

QUALITY IMPROVEMENT

Serious Illness Conversation Training for Inpatient Medical Oncology Advanced Practice Providers: A Quality Improvement Project

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<https://doi.org/10.6004/jadpro.2023.14.1.3>

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Abstract

Background: Hospitalized advanced cancer patients and their families are inadequately informed about their cancer diagnosis and prognosis, which limits educated and reasonable decision-making for their care and end-of-life planning. **Objectives:** The primary objective of this evidence-based project was to enhance serious illness conversations (SICs) with advanced cancer patients by providing advanced practice providers (APP) training and to increase the frequency of SIC documentation in the electronic medical record (EMR). **Methods:** SIC training included a 45-minute Zoom video recording and 30-minute discussion groups. Advanced practice providers' beliefs and self-efficacy were measured pre- and post-training via a survey. Prior training was queried in the pre-survey. Data from APP discussion groups were summarized and themes identified. Serious illness conversation documentation frequency was measured. Pre- and post-survey differences were assessed using Wilcoxon rank sum tests. **Findings:** 19 inpatient medical oncology nurse practitioners and 6 physician assistants participated. Many reported little formal training yet are engaging in SICs regularly. Scores on both the belief and self-efficacy survey sections were high prior to training and did not significantly change following training. Despite the high pre-survey scores, many of the APPs verbalized the need for more training to improve their confidence and to learn SIC communication skills. Training significantly improved the APP's ability to manage their own emotions and be present. This indicates a trend toward improved APP comfort with SICs. Accessible documentation in the EMR increased with training.

The American Cancer Society estimated in 2022 there would be 1.9 million new cancer cases, 609,360 cancer deaths, and 18 million cancer survivors in the United States (National Cancer Institute, 2022). These large numbers reflect the magnitude of people living with cancer. The primary site for 70% of new cancer diagnoses are solid tumors, such as lung, prostate, pancreatic, colon, and breast. Unfortunately, solid tumors contribute to 68.5% of cancer deaths (American Cancer Society, 2020). Nearly 40 million people worldwide are in need of palliative care in addition to traditional medical care (World Health Organization, 2020). The Centers for Disease Control and Prevention (CDC) estimates 1.4 million Americans are currently using hospice services (CDC, 2022), and patients with cancer account for approximately 34% of people who would benefit from palliative care (World Health Organization, 2020).

Advancements in oncology care extend life but have created a challenging crossroads between medical futility and quality of life (Lutz et al., 2018). Many patients die without the benefit of aligning their end-of-life preferences with the plan of care; they have discussions too late to realize any benefits (Temel et al., 2010). Unfortunately, the evidence shows that serious illness conversations (SICs) often occur when death is imminent, so there is little opportunity to pursue a reasonable and preferred end of life consistent with the patient's wishes (Mack et al., 2012; Emiloju et al., 2019). Patients and their families are not aware of realistic options nor prepared to adjust to predictable outcomes and are unfamiliar with helpful palliative interventions. Many are simply unprepared to die (Almalki et al., 2020; Shirado et al., 2013). Serious illness conversations can reduce symptom intensity, readmission rates, anxiety, length of stay, and critical care intervention. They can increase hospice referrals and health-care utilization (Apostol et al., 2014; Gieniusz et al., 2018; Gilligan et al., 2018; Hanson et al., 2017; Haun et al., 2017; Starr et al., 2019).

Advanced practice providers (APPs) have a unique role that blends having a clinical relationship with the patient and serving as a liaison to the rest of the health-care team. Advanced practice provider education includes communication

technique training that can be adapted to initiate and lead productive, insightful, and sensitive topic conversations. They possess the knowledge to address common disease-related questions and questions on treatments, side effects, plan of care, and disease natural course. In addition, APPs frequently have the time and skills to guide and counsel the patient and family in disclosing and discussing their true thoughts, emotions, and questions regarding their serious illness (Brunooge et al., 2018).

The purpose of this evidence-based project was to ascertain the APP's SIC knowledge and perceptions, as well as confidence in conducting SICs, then present introductory SIC training with group discussions to share experiences and benefit from the collective expertise. The goals were enhanced SIC knowledge and comfort and increased accessible documentation. The objectives were to (1) query APP participants' previous SIC training, (2) survey APP SIC beliefs and self-efficacy pre- and post-training, (3) provide introductory SIC training focused on SIC value, barriers, improved outcomes, self-efficacy, and techniques, (4) evaluate APP SIC perceptions, shared experiences, and training, and (5) increase the frequency of accessible SIC documentation.

This project's significance lies in the unsatisfactory state of end-of-life care in the United States (Lutz et al., 2018) despite policies such as the Patient Self-Determination Act of 1990. The mean number of days an advanced cancer patient transitions from comfort care to death is 3, and the mean number of days between hospice referral and death is 12 (Ernecoff et al., 2019). This provides little time to identify and accomplish any final wishes prior to death and adjust treatment intensity to realistic goals (Pfeil et al., 2014). To enable informed decisions and determine best care requires APPs' belief in SIC effectiveness as well as knowledge of, preparedness with, and comfort in conducting SICs (Tam et al., 2019).

BACKGROUND

Irrespective of cancer type, SICs can serve as a catalyst to improve quality of life and less aggressive therapy (Apostol et al., 2014; Emiloju et al., 2019; Prod'homme et al., 2018). Initially, the patient may hope for the disease to respond to con-

ventional treatment. When disease control is no longer possible, the patient and family goals may shift to ease symptoms, address personal issues, or identify where the patient wishes to die (Apostol et al., 2014; Bernacki et al., 2015). As the cancer progresses, communication between the patient and an APP provides an opportunity to prevent unwanted over- or under-treatment and optimize correspondence of care (Bergqvist & Strang, 2017; Sudore et al., 2017). Ideally, the APP, patient, and family can adapt the patient wishes to the current circumstances to achieve desired and realistic care (Shirado et al., 2013). Patients who report SIC occurrences were significantly more likely to report goal-concordant care ($p = .001$; Modes et al., 2019).

Medical oncology patient hospital admissions normally indicate a condition change related to their cancer such as progression of disease, intolerance of therapy, or decline in functional status. Regardless, if there were established clear goals prior to hospitalization, the reasons for hospitalization require a subsequent SIC to clarify the patient's current condition with possibly adjusted or more limited options. Initial or subsequent SICs need to occur in the hospital at the time of the condition change (Emiloju et al., 2019). Lack of a discussion during hospitalization is a missed opportunity to keep the patient fully informed and alert all providers involved in the patient's care of the current situation and patient preferences.

Serious illness conversation is not a euphemism for absolute pursuit of hospice, or a "threatment" of impending death. Some mistakenly assume the term "SIC" is synonymous with "goals of care," a "do not resuscitate order," or "promotion of hospice" (UptoDate, 2022). Instead, an SIC is an ongoing conversation initiated early in the diagnosis to educate, enlighten both the patient and the provider, and offer the patient guidance, services, and resources. Although educated patients may choose less aggressive treatment, the objective of SICs is not forced hospice (Sudore et al., 2017). The goal of each SIC is simply to review certain topics of previous conversations and add updates or revisions to augment or adjust the patient and health-care team understanding. The desired target is goal-concordant care. Most clinical situations, particularly inpatient, do not allow

for hours-long discussions, nor is an acutely ill patient usually able to tolerate lengthy discussions.

Serious illness conversations result in individual and system savings (Bernacki et al., 2015; Carrera et al., 2018; Gieniusz et al., 2018; Haun et al., 2017). In 2013, an Institute of Medicine report showed higher spending for chronic illnesses, including cancer, did not usually result in improved outcomes (IOM, 2013). Direct inpatient costs in the last 6 months of life are significantly less in patients who have early palliative care (Scibetta et al., 2016).

Many patients continue to receive aggressive, futile, and costly cancer treatment within weeks of death (Chandar et al., 2017). Since 1998, the American Society of Clinical Oncology (ASCO) guidelines have advised early conversations blending reasonable medical care with the patient's individual values and end-of-life goals (ASCO, 2022). Unless participating in a clinical trial, the guidelines recommend avoidance of low-yield interventions, including administration of therapies to those with low performance status, weak evidence supporting improved clinical outcomes, and lack of evidence for improved quality of life (ASCO, 2022).

Approximately 86% of terminal patients report that an SIC was worthwhile, stimulated positive behavior change, improved or stabilized hopefulness, peacefulness, and a sense of control over medical decisions, and significantly reduced anxiety (Bernacki et al., 2015). Patients who engage in SICs frequently verbalize favoring comfort over longevity at end of life (Gramling et al., 2019). Figure 1 displays some of the most recurring positive outcomes associated with routine SICs.

Provider Reluctance

One predominant barrier to SICs is APP reluctance or hesitation to engage in SICs (Chandar et al., 2017; Gilligan et al., 2018; Keating et al., 2018; You et al., 2015). Thorough, honest, and open dialogue with the patient and family from initial metastatic diagnosis and periodically as the condition changes is prudent (Chandar et al., 2017; You et al., 2015). Many providers assume patient sensitivity to the topic of death. Yet, 88.7% of terminal patients did not find SICs stressful and preferred honest discussion (Emanuel et al., 2004). Advanced practice

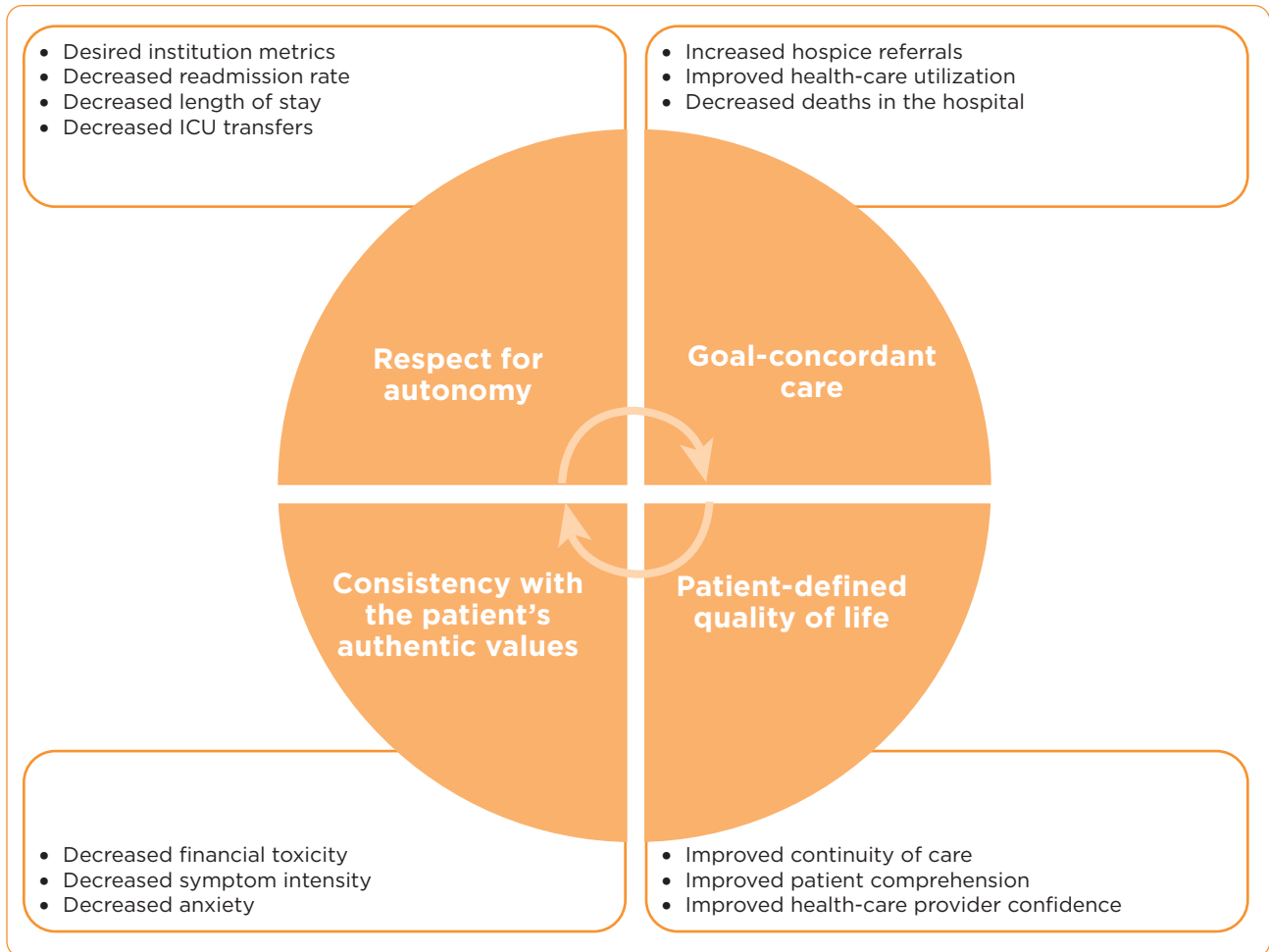


Figure 1. Model of positive outcomes with serious illness conversations.

providers may hesitate to initiate SICs due to their own discomfort with the topic, precise prognosis uncertainty, the perception that a less aggressive option is a failure, and the fear of relinquishing patient hope (ASCO, 2022; Chandar et al., 2017; Ethier et al., 2018; Gilligan et al., 2018). An SIC does not usually diminish patient hope or increase distress (Curtis et al., 2018; Haun et al., 2017). Prognostic disclosure is associated with realistic patient expectations without a negative impact on emotional well-being (Enzinger et al., 2015).

Due to personal discomfort, trepidation, or misguided perceptions, the APP may try to buffer the impact of unpleasant news by using positive-sounding medical terminology such as “progressing” or “palliative” that may confuse patients and be misinterpreted as promising or reassuring for cure (Bernacki & Block, 2014). Lack of health literacy contributes to this misunderstanding (Lutz

et al., 2018). Atul Gawande, MD, MPH, refers to this as putting a “reassuring gloss on a dire reality” (Gawande, 2014).

Noncongruence can exist between a patient’s actual wishes and the APP’s perceptions (Apostol et al., 2014; Hanson et al., 2017). Many patients think palliative chemotherapy, radiation, or surgery is a cure (Chen et al., 2013). Approximately 13% of care and management strategies in the last months of life are inconsistent with the patient’s wishes (Khandelwal et al., 2017).

Avoidance of SICs is unacceptable and does not protect the patient, but rather denies them the opportunity to control their end of life (Baer & Weinstein, 2013; Shirado et al., 2013). Many providers experience a sense of failure when transitioning from curative to palliative management (Ngo-Metzger et al., 2008; Haun et al., 2017; Prod’homme et al., 2018). Some view a nonaggres-

sive approach as a last resort rather than a legitimate choice (Chandar et al., 2017). Poor communication with patients in a life-limiting situation can result in fragmentation of care (Bernacki & Block, 2014; Curtis et al., 2018). Failure to coordinate priorities while the patient is still able to participate is untenable (Shirado et al., 2013).

Documentation of Serious Illness Conversations

Inconsistent and nonuniform documentation of SICs results in inefficiency (Bernacki et al., 2015; Curtis et al., 2018; Paladino et al., 2019). There are no standards for SIC documentation (Lakin et al., 2021). In one study, documentation occurred in merely 42% of the provider-reported SIC occurrences (Modes et al., 2019). Providers value standardized workflows and documentation for SICs (Dillon et al., 2017). An EMR smart phrase template (.acp) enables consistent and easily retrievable SIC documentation (Saiki et al., 2017). A template includes prompts such as querying the patient's understanding of their situation, interpretation of response to therapy, and clinical trial eligibility (Saiki et al., 2017). Organized information from use of a smart phrase can enhance quality monitoring and ease in billing. However, the primary advantage is improved clear communication between all team members. Specific documentation training increases the frequency and completeness of SIC documentation (Lakin et al., 2021).

Training Clinicians

There is no consensus on content associated with SIC training (Austin et al., 2015). The evidence does not identify one superior method but suggests that a structured approach is beneficial (Myers et al., 2018; Lagrotteria et al., 2021). VitalTalk (VT; vitaltalk.org) and the Serious Illness Care Program (SICP; ariadnelabs.org/areas-of-work/serious-illness-care) are two structured training programs that have shown considerable success in training and enacting effective SICs (Childers & Arnold, 2018; Geerse et al., 2019). Both are interactive programs that provide guidance and tools to empower clinicians to communicate both empathetically and effectively, as well as guide approach to sensitive topics (Saiki et al., 2017).

METHODS

Setting and Sample

The setting is a 308-bed not-for-profit free-standing academic National Cancer Institute–designated comprehensive cancer center (CCC) in a central Ohio urban area. The inpatient medical oncology services were chosen due to the volume of patients with life-limiting oncology diagnoses. Participants were inpatient APPs who primarily care for advanced oncology patients who are commonly admitted for acute symptoms such as uncontrolled nausea, uncontrolled pain, or neutropenic fever. Most patients are undergoing active cancer treatment such as chemotherapy, immunotherapy, targeted therapy, and/or radiation.

Procedures

All APPs on the inpatient medical oncology services were invited to participate in training that included a recorded 45-minute Zoom video focused on the importance of SICs, reasons for avoidance, conversation structure tips, productive strategies, and utilization of the organization-developed smart phrase for documentation. Much of the content was based on VT and SICP programs. The video format was used due to difficulty in releasing practicing APPs from their clinical duties for this education and the in-person education constraints due to the COVID-19 pandemic. In addition, four 30-minute informal virtual team discussion groups offered an opportunity to review training content application and share experiences. The acute care nurse practitioner and Doctor of Nursing Practice candidate who implemented this project also facilitated the discussion groups. Pre- and post-surveys were sent via Qualtrics. Email reminders were sent to complete surveys and invitations to discussion groups. Participants were directed to resources such as VT and SICP conversation guides as well as several facility patient information pamphlets on topics such as advanced care planning and hospice care.

Instrumentation

The project had six distinct measures and measurement types: (1) previous training was measured by Likert scale/survey, (2) beliefs were measured by Likert scale/survey, (3) self-efficacy (knowledge, preparedness, and comfort) was

measured by Likert scale/survey, (4) discussion group perceptions were measured in a narrative format, (5) documentation was measured by frequency, and (6) training feedback was measured in a narrative format.

The instrument used to measure APP beliefs and self-efficacy was a pre- and post-training survey with a self-rated, 5-point Likert scale with 1 representing “not at all” and 5 indicating “very much” (Tam et al., 2019). The survey was developed for use with recent physician graduates. The term “physician” was replaced with “APP.” The term “goals of care discussion” was changed to “serious illness conversation” to accommodate the facility-accepted terminology. The four items in the beliefs survey section were APP belief in: (1) congruence between patient care and wishes, (2) importance of SICs, (3) SIC influence on the treatment plan, and (4) perception of SICs occurring early in the course of the illness. The self-efficacy survey section was comprised of one knowledge, three preparedness, and four comfort items and was scored separately from the beliefs survey section. The pre-training survey also included four additional items that queried previous training that did not factor into scoring. The post-training survey included five short answer training feedback questions. The discussion group qualitative data were summarized in a narrative format. The frequency of APP SIC documentation through use of the organization-developed “.acp” smart phrase use was measured for 6 weeks prior and following training.

Analysis

Individual survey items were separately compared pre- and post-training. The pre- and post-samples were not matched so they were treated as independent samples. Each study participant was given an overall beliefs and self-efficacy score by averaging responses to the four belief items and the eight self-efficacy items. To assess whether there were differences in the distribution of pre- and post-scores, Wilcoxon rank sum tests were performed. The Wilcoxon rank sum test is the nonparametric equivalent to an independent samples *t*-test. A nonparametric test was chosen because of the small sample size. In

keeping with the nonparametric approach, the nonparametric Hodges-Lehmann method was used to estimate the median of the pre- and post-score differences. Ninety-five percent confidence intervals for the true median difference in pre- and post-scores were estimated. To compute the median difference, pre-values were subtracted from post-values. Analysis was performed using SAS version 9.4 for Windows.

Previous training was measured with a four-item Likert scale addressing direct supervision as well as formal and informal training. Common themes in discussion groups were summarized in order to evaluate APP perceptions of SICs. Frequency of SIC documentation by APPs was measured with the “.acp” smart phrase. Post-survey training qualitative data were summarized and themes identified.

FINDINGS

The 25 participants ranged from 28 to 60 years old with most between the ages of 30 and 49 (13 or 52%). The pre-survey response rate was 72%, or 18 respondents. The post-survey response rate was 48%, or 12 respondents.

Despite working daily with acutely ill oncology inpatients, nearly 50% reported little to no SIC direct supervision in their training. Greater than 20% reported no formal training. Over 80% reported informal training. Yet over 60% responded that they are having SICs independently “quite a bit” or “very much” (Figure 2).

The beliefs overall mean scores were 4.58 in the pre-survey and 4.46 post-survey, with a scoring range of 4.00 to 5.00. There was no statistical evidence that the SIC training affected SIC beliefs ($p = .19$). The Hodges-Lehmann pre- and post-survey median differences were estimated to be -0.25 , indicating a small decrease in overall beliefs (Table 1). The belief individual items revealed a slight decrease in congruence of care to patient wishes (3.7 to 3.4) and that SIC influences the treatment plan (5.0 to 4.8). The belief that SICs should occur early in the disease did not change (4.8). The belief of the importance of SICs was slightly higher at post-survey (4.8 to 4.9; Table 2).

The self-efficacy overall mean score was 4.80 on the pre-survey and 4.70 on the post-survey. There was no statistical evidence that SIC train-

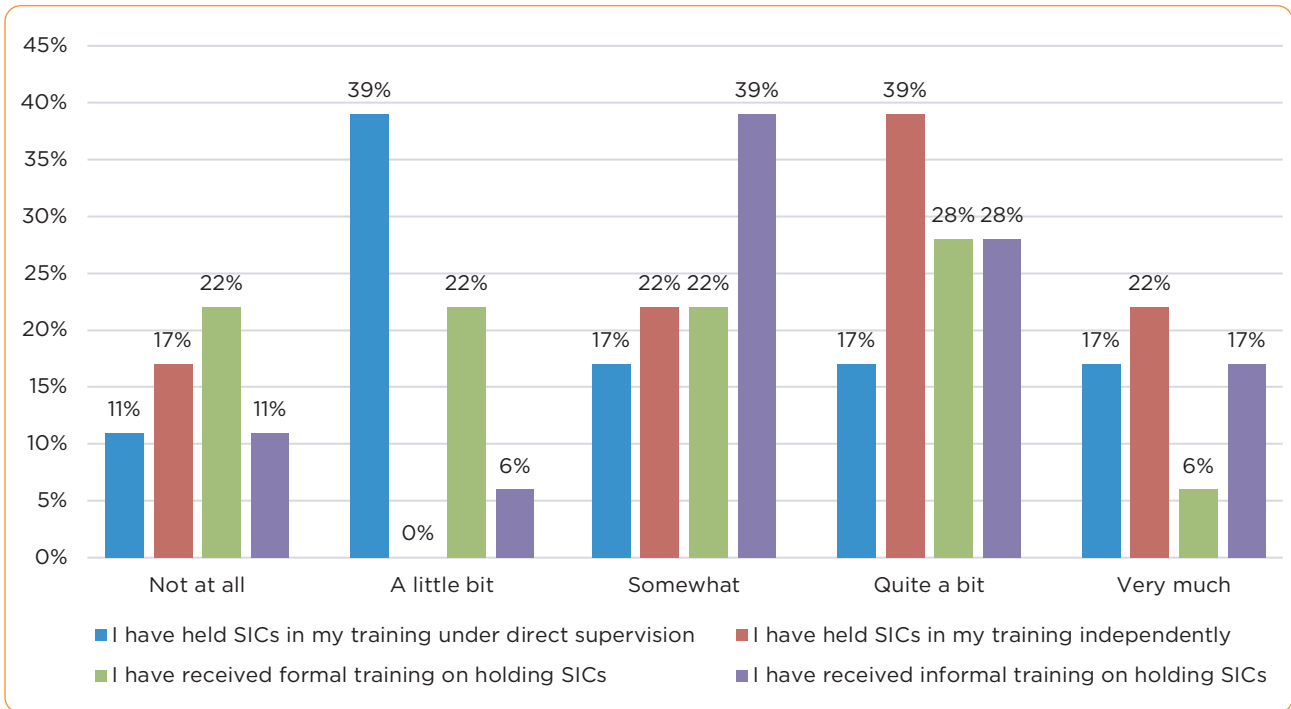


Figure 2. Advanced practice provider previous training reported in the pre-survey. SICs = serious illness conversations.

ing affected self-efficacy. The Hodges-Lehmann pre- and post-survey median differences were estimated to be 0, with a 95% confidence interval (CI) of -0.5 to 0.38 (Table 3). The self-efficacy individual items showed a slight downtrend in the knowledge item of understanding the concept of SICs (4.8 to 4.7), preparation for setting goals (4.3 to 4.2), and providing patient (4.2 at both time points) and family emotional support (4.2 to 4.1). There was also a downtrend in comfort with managing emotions evoked by the patient (4.0 to 3.8) and families (4.2 to 4.1). However, there was an uptrend in APP comfort with managing their own emotions (4.2 to 4.4) and being present for terminally ill patients (4.0 to 4.4; Table 4).

Qualitative data from the APP discussion groups included topics such as the best time of day for discussion, the lack of time due to pressure to complete other clinical responsibilities, patient

and family ignorance of their clinical situation, and the need for clear, accessible documentation. The APPs specifically verbalized the need for SICs with each hospitalized patient and the desire for additional training to enhance confidence and skill in conducting SICs. There were several comments that SIC training would be particularly beneficial for inexperienced APPs.

Data on APP documentation frequency measured by use of the “.acp” smart phrase revealed no uses over the 6 weeks before training (9/28/2020–11/1/2020). Following training, there were eight “.acp” uses over 6 weeks (11/22/2020–1/3/2021).

DISCUSSION

Overall scores on the belief and self-efficacy survey sections were high before the training, indicating that APPs already considered SICs crucial to their patient care and their self-perceived

Table 1. Summary Statistics for the Overall Pre- and Post-Intervention Belief Scores

| N | Time relative to the intervention | M | SD | Median | Minimum | Maximum | Pre/post median difference (95% CI) | p value |
|----|-----------------------------------|------|------|--------|---------|---------|-------------------------------------|---------|
| 18 | Pre-survey | 4.58 | 0.28 | 4.50 | 4.00 | 5.00 | -0.25 (-0.25-0) | .19 |
| 12 | Post-survey | 4.46 | 0.21 | 4.50 | 4.25 | 4.75 | | |

Table 2. Summary Statistics for Pre- and Post-Intervention Responses to Each Belief Question

| | | <i>N</i> | <i>M</i> | <i>SD</i> | Median | Minimum | Maximum |
|---------------|------|----------|----------|-----------|--------|---------|---------|
| 1. Congruence | Pre | 18 | 3.7 | 1.0 | 3.5 | 2.0 | 5.0 |
| | Post | 12 | 3.4 | 0.9 | 3.0 | 2.0 | 5.0 |
| 2. Importance | Pre | 18 | 4.8 | 0.5 | 5.0 | 3.0 | 5.0 |
| | Post | 12 | 4.9 | 0.3 | 5.0 | 4.0 | 5.0 |
| 3. Influence | Pre | 18 | 5.0 | 0.0 | 5.0 | 5.0 | 5.0 |
| | Post | 12 | 4.8 | 0.5 | 5.0 | 4.0 | 5.0 |
| 4. Early | Pre | 18 | 4.8 | 0.4 | 5.0 | 4.0 | 5.0 |
| | Post | 12 | 4.8 | 0.5 | 5.0 | 4.0 | 5.0 |

Note. 1. Congruence: patients receive care at the end of life that is congruent with their wishes. 2. Importance: serious illness conversations are important for patients and families to have. 3. Influence: serious illness conversations can influence the patient's treatment plan. 4. Early: serious illness conversations should be held early in the course of illness.

knowledge, preparedness, and comfort with SICs. However, nearly 16% of the respondents changed their responses to knowledge of the concept of an SIC from “very much” to “quite a bit” following training. Similarly, responses of “very much” to comfort with setting goals of care with patients decreased by 8%. One explanation is that the training revealed previously unidentified SIC knowledge deficits. The downward trend in being prepared for patient and family emotions supports that explanation. An additional explanation can be found from the survey beliefs section that showed a downward trend in both the belief of congruence in care and SIC influence on treatment plan. Perhaps the training unveiled a previously undetected incongruence in care and illuminated some weaknesses in APP confidence in conducting effective SICs and providing goal-concordant care.

Two survey items had a substantial positive trend. There was a 14% increase in the post-survey response of “very much” in the ability to manage their own emotions and a 30% “very much” improvement in being present with the terminally ill. These impressive increases indicate a trend toward improved APP comfort. The

evidence shows that improved provider comfort and presence can lead to an increase in goal-concordant care and hospice referrals, and a decrease in futile critical care intervention (Apostol et al., 2014; Hanson et al., 2017; Bernacki & Block, 2014).

Despite the lack of statistical significance on the survey, group discussions revealed APPs' desire for more training. This expressed need is consistent with the evidence (Apostol et al., 2014; Bernacki & Block, 2014; Bernacki et al., 2015; Curtis et al., 2018; Gilligan et al., 2018; Hanson et al., 2017; Meyers et al., 2018; Paladino et al., 2019; Starr et al., 2019). Additional training would include structured skills practice, demonstration, and simulation. The pre-training survey questions revealed inadequate SIC formal training and direct supervision. Provider beliefs, knowledge, preparedness, and comfort can improve the quality and frequency of the conversation (Gramling et al., 2019). Training based on best evidence encourages both SIC consistency and APP confidence in facilitating conversations that enhance message consistency and continuity (Apostol et al., 2014; Paladino et al., 2019). Mixed messages and varying SIC content result in care misaligned

Table 3. Summary Statistics for the Overall Pre- and Post-Intervention Self-Efficacy Scores

| <i>N</i> | Time relative to the intervention | <i>M</i> | <i>SD</i> | Median | Minimum | Maximum | Pre/post median difference (95% CI) | <i>p</i> value |
|----------|-----------------------------------|----------|-----------|--------|---------|---------|-------------------------------------|----------------|
| 18 | Pre | 4.80 | 0.25 | 4.25 | 3.75 | 4.63 | 0 (-0.5-0.38) | .87 |
| 12 | Post | 4.70 | 0.58 | 4.25 | 3.38 | 5.00 | | |

Table 4. Summary Statistics for Pre- and Post-Intervention Responses to Each Self-Efficacy Question

| | | <i>N</i> | <i>M</i> | <i>SD</i> | Median | Minimum | Maximum |
|--------------------------------|------|----------|----------|-----------|---------------|----------------|----------------|
| 1. Concept | Pre | 18 | 4.8 | 0.4 | 5.0 | 4.0 | 5.0 |
| | Post | 12 | 4.7 | 0.5 | 5.0 | 4.0 | 5.0 |
| 2. Setting goals | Pre | 18 | 4.3 | 0.8 | 4.5 | 3.0 | 5.0 |
| | Post | 12 | 4.2 | 0.9 | 4.0 | 2.0 | 5.0 |
| 3. Patient emotional support | Pre | 18 | 4.2 | 0.8 | 4.5 | 3.0 | 5.0 |
| | Post | 12 | 4.2 | 0.8 | 4.0 | 3.0 | 5.0 |
| 4. Family emotional support | Pre | 18 | 4.2 | 0.9 | 4.5 | 3.0 | 5.0 |
| | Post | 12 | 4.1 | 0.9 | 4.0 | 3.0 | 5.0 |
| 5. Emotions evoked by patients | Pre | 18 | 4.0 | 0.8 | 4.0 | 3.0 | 5.0 |
| | Post | 12 | 3.8 | 1.0 | 4.0 | 2.0 | 5.0 |
| 6. Emotions evoked by family | Pre | 18 | 4.2 | 0.8 | 4.0 | 3.0 | 5.0 |
| | Post | 12 | 4.1 | 1.1 | 4.0 | 1.0 | 5.0 |
| 7. My emotions | Pre | 18 | 4.2 | 0.6 | 4.0 | 3.0 | 5.0 |
| | Post | 12 | 4.4 | 0.5 | 4.0 | 4.0 | 5.0 |
| 8. Present | Pre | 18 | 4.0 | 0.8 | 4.0 | 2.0 | 5.0 |
| | Post | 12 | 4.4 | 0.8 | 5.0 | 3.0 | 5.0 |

Note. 1. Concept: I understand the concept of a serious illness conversation. 2. Setting goals: I feel comfortable setting goals of care with patients. 3. Patient emotional support: I feel comfortable providing emotional support to the patient at the end of life. 4. Family emotional support: I feel comfortable providing emotional support to the family of the patient at the end of life. 5. Emotions evoked by patients: I am able to manage the emotions evoked by the serious illness conversations in the patient. 6. Emotions evoked by family: I am able to manage the emotions evoked by the serious illness conversations in the family. 7. My emotions: I am able to manage my own emotions evoked by the serious illness conversations. 8. Present: I am able to be present with terminally ill patients.

with the patient's goals and values (Curtis et al., 2018; Bernacki & Block, 2014).

The APP's awareness of and familiarity with the ".acp" smart phrase increased the frequency of its use. The ability to efficiently review other providers' smart phrase documentation can empower the APP to understand previous SIC discussion points, decisions, and concerns of the patient, family, and providers. This not only prevents unnecessary repeated conversation topics but also enables patient and family confidence in the APP's awareness of their specific wishes and concerns.

Both quantitative and qualitative data support APP interest in learning how to better conduct SICs. Although not statistically significant, likely due to small sample size, the data revealed a general trend toward increased comfort with SIC following training. These findings provide evidence to justify continued APP SIC training with interactive applied SIC techniques. The data show that APPs are eager to improve their SIC skills.

Limitations

The limitations of this evidence-based project include the small number of participants, particularly those that responded to the post-survey. In addition, there was limited ability to have more in-person instruction and discussions due to the COVID-19 pandemic.

IMPLICATIONS FOR PRACTICE

This study indicates the value of routine SICs with metastatic oncology patients. It reveals an expressed need by inpatient medical oncology APPs for SIC training. The "convenience" or "as able" didactic education format is effective and feasible for busy clinicians. There is also a benefit to informal group discussion of didactic content and actual clinical scenarios, which enable learning from other APPs' expertise. There was improved comfort and ease with being present following SIC training, and the benefit of SIC standard documentation was demonstrated. There was more

frequent and easily retrievable documentation with the use of an SIC smart phrase.

CONCLUSION

Often, advanced medical oncology patients and their families are not adequately informed or educated about their cancer diagnosis and prognosis, which limits them from making educated and reasonable decisions concerning their end of life. There is often discrepancy between patient wishes and provider perceptions. Patients have consistently communicated their preference for early, honest, and thorough discussion exploring achievable goals, future preparation, and shared decision-making.

Advanced practice providers are in an ideal position to discuss the patient's serious illness, answer clinical or disease-related questions, and promote realistic care consistent with the patient's wishes. They receive little to no baseline education in their initial or subsequent education that introduces initiation and conduct of efficient, informative, and effective SICs with the optimal accomplishment of goal-concordant care. Many APPs report no formal training yet are engaging regularly in SICs with patients and families. They verbalized the need for more training to enhance confidence and skills. The participants indicated that training was beneficial. In addition, easily identifiable EMR documentation increased after SIC training. Serious illness conversation training for inpatient APPs who care for the seriously ill is feasible and effective. ●

Disclosure

The authors have no conflicts of interest to disclose.

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