Innovative Training Program in Advance Care Planning

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Innovative Training Program in Advance Care Planning

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Title: Innovative Training Program in Advance Care Planning

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Background: Advance care planning (ACP) is a key component in achieving high quality care for patients approaching the end of life. Clinician factors, such as self-doubt and fear of taking away hope, are among the most significant barriers to carrying out successful ACP discussions in current clinical practice. These barriers may be related to inadequate training in end of life communication and care at all levels of medical education. These training deficits have been shown to exist even within the field of oncology, where the need for proper ACP is especially high. Here we describe a training program for oncology clinicians at the Dana-Farber Cancer Institute (DFCI), designed based on the methods known to be most effective in adult continuous professional development.

Methods: As part of the larger Serious Illness Care Project at DFCI, 52 oncology clinicians attended a 2.5 hour training session in ACP and communication skills led by 1-2 experienced palliative care educators. Training sessions were composed of three main parts: cognitive input (interactive lecture with review of current status of end-of-life care and a structured approach for carrying out ACP discussions); modeling (demonstration of an ACP discussion between faculty and standardized patient); and practice of key skills (observed role-play exercise between clinicians and standardized patient with feedback). Before and immediately after the session, all clinicians completed surveys regarding their attitudes towards ACP and their confidence in skills related to ACP/communication. Clinicians also completed an anonymous training evaluation form.

Results: The mean rating of the session was 4.38/5, accompanied by positive open text feedback. Clinicians felt the most effective aspects of the session were the demonstration and role-play exercise. There were no statistically significant changes in confidence or attitudes following the intervention based on self-rated surveys. On anonymous evaluation forms, 90.2% of clinicians reported that they felt the session enhanced their confidence in talking to patients and 92.2% felt it improved their skill in conduction discussions about end-of-life care. 98% of clinicians carried out at least one conversation within their clinical practice following the session.

Conclusions: Our results suggest that this model of training might be a means to promoting a needed change in ACP practices within the field of oncology, in a manner that is both time-effective and acceptable to clinicians.

DESCRIPTION OF STUDENT CONTRIBUTION:

For my scholarly project, I worked on the Dana-Farber Cancer Institute trial of the Serious Illness Care Project at Ariadne labs. My project focused specifically on the effect of the training sessions on clinician confidence, attitudes, and behavior within this trial.

As the DFCI trail is 4 years in duration, the clinician training sessions began prior to my joining Ariadne Labs. I was therefore not able to play a large role in the design or initial execution of the training sessions themselves. I did, however, attend multiple training sessions throughout the year as an observer and partial-facilitator. This enabled me to accurately describe the training sessions in the methods section of my paper, and help improve later training sessions and contribute to the design of similar training programs being implemented by the team elswhere.

Entry at this later point in the trial was advantageous, however, in that all of the training sessions were completed towards the end of my year with the Serious Illness Care team. I was therefore able to access a complete set of data for analysis of the training overall. My main contribution was thus in the form of analysis and writing. I personally carried out statistical analysis of the data from the Clinician Confidence, Clinician Attitude, Anonymous Training Evaluation Forms, and Clinician Acceptability Surveys (as described in the text). This involved learning how to use software such as WINPEPI, with assistance from a statistician on the Serious Illness Care Team, and determining the ideal way to present this data. All of my work was later verified by the statistician on the team.

As the first author, I wrote all sections of the original manuscript to be submitted myself. This involved completing an extensive literature review of the current status of ACP/training in end-of-life care/communication training for background knowledge and determining how the manuscript could best contribute to the existing field. I used the data obtained from our training sessions to evaluate the effectiveness of the intervention and to create a meaningful discussion about the results discovered. I worked closely with my PI, Rachelle Bernacki, during all stages of development of this manuscript.

All other authors (Rachelle Bernacki, Joanna Paladino, Susan Block) were vital in the design and execution of the training sessions/study materials themselves, and provided edits/feedback throughout the writing process.

APPENDIX:

Innovative Training Program in Advance Care Planning

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BACKGROUND

Advance care planning (ACP) is a key component in achieving high quality care for patients with serious illness[1,2] and optimal care at the end of life. Unfortunately, most physicians today fail to either initiate or to properly execute the process of ACP with their seriously ill patients[3]. As a result, end-of-life care too frequently involves overly aggressive medical interventions[4, 6-7], poorly coordinated transitions of care[76], unnecessary stress for loved ones[7], and high costs[4-7].

Clinician factors are significant barriers to successful ACP and actually may have more impact than patient or system factors[8, 9]. For example, clinicians are reluctant to initiate ACP discussions because of the belief that it will harm their patients and take away hope[75]. Evidence suggests, however, that these discussions do not cause patients significant psychological harm, such as anxiety or depression, nor loss of hope[10], and may even decrease patient anxiety and improve quality of life for patients near death[10-13]. Clinicians also hesitate to initiate ACP discussions because they lack confidence in their communication skills, ability to prognosticate, and competence at conducting such discussions[14]. This self-doubt prevents clinicians from having candid conversations with patients about their illnesses, and from sharing prognostic information that patients would otherwise use to make important decisions about treatment[15-17]. Furthermore, when clinicians *do* attempt to have ACP discussions with their patients, this discomfort leads them to do so inadequately; focusing on technical interventions rather than patient values, concerns, and goals of care[18]-- which are critical for appropriately guiding care when near death.

These barriers might not exist today if clinicians were sufficiently trained in end of life care and the skills required for effective ACP. Unfortunately, clinician training in ACP is inadequate[19-21]. Despite recognizing the importance of learning to provide care for patients as they approach the end of life[19], most medical students, residents, and fellows across the country report minimal formal training in end-of-life care, and feel the training that *is* currently in place does not prepare them for future ACP discussions[19-22]. Even within the field of oncology, where clinicians give bad news to patients an average of 35 times per month[23], most physicians do not feel adequately trained in communication skills, breaking bad news, or providing care towards the end of life[20,24-26]. In fact, in a survey of oncology fellows, only 26% reported being explicitly taught how to help patients/families with reconciliation and goodbye, and only 55.2% to discuss stopping antineoplastic therapy and focus on palliative care[20]. In addition, only 6% of physicians report formal training on delivering poor prognosis, and 74% had no consistent plan or strategy to do so[24].

As these training and practice deficits gain attention, respected organizations such as ASCO[32] and IOM[33] have issued reports urging improvement in practices surrounding end-of-life care for cancer patients. Some progress has been made towards achieving this goal, such as the identification of core competencies in palliative care for training medical students and residents[30], the publication of consensus-based guidelines for palliative care[73,74], and increased integration of palliative care into oncology programs within the US[22]. However, the gap in both education and clinical practices still remains, and national organizations continue to endorse training in end of life and communication care as a priority for oncologists[31,33-38].

To address this problem, various courses have been implemented to improve clinician practices surrounding ACP and end-of-life care[52,58-60].However, whether this training is sufficient to alter clinician behavior and patient outcomes has not been as well studied[40]. The most effective methods include using a multi-modality, learner-centered, interactive approach, and incorporating both modeling of behavior and hands-on practice with learned skills[41-43]. Specifically, the most successful courses contain the following three components: cognitive input (proving the need for change and providing evidence for the skills required to achieve it), demonstration of key skills, and skills practice with constructive feedback[56]. Courses that are longer in duration with multiple iterations are also more effective, though harder to implement in a typical clinical practice[41]. In order to affect meaningful change in end of life care practices, however, interventions also need to address the deeply ingrained attitudes, beliefs, and overarching culture surrounding the subject[44-48]. Results from ACP and communication interventions within oncology (that were designed using these principles) suggest that there *is* potential for training to improve clinician competencies and thus cause behavior change[28, 49-55].

Here we report the effect of a clinician training program developed as part of the Serious Illness Care Program at the Dana-Farber Cancer Institute (DFCI). The training program utilizes the methods known to be most effective in adult continuous professional development, as described above, and provides clinicians with a structured approach for carrying out ACP discussions in the clinical setting.

METHODS:

Participants:

All clinicians (physicians and associated NP/PAs) within the following disease centers at Dana Farber Cancer Institute (DFCI) and its satellite clinics were invited to participate in the study : breast oncology, gastrointestinal oncology, head and neck oncology, genitourinary oncology, leukemia program, lymphoma program, melanoma, neuro-oncology, sarcoma, and thoracic oncology. Clinicians who volunteered to participate were randomized into either the intervention group or the standard care group.

Training Session:

Clinicians in the intervention group attended an initial 2.5-hour training session held at the DFCI. Approximately 4-6 clinicians attended each session. Training was led by 1-2 experienced palliative care educators. Sessions were designed based on the teaching methods proven most effective for communication training and changing clinician behaviors, as outlined above (Figure 1). All training sessions were thus composed of three main parts: cognitive input, modeling, and practice of key skills.

1. Cognitive Input

Reflection -Each group started with a reflective exercise; participants were prompted to think about an instance where communication about goals of care impacted a patient and family and then asked to share their experience. This exercise helped to engage learners to focus on the impact of communication and its importance in delivering patient-centered care.

Interactive Lecture- At each training session, one of the project leaders led a 30-minute interactive lecture, which reviewed recent literature about the status of end-of-life care, including patient experiences at the end of life, discussions with clinicians and the impact of these discussions and end-of-life experiences on family and caregivers[61-65]. The most common barriers to ACP and strategies for overcoming these barriers were also explored. The lecture was accompanied by a reference guide that reviewed the learning objectives of the training session and provided scripting for challenging situations that arise during ACP discussions in clinical practice. Some of the scenarios addressed in the reference guide included: patients expressing intense emotions; patients unwilling to participate; getting off track; making important medical recommendations; and discussing code status.

Introduction to Serious Illness Care Guide- The *Serious Illness Care Guide* is a tool that was developed by the research team at DFCI to guide clinicians in carrying out effective ACP discussions with seriously-ill patients and their family members[72]. Use of the guide ensures that key topics are addressed in a patient-

centered manner; specifically, that patients are given the opportunity to communicate their wishes as they approach the end of life. The hypothesis is that adherence to the guide enables clinicians to elicit vital information that can be used to develop plans of care that are more aligned with patient values and goals.

2. Modeling

Clinicians observed faculty demonstrate use of the *Serious Illness Care Guide* in a serious illness care planning discussion, role-played with an actor. After the demonstration, the clinicians and trained actor were given an opportunity to debrief the conversation, with focus on: the content of the encounter, the clinician's communication skills, and effective use of the guide during the discussion. Following the demonstration, participants were encouraged to reflect on their reactions to the conversation and on how similar or different it was to their usual practices.

3. Skills Practice

Clinicians were divided into small groups of 2-3 clinicians, a trained actor, and an experienced palliative care faculty member for this portion of the training. Each clinician was given approximately 15 minutes to carry out a discussion using the guide with the actor. The faculty observed the conversation, invited the clinician to reflect on their experience first, and then asked the clinician what they had difficulty with, providing feedback to the clinician, as appropriate, based on a Structured Observation form. The Structured Observation Form evaluated the clinician's patient-centered interviewing skills, coverage of the key topics outlined in the guide, use of silence, and response to emotion. "Time outs" were available when clinicians encountered difficulties during the conversation. The group then discussed strategies to address challenges the clinician encountered; suggestions about language and scripting were provided by the facilitators, as needed. Each clinician had an opportunity to practice using the Serious Illness Conversation Guide.

Large Group Debrief—Following the role plays, clinicians reconvened into the larger group to provide feedback on the use of the guide and training session overall. Project leaders explained the clinicians' role in the study and instructions for documenting the information elicited from SICG discussions in the electronic medical record (EMR).

Figure 1. Structure of Training Program. Design of the clinician training session based on techniques proven to be most effective for teaching communication skills[56].
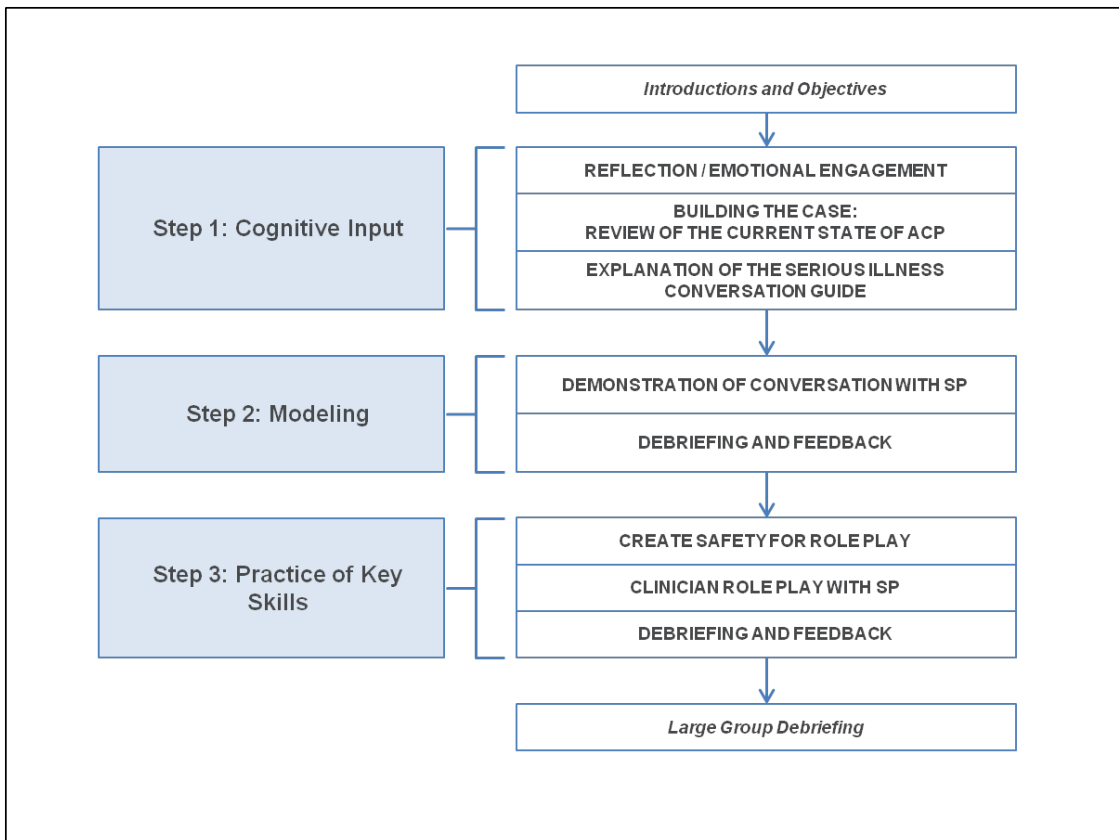
Conversations:

After completing the training, clinicians were asked to conduct guided discussions with patients in their clinical practices[70]. Patients were selected based on clinicians answering "No" to the question, "Would you be surprised if this patient died within a year?" from a list of patients in his/her current practice[71]. Once a patient was enrolled, clinicians were prompted, or "triggered", by the study staff to have the guided conversation at that patient's next regularly scheduled appointment. Triggers consisted of an email reminder the day prior to the patient's appointment and a packet containing the guide placed in the patient's medical chart.

Clinician Outcomes:

"Clinician Confidence" and "Clinician Attitude" surveys were administered to all intervention clinicians at the time of enrollment into the study and immediately after completing the initial training session. "Clinician Confidence" surveys asked clinicians to rate their skill levels at tasks related to general communication, prognostication, and discussing ACP. "Clinician Attitude" surveys ascertained physicians' beliefs regarding the practice of ACP and a provider's overall role in end-of-life care.

Clinicians also completed an anonymous "Training Program Evaluation" form immediately after the initial training, which evaluated the training. Finally, each clinician completed a "Clinician Acceptability" survey immediately following his/her first guided conversation with a patient.

The "Clinician Confidence", "Clinician Attitude", and "Clinician Acceptability" surveys were developed by the research team at DFCI based on items shown to have good construct validity and internal consistency reliability[50] from national surveys evaluating attitudes about end-of-life care, as well as the Harvard Medical School Center for Palliative Care's faculty development program[27,52].

RESULTS:

131 clinicians at DFCI and its satellite clinics were invited to participate in the SICP study. 96 clinicians (73%) volunteered to participate. 52 of the clinicians who volunteered were randomized into the intervention arm and attended the training session (Table 1).

Table 1. Clinician Demographics. Demographic information for clinicians in the intervention group, all of whom participated in the training session.

Clinician Characteristics	
Gender • Male, n (%) • Female, n(%)	19 (37%) 33 (63%)
Degree, n (%) • MD • NP • PA	38 (73%) 11 (21%) 3 (6%)
Oncology Clinic Type, n (%) • Breast • Gastrointestinal • Genitourinary • Head and Neck • Hematologic • Lymphoma • Melanoma • Neurology • Sarcoma • Satellite Clinics • Thoracic	10 (19%) 6 (12%) 5 (10%) 3 (6%) 2 (4%) 4 (8%) 5 (10%) 3 (6%) 5 (10%) 4 (8%) 5 (10%)
Percentage of Time Spent in Clinic (mean, range); n=51	68%, (2-100%)
Years in Practice (median, range)	9.0 (0.5-34.0) *n=45*

All volunteer clinicians completed *Clinician Confidence* and *Clinician Attitude* surveys at the time of enrollment. For both surveys, there was no statistically significant difference between the responses of the intervention and control groups. Clinicians in the intervention arm completed both of these surveys again immediately after the training session (Table 2-3).

Table 2: Confidence Levels. Self-reported skill ratings for intervention group clinicians from the *Clinician Confidence* survey, completed both prior to ("Pre-") and immediately after ("Post-") attending the training session. *Scale: 1=Very unskilled, 7= Very skilled.*

Area of Clinician Confidence	Rating of Skill Level Mean (±SD)	
	Pre-	**Post-**
General Communication Skills		
Demonstrating empathy	5.80 (± 0.9)	5.65 (± 1.0)
Responding to a patient's emotions	5.38 (±0.9)	5.29 (± 1.2)
Eliciting patient goals	5.02 (±1.1)	4.88 (± 1.1)
Using therapeutic silence	4.46 (±1.4)	4.75 (± 1.5)
ACP-related Communication Skills		
Discussing palliative care	5.48 (±1.1)	5.25 (±1.4)
Knowing how to work collaboratively with palliative care specialists	5.31 (±1.2)	5.27 (±1.4)
Discussing discontinuing disease-modifying therapy	5.27 (±1.2)	5.06 (±1.1)
Discussing EOL issues with my patients	5.00 (±1.1)	4.98 (±1.2)
Inquiring about patient fears and worries about disease progression	4.96 (±1.3)	4.77 (±1.4)
Assessing patient views on tradeoffs necessary for extending life	4.81 (±1.1)	4.55 (±1.1)
Assessing patient views on functional impairment	4.62 (±1.2)	4.67 (±1.3)
Health Care Proxy		
Explaining what a health care proxy is	4.98 (±1.3)	4.94 (±1.0)
Talking with patients about who their health care proxy should be	4.83 (±1.5)	4.75 (±1.2)
Prognosis		
Determining when to refer patients to hospice	5.31 (±1.0)	5.12 (±1.0)
Telling a patient he or she has a poor prognosis	5.15 (±1.2)	4.88 (±1.2)
Telling a patient he or she is dying	5.04 (±1.3)	4.79 (±1.3)
Determining how much information to tell a patient regarding prognosis	4.94 (±1.1)	4.75 (±1.5)
Assessing patient understanding of prognosis	4.84 (±1.1)	4.88 (±1.2)
Estimating prognosis	4.67 (±1.0)	4.62 (±1.2)
Reconciliation		
Managing my own stress in caring for the terminally ill	4.62 (±1.4)	4.33 (±1.1)
Helping families with reconciliation and good-bye	4.33 (±1.4)	4.31 (±1.2)
Helping patients with reconciliation and good-bye	4.25 (±1.3)	4.25 (±0.0)

Table 3. Clinician Attitudes. Attitudes of intervention clinicians towards advance care planning, obtained from *clinician attitude* surveys completed before("Pre-") and immediately after ("Post-") the training session. *Scale: 1= Strongly disagree, 2= Somewhat disagree, 3= Neither agree/disagree, 4= Somewhat agree, 5= Strongly Agree.* **A statistically significant change in attitude was seen in response to this prompt after participating in the training program (p= 0.02).

ATTITUDE S RELATED TO ACP	PRE-		POST-	
	% 4 and 5	% 1 and 2	% 4 and 5	% 1 and 2
Clinicians have a responsibility to help patients prepare for death.	98%	2%	98%	2%
Speaking with a patient about the possibility of her/his death takes away her/his hope.	10%	63%	10%	69%
Clinicians should recommend medical treatments that will help the patient meet his/her life goals.	90%	4%	92%	0%
Usually, when clinicians discuss patients' fears about the future, patients become upset.	15%	37%	25%	40%
Advance care planning is a basic responsibility for clinicians.	92%	2%	96%	0%
I think that talking about end-of-life issues lowers patients' quality of life.	4%	88%	4%	90%
Meeting the psychosocial needs of dying patients is my responsibility.	86%	0%	90%	0%
Working with dying patients is rewarding for me.	75%	2%	79%	0%
Physicians should not discuss prognosis with patients.	2%	98%	0%	96%
Physicians should disclose prognosis only when asked by the patient.	6%	81%	4%	78%
Physicians should disclose prognosis without using numbers. **	29%	27%	23%	46%

Clinician confidence did not change significantly following the training. Similarly for *clinician attitudes*, the only prompt with a statistically significant change was "Physicians should disclose prognosis without using numbers" (*p*=0.02). Clinician reporting of the "ideal timing" for initiating discussion and planning of end-of-life care with a patient expected to die of his/her disease also did not change; the mean response prior to training was 7.49 (SD=5.78; Range= 2-36; IQR=6-6) months before death, and after the training was 7.78 (SD=4.11; Range=2-24; IQR=6-12) months before death.

51 of the 52 trained clinicians completed the anonymous *Training Program Evaluation* form at the end of their training session (Tables 3-5).

Table 4. Training Evaluation Form— Rating of Components.
Clinicians' evaluation of the listed components of the training program in response to the question, "How much did each of the following elements of the program contribute to your learning today?" *Scale: 1=Not at all; 3= Somewhat; 5= A great deal.*

Component of Training Program	Clinician Rating	
	% 4 or 5's	Mean
Reading materials	60.4%	3.77
Introduction/Reflection	78.0%	4.08
Discussion of evidence base for end-of-life communication	77.5%	4.23
Discussion of values and goals communication challenges	84.3%	4.47
Review of checklist and orientation materials	92.2%	4.41
Demonstration of checklist-guided discussion	94.1%	4.69
Debriefing of checklist-guided discussion	94.1%	4.59
First ("easy") role play	92.2%	4.49
Feedback received on "easy" role play	92.2%	4.55
Second ("hard") role play	90.7%	4.49
Feedback received on "hard" role play	95.4%	4.53
Wrap up discussion/group debrief	82.4%	4.29
Reference Guide for Clinicians	83.3%	4.36

Table 5. Training Evaluation Form—Confidence in Implementation. Clinicians' confidence in implementing the listed skills related to ACP discussions, as obtained in response to the question, "To what extent do you feel able/comfortable implementing the following practices in your next discussion with a patient about end-of life issues?" *Scale: 1=Not at all; 3= Somewhat; 5= A great deal.*

Skill related to ACP Discussions	Clinician Rating	
	% 4 or 5's	Mean
Using silence to allow patient to take in information or express emotion	86.3%	4.26
Acknowledging difficult emotions during conversation	90.2%	4.26
Responding to patient/family emotion	94.1%	4.31
Eliciting patient concerns	92.2%	4.29
Speaking less than 50% of time in this discussion	60.8%	3.80
Knowing what to do in challenging situations	64.7%	3.71

Table 6. Training Evaluation Form— Perceived Effect of Training. Clinicians' perception of the training program's effect on their confidence and skill levels in areas related to ACP, as reported in response to the prompts listed below. *Scale: 1=Not at all; 3= Somewhat; 5= A great deal.*

Area Affected by Training	Clinician Rating	
	% 4s or 5s	Mean
Overall, how effective was this session in enhancing your confidence in talking with patients in the format described?	90.2%	4.24
Overall, how effective did you find this program to be in improving your skills in conducting a discussion about end-of-life care?	92.2%	4.33

42 out of the 52 trained clinicians completed at least one guided conversation with a patient in their practice. 41 clinicians (98%) completed at least one conversation within the first 3 triggers by the study staff. 40 of the clinicians who had carried out a guided discussion completed the *Clinician Acceptability* survey following their first conversation. In this survey, 51% of clinician (n=33) reported that the timing of their conversations was different from that of their usual practice, and 45% (n=33) said the guided conversation was different in structure from their usual end-of-life conversations.

DISCUSSION

The Serious Illness Care Program training program proved feasible to implement and for physicians to attend. 51/52 DFCI clinicians randomized to the intervention arm—with a mean of 68% of their time spent in clinical practice (Table 1)—were able to attend the entire session, suggesting feasibility of a 2.5 hour course in an academic oncology practice. While most existing palliative care and communication courses tend to be longer in duration and more intensive, they are also more difficult to implement.

The session was well received by clinicians, with an overall rating of 4.38/5 (Table 4). Open text feedback from the *Training Evaluation* form was generally positive, expressing satisfaction with the training session and motivation for continued practice of learned skills after the course. Many clinicians also endorsed valuable insight gained from the session; for example, clinicians wrote that the training session caused them to "reflect on their practices", and realize that "patients appreciate clinicians initiating these types of discussions" and "actually want more information...and do better with that information than when they don't get it". One clinician shared that after the training session he/she realized that "focusing on overall values/goals rather than procedures and interventions *does* surprisingly allow [clinicians] to elicit real, achievable, information." Another clinician commented that he/she now appreciated that "[ACP discussions] are very important, [clinicians] can always improve, and support is out there."

Clinicians felt that the most effective parts of the training were the demonstration of a discussion with an actor and the role-playing exercise with associated feedback (Table 3). In the open text portion of the evaluation form, multiple clinicians wrote that "the role play was very helpful," and several suggested that more time in the session be devoted to that activity. This is well aligned with current pedagogy in effective methods for communication training[41, 56], though is difficult to implement, as both activities are time-consuming and expensive. While these components of the training session are essential for communication training, they pose challenges for scalability, as using actors and small group role-play with expert faculty may be cost prohibitive in some settings. When such resources are not readily available, reasonable alternatives include using clinicians to act as the patient during the mock discussions and training facilitators on the relevant/key aspects of communication within palliative care.

While there was no statistically significant change in self-reported skill level ratings after the session based on the *Clinician Confidence* surveys, 92% of clinicians said that the training session increased their skill in conducting ACP discussions with patients, and 90% said it enhanced their confidence in doing so (Table 6) in the anonymous *Training Evaluation Form*. This disconnect may be due to a response-shift

bias; a bias in measuring change that occurs when exposure to an intervention causes participants to adjust the way they judge their own competence. Exposure to our intervention was likely to have heightened the clinicians' awareness of the skills and knowledge required to carry out successful ACP discussions, causing them to reassess their abilities, and thus, shift the framework they used to rate their competence after the training. Consistent with this explanation, self-reported skill ratings tended to be lower following participation in the training session.

Attitudes also did not change significantly after the training, which is not surprising considering the limited extent of our one-time 2.5-hour intervention. Responses to this survey did confirm that, despite current practices in ACP, clinicians do recognize the importance of having ACP discussions with their patients and feel responsible for helping patients prepare for death (Table 2).

Interestingly, our evaluation also uncovered a common difficulty clinicians have with using silence as a communication skill. Previous studies have shown that clinicians interrupt patients within only 12-18 seconds of them speaking[66, 67], and in doing so, impede patients in addressing their personal goals for the encounter approximately 74% of the time[68]. Physician use of silence is also thought to be a key factor in determining patient satisfaction[69]. In the *Training Evaluation* form, only 61% of clinicians reported feeling comfortable speaking less than 50% of the time during an ACP discussion (Table 5). In the open text portion of this form, "therapeutic silence", "using silence" or "talking less" were the most common responses to the question, "what is the most important thing you learned in this workshop?" (26%, n=34). Similarly, "using therapeutic silence" was one of the lower rated self-reported skills. These data may highlight a key insecurity shared by clinicians, and suggest that silence is an important communication skill to be emphasized in advance care planning training.

Fully assessing the effectiveness of our training requires examining, not only self-reported survey data, but also the impact of the training on clinician behavior[57]. During the role-play with a simulated patient portion of the training session, clinicians were given the chance to demonstrate their proficiency at the skills attained during the session (Figure 2-"Shows How"). After the training, 81% of clinicians carried out at least one conversation with a patient, majority of which were initiated with 3 triggers or less (Figure 2- "Does"). Of note, though enrollment in the trial created an added incentive for behavioral change, clinicians were not given additional time or RVUs to have these conversations and thus face the same barriers to ACP as they would outside the context of this trial. The primary difference between clinician's usual practice and the trial were thus the "triggers" before a patient's appointment, which were intentionally limited in extent. Acceptability surveys revealed that after the first conversation,

approximately half of the clinicians felt the guided conversation was different in timing and structure than the conversations held in their practice prior to the trial. While we could not directly observe and evaluate communication skills during each conversations due to logistics, roughly 10% of conversations will be chosen at random to be recorded, and will be evaluated formally at the end of the trial.

Figure 2. Miller's Triangle[57]: Framework for Clinical Assessment.
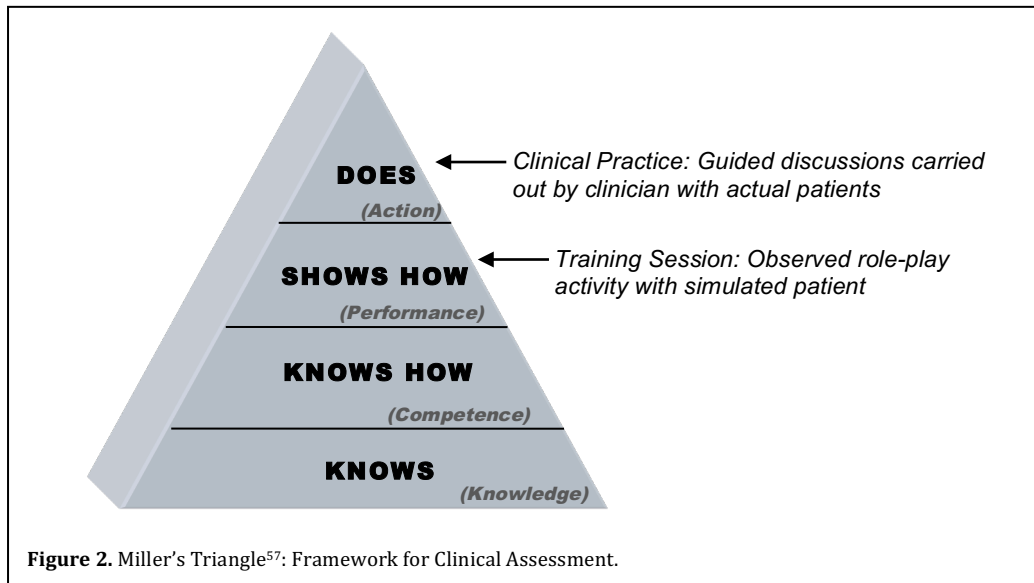
Limitations:

There are several limitations to this study. The trial was conducted at a single site, the Dana-Farber Cancer Institute, and all participants were Hematology/Oncology clinicians. The intervention also occurred in an academic setting with trained palliative care faculty, which may limit generalizability. Future interventions carried out by the Serious Illness Care Program will expand beyond the Dana-Farber Cancer Institute and include clinicians outside the field of hematology/oncology.

Summary:

Overall, the training session was feasible and well-received. While this one-time training session did not cause significant changes in clinician attitudes or confidence, the effect of practice and reinforcement of the skills learned in the training session within clinical practice will be evaluated at the completion of the larger Serious Illness Care Program trial at the Dana-Farber Cancer Institute. Our results suggest that a similar training program could be successfully incorporated into clinical practices elsewhere, promoting a needed change in end-of-life care practices, and in a manner that is both time-effective and acceptable for clinicians.

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