologists in our study reported multiple barriers to the initiation of ACP discussions. Insufficient time and a fear of overwhelming patients with too much information were the most common barriers identified. Multiple studies have also reported a lack of time as the primary barrier to ACP discussions [30, 39, 40], which has prompted interventions utilizing nonphysician resources to increase patient knowledge on ACP [32]. Patient resources such as educational CPR videos or narratives could decrease the time burden of ACP, with the potential to facilitate earlier, quality discussions with physicians and other members of the healthcare team [15]. There should be

a designated section for ACP documentation in electronic health records that can be easily accessed and updated. Furthermore, ACP documentation should be centralized and accessible by different healthcare professionals across institutions. This would allow for value-aligned care regardless of the patient's location and a continuous ACP that can be updated throughout the patient's treatment trajectory.

4.5. Patient Characteristics Prompting ACP Discussions. Our study results suggest that medical oncologists are prompted to initiate sooner ACP discussions if a patient has a poor ECOG PS, an anticipated short prognosis, and/or elderly age. These characteristics may correlate with a shorter life expectancy. In this way, oncologists' ACP practices may be in accordance with palliative care guidelines recommending the initiation of ACP when patients have an estimated life expectancy of months to years [6], and in reality, it is likely often initiated sooner in the setting of poor prognosis malignancies.

4.6. International Perspectives. Our centre is in a multicultural region. Research around the world has highlighted the cultural implications of advance care planning and palliative care, including the impact of limitations in palliative care resources and the cultural propensity to deny death, which may hamper ACP discussions in Columbia [41, 42]. In Asia, the important role of families has been highlighted in ACP [43]. As such, education about ACP must be adapted to particular cultural settings.

4.7. Study Limitations. The limitations of the study include its small sample size that may not be representative of all medical oncologists; however, there was a high response rate of 74%, indicating that the survey captured the views and practices of the medical oncologists at our centre well. It was a single-centre study; therefore, it may not comprehensively reflect the beliefs and practices of oncologists at different institutions. As the questionnaire was completed based on the opinions and recollection of the medical oncologists, the accuracy of the responses may be limited due to recall bias and desirability bias.

4.8. Clinical Implications. ACP is valued by both patients and physicians. Educational and supportive resources for both patients and oncologists are needed to overcome the barriers to effective ACP and ensure that cancer patients in the outpatient setting receive value-aligned medical care.

5. Conclusions

ACP is a collaborative process for cancer patients, their families, oncologists, and other members of the healthcare team. There are clear benefits to ACP in oncology; however, the practice patterns of oncologists may be inconsistent with current cancer care guidelines. Ascertaining the actual and desired practice patterns of oncologists, the precipitating

patient factors, and the barriers faced when initiating ACP is essential towards understanding the gaps in knowledge and resources encountered during this process.

Data Availability

The data that support the findings of this study are available on request from the corresponding author pending approval from the Research Ethics Board. The data are not publicly available due to privacy or ethical restrictions.

Disclosure

The abstract has been previously published [44].

Conflicts of Interest

The authors declare no conflicts of interest.

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