



## **Original Publication**

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# Incorporation of an Interprofessional Palliative Care-Ethics Experience Into a Required Critical Care Acting Internship

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#### **Abstract**

Introduction: The literature documents inadequate palliative medicine training in undergraduate and graduate medical education. As the population lives longer, many people will experience multiple chronic illnesses and the associated symptom burden. All physicians involved in clinical care of patients need to be equipped with the knowledge, attitudes, and skills necessary to provide palliative care, yet most physicians do not feel adequately prepared. We designed a curriculum to provide a meaningful palliative care-ethics (PCE) clinical experience to prepare senior medical students for future practice regardless of specialty choice. Methods: The Zucker School of Medicine at Hofstra/Northwell integrated a PCE experience into the required 4-week acting internship in critical care (AICC). Students met weekly with an interprofessional faculty member and presented clinical cases focusing on communication and/or bioethical challenges. Faculty facilitators ensured that the presentations integrated discussion of communication skills. During the final session, students shared written reflections. Students were invited to complete a satisfaction survey postrotation and 1 year after graduation. Results: The curriculum was evaluated positively by the graduating classes of 2015 (n = 28) and 2016 (n = 56) at the end of the course and 1 year postgraduation. Qualitative analysis of the class of 2018 fourth-year students' reflective writing demonstrated themes of role modeling, suffering, family, and goals of care. Discussion: It is feasible to incorporate an interprofessional PCE experience into a required AICC. Students indicated a better understanding of palliative care and, at 1 year postgraduation, reported feeling comfortable caring for patients with serious illness.

## Keywords

Communication, Palliative Care, Interprofessional, Ethics, Critical Care

## **Educational Objectives**

By the end of this activity, learners will be able to:

- 1. Identify medical, psychological, social, and spiritual needs of patients with serious illness and link with appropriate members of the interprofessional team to address these needs.
- 2. Apply state-specific laws that relate to medical and clinical decision-making.
- 3. Brainstorm how communication skills can be used to facilitate decision-making discussions about goals of care and in caring for patients and families facing serious illness.
- 4. Identify ethical principles that inform complex decision-making during serious illness.
- 5. Reflect on personal emotional reactions to caring for seriously ill patients and their families.

# Introduction

There is a well-documented need for improvement in palliative medicine education in both undergraduate and graduate medical education.<sup>1,2</sup> As the population lives longer, many patients will experience multiple chronic illnesses and the associated symptom burden.<sup>3</sup> All physicians involved in the clinical care of patients will therefore need to be equipped with the knowledge, attitudes, and skills necessary to provide

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## **Appendices**

- A. ICU Sessions Student Guide.docx
- B. ICU Sessions Faculty Guide .docx
- C. End-of-Course Evaluation
- D. ICU Sessions Postgrad Survey.docx

All appendices are peer reviewed as integral parts of the Original Publication.





effective palliative care.<sup>4</sup> Progress has been made in the prevalence of education in end-of-life care in U.S. medical school curricula<sup>5</sup> yet less than half of U.S. resident physicians feel prepared to provide end-of-life care.<sup>6</sup>

Palliative care is defined by the World Health Organization as an

approach that improves the quality of life of patients and their families facing the problems associated with life-threatening illness, through the prevention and relief of suffering by means of early iden tification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual.<sup>7</sup>

The importance of teaching palliative care principles in a variety of clinical settings was recognized early in the development of the specialty of palliative medicine. Many of the initial efforts to integrate palliative medicine education into medical school curricula equated palliative medicine with death and dying. Medical school curricula in palliative medicine have been growing and expanding over the last several decades, shifting from solely didactic teaching methods to increased use of clinical experiences. Clinical exposures in many of these curricula are focused on brief hospice experiences. The historical equating of palliative medicine with end-of-life care has been identified as one of the barriers to the integration of palliative care for patients facing serious illness. True integration of palliative care into the care of all patients with serious illness, regardless of disease trajectory, requires that palliative medicine curricula be integrated into clinical experiences for all patients with serious illness.

A common limitation of published studies on palliative care educational interventions is that the curricula are not described in sufficient detail to enable replication. One resource currently available in *MedEdPORTAL* describes the integration of a palliative medicine experience into a previously existing ambulatory clerkship. The clinical aspect of this resource was a half-day supervised experience at one of four clinical sites (inpatient palliative care, outpatient palliative care service, home hospice, or inpatient hospice) and was an addition to the internal medicine ambulatory rotation, rather than being fully integrated into a clinical rotation. A structured assessment of a similar educational intervention, integrating a palliative medicine clinical experience into the ambulatory block of an internal medicine clerkship, demonstrated significant impact on medical student knowledge that was retained over time. Additional intervention in the context of the conte

Growing trends in medical school curricula to move toward shorter and competency-based training lead to limitations in adding curricular time for palliative medicine education. Medical schools therefore favor integrating palliative care content into existing courses. <sup>15</sup> Experiences during clinical clerkships and exposure to the hidden curriculum—a culture in hospital-based medicine that emphasizes curative and life-prolonging interventions above all else—may negatively impact students' prior classroom education in palliative medicine and communication skills. <sup>12,16</sup> Despite the growth of palliative medicine education, the average number of teaching hours in palliative care in the United States is roughly half of that in the United Kingdom. <sup>4</sup> Identified areas for quality improvement in palliative medicine education include requiring clinical experiences during the third- and fourth-year rotations, making use of the interdisciplinary team, incorporating ethical and legal issues, and encouraging students to reflect on their personal reactions to these clinical experiences. <sup>9,17,18</sup>

In recent years, essential palliative care competencies for medical students have been defined through a national survey of palliative care experts. The top-ranked competency for medical students was to "demonstrate the ability to describe ethical principles that inform decision making." Two of the additional top-ranked competencies fell within the domain of communication. We therefore sought to build a palliative care clinical experience centered around ethics and reinforcement of our longitudinal communication skills curriculum integrated into a preexisting medical student clerkship.





The Zucker School of Medicine at Hofstra/Northwell (Zucker SOM) provides all medical students with a comprehensive fully integrated 4-year communication curriculum that begins with the first week of medical school. The initial 7-week communication course presents students with the basic skills necessary to elicit a complete history and develop an effective working relationship with the patient based on empathy and trust. This communication curricular thread places heavy emphasis on important skills required in palliative care, such as sharing emotionally challenging news, discussing goals of care, and designating a health care proxy. The Zucker SOM also provides all medical students with an integrated 4-year bioethics thread throughout the curriculum.

As a continuation of our communication and bioethics curricular threads, we designed a palliative careethics (PCE) clinical experience for fourth-year medical students integrated within a required 4-week acting internship in critical care (AICC). This clinical experience offered a unique opportunity to provide mentorship encompassing medical student competencies including interpersonal and communication skills, interprofessional collaboration, knowledge for practice, patient care, personal and professional development, practice-based learning and improvement, professionalism, and systems-based practice. By integrating the PCE experience into a preexisting clerkship, there was no additional curricular time added to students' schedules. Targeting these learners allowed us to have a final touch point with the communication and ethics curriculum for our fourth-year students prior to graduation. The intensive care unit (ICU) has long been identified as a clinical setting in which learners encounter patients in need of palliative care.<sup>8</sup> The addition of the PCE experience to the AICC was a natural collaboration, as all patients in the ICU face serious illness and receive intensive medical interventions with the associated physical, social, psychological, and spiritual suffering. Students could apply principles of ethics and palliative medicine to the discussion of real-life patients and families facing serious illness, regardless of prognosis.

The format of the PCE experience provided students with the opportunity to interact with an interprofessional team to better understand the roles each profession plays in the care of patients and families facing critical illnesses. We chose to integrate our experienced communication and ethics clinical faculty in this curriculum to highlight the complementary specialties of palliative care and ethics and the importance of the interprofessional team in caring for and communicating with the seriously ill. Embedding a PCE curriculum within an established required clerkship had the potential to counteract the hidden curriculum by allowing interdisciplinary team role modeling and reinforcement of prior communication and ethics curricula without adding additional rotation time.

We sought to assess the immediate impact of the PCE curriculum on students through end-of-course assessments and an analysis of students' written reflections. We additionally conducted a postgraduation survey to assess longer term impact of the experience on the students as they began their practice as physicians.

# Methods

The Zucker SOM requires a 4-week AICC. Students choose to rotate in the medical, pediatric, surgical, or neurosurgical ICU. We designed the PCE experience as a weekly 1-hour interprofessional team conference for all students rotating on the AICC. The students presented clinical cases from their ICU experience, focusing on communication or bioethical challenges. Medical school faculty with experience with the Zucker SOM curriculum ensured that the presentations integrated discussion of communications skills, with a focus on shared decision-making involving patients and families.

Extension of Longitudinal Communication and Ethics Curricular Threads

We chose to have faculty members intimately involved in the longitudinal communications and ethics curricula, including the communications curriculum course directors, facilitate the PCE sessions. The faculty included physicians, interprofessional educators with master's degrees in science education, and





clinical ethicists. At least one faculty member involved in the communication curriculum was present at each meeting. As a result of their familiarity with the preclinical curricular threads, these faculty were able to easily integrate and reinforce patient-doctor-team communication skills during the PCE sessions, as well as provide a forum for discussion of the hidden curriculum. Many of these faculty also had longitudinal relationships with the students, which further reinforced the importance of the sessions.

## PCE Experience Curriculum Summary

Our initial step in curriculum development was to set up meetings with the critical care faculty at all institutions at which our students rotated to introduce the goals and objectives of this experience. The critical care faculty immediately recognized the importance and value of the PCE experience for the student, the interprofessional team, and the patient. We proposed 1-hour weekly meetings at a time that was convenient for the critical care faculty as their clinical schedule was most restrictive. The remainder of the interprofessional team had the flexibility to work around the ICU schedule. The PCE experience was successfully integrated in the 2014-2015 academic year and has continued to date.

Each week, students rotating on the AICC had a 1-hour meeting with select faculty from several of the following disciplines: critical care medicine, palliative and geriatric medicine, pediatrics, liaison psychiatry, communication skills, ethics, chaplaincy, social work, nursing, and child life. Students completed the AICC at one of the tertiary hospitals of the Northwell Health System. The rounds were held at each of the hospitals at which students rotated on their AICC. The interprofessional faculty served as a resource for discussing challenging cases, as well as a source of support for the students. Students were provided with a student guide (Appendix A) that included goals and expectations for the PCE experience.

One medical school faculty member who was a core communications curriculum faculty served as the weekly facilitator for each site. The faculty met twice annually (midyear and end of year) to review student feedback. We discussed any challenges regarding facilitation, as well as verifying continued availability and buy-in of the interprofessional faculty. We developed a faculty guide (Appendix B) with an outline and structure for the 1-hour rounds and suggested questions for facilitating the discussion with associated teaching points. The goal for the guide was to maximize consistency across sites and keep the sessions learner centered. Once established, these rounds took only 4 additional faculty hours per 1-month block during which students were rotating in the ICU.

During weeks 1-3, students came prepared with cases to be presented for discussion. Students were instructed to select patients who presented challenges or dilemmas regarding complicated medical, psychological, social, and spiritual needs; challenging communication issues; application of state laws to medical decision-making; complex medical decision-making; bioethical questions; and/or students' own personal challenges in caring for a seriously ill patient and family.

During the first 2 years of the course, the students were assigned a case write-up in the form of an ethics or palliative care consult. Based on student feedback, the write-up was replaced by a written reflection during the 2016-2017 academic year that has continued to date. Developing the ability for self-reflection has been identified as one of the top seven palliative care competencies for medical students. In one study, students reported that the integration of a reflective writing exercise into palliative care teaching enhanced their learning experience and improved their understanding of palliative care. Reflection is also one of the core values of the Zucker SOM, and students are exposed to a 4-year curriculum in written reflection. The fourth-year students, therefore, were well versed in reflective writing, sharing, and debriefing with their peers. In advance of week 4 of the AICC, students submitted a written refection, which they shared with peers and faculty during the final session. Students were provided with the following prompts for reflection:





- Reflect on something that surprised you (negative or positive).
- Reflect on something that inspired you.
- Reflect on something that moved you or touched your heart.
- · Reflect on instances of moral distress.
- Reflect on an observed/experienced disconnect between what we teach and what you learn/what you see practiced.

We assessed the course soon after the PCE experience through an end-of-rotation evaluation (Appendix C). We sent an additional survey to all graduates of the classes of 2015 and 2016 1 year after graduation (Appendix D), after the practicing intern physicians had had an opportunity to apply the knowledge and skills gained from the experience. The Hofstra University Institutional Review Board deemed the study exempt from ethical review. A deidentified convenience sample of students' written reflections from the first half of the 2017-2018 academic year was independently reviewed and coded by three of the authors (Gabrielle R. Goldberg, Alice Fornari, and R. Ellen Pearlman), irrespective of the prompt to which an individual student had responded. Theme identification used an iterative process, and all three authors met to reach consensus on themes, subthemes, and supporting quotes.

#### Results

Rounds were conducted at all clinical sites beginning with the inaugural Zucker SOM class of 2015. The numbers of students participating in the PCE experience varied from one to nine students per site. Faculty representation at rounds regularly included communication faculty, ethics faculty, palliative care faculty, and chaplains. Social workers, critical care faculty, and child life staff participated as their schedules allowed.

#### Postrotation Evaluation Results

All 84 students from the classes of 2015 and 2016 completed the end-of-rotation evaluation. A 4-point Likert scale (1 = strongly disagree, 4 = strongly agree) was used. The students expressed agreement with having a better understanding of a variety of topics pertaining to palliative medicine and ethics (Table 1).

Table 1. End-of-Course Assessment Results

Average Score <sup>a</sup>
3.2
3.3
3.0
3.2
3.0
2.9

<sup>&</sup>lt;sup>a</sup>Rated on a 4-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree). Please note that the Likert scale on subsequent end-of-course assessments (as reflected in Appendix C) was changed to a 5-point scale.

## One-Year Postgraduation Survey Results

The 1-year postgraduation survey was distributed to all graduates of the classes of 2015 and 2016 (n = 84). A total of 34 graduates completed the survey (40% response rate; 14 from 2015, 20 from 2016). A 4-point Likert scale (1 = strongly disagree, 4 = strongly agree) was used for all questions. Graduates responded favorably regarding their preparation for several aspects of caring for patients with serious illness (Table 2). Qualitative data were also obtained; representative comments regarding the PCE experience included the following:

- "Felt I was better able than my peers to lead discussions regarding goals of care."
- "Have helped families empower their loved ones."
- "Diffused tense conflicts between families and ICU staff bringing the conversation back to the patient's goals/desires."
- · "Discussing these things as MS4 was key in applying them spur of the moment as an intern."





Table 2. One-Year Postgraduation Survey Results

Item	Scorea	No. Respondents	Not Applicable <sup>b</sup>
The PCE experience prepared me:			
For delivering emotional/challenging news	3.2	30	4
To participate in family meeting regarding goals of care and end of life	3.7	30	4
To be leader in a family meeting regarding goals of care and end of life	3.3	25	9
To better deal with ethical challenges regarding goals of care and end of life	3.3	30	4

Abbreviation: PCE, palliative care-ethics.

At 1 year postgraduation, these practicing interns reported feeling well prepared to handle challenging communication tasks, including conducting patient-centered goals-of-care discussions and navigating emotionally challenging conversations.

#### Written Reflections

Students' written reflections were submitted electronically and shared during the final meeting of the peer and faculty group. Deidentified written reflections from the first half of the 2017-2018 academic year (n = 32) were independently reviewed and coded as described above. Each reflection was coded for no more than two themes. One reflection was not coded due to brevity of response. We identified the following themes: role modeling (n = 13), suffering (n = 9), family (n = 13), goals of care (n = 14), and other. Subthemes were identified within each category. Two of the subthemes (moral distress and hidden curriculum) were specifically aligned with the prompts provided. Themes and subthemes are listed below, along with representative quotations from the written reflections.

## Role modeling (n = 13):

- Positive communication/role modeling (n = 5):
- "My fellow spoke with such a gentleness that I think Mom couldn't help but to soften a little."
- "The attending firmly but kindly answered her questions. . . . He allowed space between each bit of news for the mom to emotionally react. He stayed in the room until her tears had stopped coming and she had no more questions."
- Negative communication/hidden curriculum (n = 5):
  - "It is heartbreaking for me to see patients who will inevitably die in the near future, and likely suffer much more going through chemo, radiation, etc. to the bitter end, rather than be offered alternatives to short-term life-extending treatments, and at least have the choice."
  - "No one ever stopped to explain to her what was happening because she couldn't hear."
- Teamwork/hierarchy (n = 2):
  - "Twenty minutes of CPR but he made it. What a way to work together."
  - "Even though I knew the team was much more concerned about keeping the septic patient alive, I struggled to keep my mouth shut and not interrupt."
- Empathy (n = 3):
  - "The most important thing for a physician in these situations is to remain empathic, patient, provide the objective opinion when appropriate, and to allow patients and families to cope on their own terms. After all, we do not bear the weight of such decisions."
  - "Witnessing this event brought heaviness to my heart."

# Self/staff suffering (n = 9):

- Frustration/helplessness/lack of control (n = 5):
  - "I guess it really struck me how unpredictable medicine as a field can be, and that we can't possibly control everything that can happen to a patient, no matter how hard we try."



<sup>&</sup>lt;sup>a</sup>Rated on a 4-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree). <sup>b</sup>Not Applicable: completed by students who had not yet had the opportunity and/or were training in specialties with limited clinical exposure (e.g., radiology, pathology).



- Moral distress (n = 5):
  - "I knew it was wrong when we didn't call her son when she asked. But I had not done anything to push back."
  - "I was surprised a soft code existed and was trying to grapple with patient centered care vs physician directed care."
  - "I also felt an attitude toward the patient especially after she was made DNR/DNI, that
    aggressive medical intervention (short of CPR/intubation) would not be pursued, which was not
    part of the discussion with the family."

## Family (n = 13):

- Caring for family (n = 4):
  - "I was honored to have been included in Stephanie's journey and happy that I was able to witness helping not only the patient, but the whole family."
  - "We must also balance our responsibility to the patient with that to their families, who in many circumstances may be the greatest sufferers."
- Family suffering (n = 3):
  - "I watched as the patient was extubated. Her husband clutched her tightly and cried inconsolably. It was one of the most emotionally powerful and unforgettable moments during my medical school career."
- Gratitude in the face of death (n = 4):
  - "They looked at us and thanked us. Thanked us for everything we did for them that day. They
    thanked us."
- Respect for family resilience and commitment (n = 2):
  - "It was also beautiful to see how many people were here for him, who loved him and cared for him"
  - "I learned a lot during this rotation, but my biggest lesson has been about the importance of support systems during times of critical illness."

#### Goals of care (n = 14):

- Managing family expectation; establishing trust (n = 3):
  - "It wasn't until all of the children spoke on behalf of comfort care, and the MICU attending told her gently but firmly 'remember, you're making a decision on behalf of your husband. We are suggesting this approach to keep him as comfortable as possible. If there was any inkling for him to clinically improve, we would not be suggesting this' that she allowed a silent approval."
- Importance of understanding patient and family values (n = 3):
  - "We have the opportunity to care and fight to get patients to a point where they can have a quality life with those they love. It is not necessarily what I imagine as ideal and likely not what they pictured either."
  - "It is the responsibility of the team to not only care for the patient, but also for the family, to help establish and understand their goals so they can be at peace with the process and results."
- Hope versus futility, help versus harm (n = 7):
  - "His wife is making an effort to slow the GOC discussions to her own pace, and unfortunately, that effort may be doing more harm than she understands."
  - "What do you do when a treatment has a small chance of a huge benefit as well as a huge chance of a low benefit or even harm? Who decides when the family disagrees with each other and parts of the medical team is equally torn? . . . Even in the same day, I felt pulled in two directions."
  - "My gut instinct was to make the patient comfortable, not to give up, but to get them out of this depressing unit."





#### Other:

- Work-life balance (n = 1):
  - "But I'm surprised to be thinking about finding a balance between work-life and home-life, as I
    have always been able to separate the two."
- Grief and loss (n = 1):
  - "And I'm unsettled by the selfish thought that I will have to face so many more deaths of children before alighting on my own health ways to mourn and grieve."
- Introspection/identification (n = 1):
  - "I particularly struggled with a decision a patient's mother made on his behalf because it hit close to home."
- Inspiration to student, knowing the patient as a person (n = 2):
  - "But I have a feeling that the memories I have of patients that I helped take care of in the ICU will stick with me for longer. And I think it's because I often found it to be extremely solemn and humbling experience to have the privilege of helping take care of strangers who may literally be on the verge of dying."
  - "She used to work in the fashion industry and had very strong opinions about coffee and her food and she was just a joy to speak to. We would have serious conversations though."
- Not themed due to brevity of reflection (n = 1).

#### Discussion

We conclude that it is feasible to incorporate a clinical interprofessional PCE experience into a required AICC. Students reported a better understanding of end-of-life care at the end of the rotation. Feedback from students at end of the course was used to adjust the curriculum (e.g., the required write-up was replaced by the written reflection, and the faculty guide was refined to maximize consistency across clinical sites). At 1 year postgraduation, students reported that the PCE experience prepared them to deal with communication challenges including goals-of-care and end-of-life issues during residency.

The replacement of the case write-up with the written reflection assignment was an important addition. The students' responses to the reflective writing prompts and their participation in the week 4 reflection session allowed us to understand what was meaningful to them during the AICC. The reflection exercise provided an additional means of debriefing the emotional intensity of their experiences caring for patients and families facing serious and life-threatening illnesses. The exercise also encouraged students to continue to develop their ability for self-reflection, which will serve them well in their future training.

As our class size has grown, clinical sites for the AICC have expanded. We currently run the PCE rounds at four clinical sites. Student group size at each site varies over the course of the academic year, ranging from one to nine students. We have found that when there are fewer than two students at a site, we can adjust the schedule to meet only during week 2 for case presentations and week 4 for the reflection exercise. When the group size approaches nine students, we adapt the timing to allow for three case presentations during weeks 1-3. During the busier rotation blocks, we have also had students assigned to the same unit present a case together. Schools interested in adapting the curriculum should take into consideration how many students are on the ICU rotation at any given time. If the number of students far exceeds nine per block and faculty time allows, schools might consider running more than one session per week. This would allow all students to present a case and ensure that the group for the week 4 reflection remains intimate. An alternative option would be to have groups of students from different ICUs (e.g., surgical, medical, and pediatric ICUs) each assigned to present on a different week of the rotation.

One limitation of integrating this curriculum at other sites is the labor-intensive nature of these rounds, which call upon interprofessional faculty to participate in a multisite, weekly experience. One attempt to address this challenge has been to assign one communications faculty member the role of facilitator at each clinical site. Consistency of faculty improves the continuity for each group of rotating students and





increases the participation from the interprofessional team as session expectations and format are clear. Use of communication faculty for this role helps to further relate the content of case discussions to the longitudinal communications curriculum. It also allows the faculty to engage the students in the practice of communication skills relevant to the cases being presented, with input from interprofessional faculty.

An additional ongoing challenge is the availability of the clinicians actively involved in the care of the patients in the ICU to attend the rounds. We now encourage each student to personally invite members of the interdisciplinary team to the rounds at which the student will be presenting a case. We provide students with suggested questions they can ask the clinicians who cannot attend in advance of the session as a means of bringing those voices and perspectives to the table.

While the postgraduation data are positive, we recognize that the data are self-perceptions of skill rather than objective assessments of clinical practice. One of the major strengths of this curriculum is the dedicated faculty who have a longitudinal relationship with both the communications and ethics curricula and the students. This allows faculty to efficiently and effectively create an environment in which the students can comfortably present cases that challenge them. A key first step in applying this curriculum is the identification of faculty to facilitate the rounds at all clinical sites where students are rotating in the ICU. Each designated faculty member should ideally be a medical educator with previous experience in small-group facilitation. This faculty member should establish rapport with and buy-in from the ICU staff to optimize the ability of students to attend rounds and the availability of ICU staff to participate. One faculty member should serve as the dedicated facilitator, focused on keeping the discussion on track and promoting participation from all present. The buy-in of interprofessional team members at the clinical sites is integral to the success of the rounds. We would encourage schools that are interested in developing a PCE experience to identify key advocates from a variety of disciplines to maximize the likelihood of representation from a full interprofessional team.

Integration of a PCE experience into a required critical care rotation is a useful tool for providing an opportunity to discuss cases with an interprofessional team, reinforce previously taught communication skills, reinforce palliative medicine and ethics educational concepts, and provide a forum for reflection and debriefing during a potentially emotionally draining rotation without requiring additional curricular time.

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#### **Prior Presentations**

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#### **Ethical Approval**

Hofstra University's Institutional Review Board approved this study.

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