Advance Care Planning and Shared Decision-Making: An Interprofessional Role-Playing Workshop for Medical and Nursing Students

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Abstract

Introduction: Advance care planning (ACP) is an essential discussion between a health care provider and a patient about their future care during serious illness. In clinical practice, high-quality ACP may be addressed with an interprofessional approach. Role-playing is an ideal method to practice both ACP and shared decision-making before having these conversations with patients. Methods: This asynchronous role-playing workshop is prefaced with two prerecorded 25-minute videos for faculty and student preparation with one introducing ACP concepts, and one depicting a patient-physician ACP discussion. During the 2-hour workshop, students complete four role-play ACP scenarios with the following roles: patient, family member, nurse, nurse practitioner, and physician. Students rotate through different roles guided by scripts, and have a fact sheet for each scenario detailing prognostic information for disease processes. The role-play works optimally with three nursing students, three medical students, and one faculty facilitator per group. Facilitators are provided with a timeline, a guide for debriefing, and an evaluation rubric. Results: The survey data from 85 students spread over four course offerings were summarized. When asked both if learning objectives were met, and to reflect on the clinical relevance, teaching effectiveness, and the overall workshop experience, most participants reported a good to excellent rating. Discussion: This role-play activity allows students to practice ACP and shared decision-making, both with patient and family presence, and in premeeting rounds with the health care team. ACP exposure during student training helps trainees recognize the impact of high-quality interprofessional conversations on the care patients want and ultimately receive.

Keywords

Workshop, Interprofessional, Prognosis, Shared Decision-making, Advance Care Planning, Ask-Tell-Ask, Role-play

Educational Objectives

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

1. Demonstrate advance care planning (ACP) and shared decision-making, and describe how to conduct ACP with the Ask-Tell-Ask approach.
2. Utilize questions proposed by Atul Gawande and Susan Block for eliciting patient values.
3. Recognize the impact of prognosis on shared decisions and the value of an interprofessional team in ACP.
4. Identify both CPR outcomes in the chronically ill, and feeding tube outcomes in advanced dementia, implement discussions about CPR, intubation, and feeding tubes.

Introduction

The 2014 Institute of Medicine report, Dying in America: Improving Quality and Honoring Individual Preferences Near the End of Life, asks health care providers to initiate high-quality conversations about advance care planning (ACP). This report states that improving shared decision-making and ACP reduces...
medical services that are unnecessary and inconsistent with patients’ goals of care. Additionally, the ACP process aligns patient goals with future care, improves the quality of care patients receive, and decreases stress and anxiety in surrogates.

Aligning medical treatments with patient goals is a core aspect of quality care and should be a routine aspect of care delivered by any practitioner, particularly a primary care provider. However, many providers need more training to provide basic palliative care and ACP. Studies have shown that medical and nursing students believe they have not received adequate exposure to ACP. Nurses and physicians have voiced that the lack of palliative care education in their curricula are obstacles to providing quality palliative care. Although nursing and medical school curricula now stress the importance of collaboration and advocacy in patient care, palliative care curricular innovations are varied and prove difficult for evaluating long-term outcomes. There are no standardized methods to teach ACP, and little is known about which educational strategies are most effective in teaching ACP. At the time of publication, there are three other MedEdPORTAL publications on ACP: one module covering ACP for heart failure, one problem-based learning case on advance directives, and one cardiopulmonary resuscitation module. Recent research on ACP curricula has shown interprofessional education (IPE) to improve attitudes, skills, and teamwork in end-of-life care settings. As a result, IPE is the recommended format for teaching ACP in medical and nursing curricula. Following this evidence and recommendation, we have created the first MedEdPORTAL module utilizing an interprofessional approach to ACP.

The development of this module began approximately 10 years ago with a role-playing workshop focusing on communication skills during end-of-life ACP conversations for medical students. Recognizing the newfound importance of IPE in ACP, in 2014 the authors evolved the workshop into an IPE workshop with second-year medical students and undergraduate nursing students. With this evolution the role of the nurse and nurse practitioner (NP) were added to the role-play scenarios to help further address the goals set forth by the Institute of Medicine and reflect the important roles these professionals play in ACP. Prior to this new workshop, second-year medical students and junior nursing students had been exposed to the ideas of ACP during their medical and nursing ethics courses, but the students had had no formal training other than what was observed during their clinical rotations.

The course content and role-playing scenarios have been enhanced each year to address evaluation scores and both formal and informal feedback. For example, the IPE workshop was originally 4-hours and began with a slide presentation of ACP content after which the patient-physician ACP discussion was role-modeled live for students to observe in real time. To be respectful of the students’ and workshop facilitators’ time, the presentation and role-modeling were translated into videos that facilitators and students could watch before the session in a flipped-classroom approach.

The ability to integrate concepts such as the chronicity of certain disease states, prognostication of illness, and empathetic communication are necessary to role-play effectively in this workshop. Therefore, third- or fourth-year medical students and advanced nursing students were targeted for this IPE workshop. All learners should have the following prerequisites: (1) intermediate level communication skills (i.e., completion of history-taking skills course, or patient interactions), (2) current enrollment in clinical courses for exposure to patient care and interdisciplinary interactions, (3) basic knowledge of common chronic disease states, and (4) an introduction to ACP concepts.

Methods

This 135-minute flipped classroom workshop has been implemented with medical and nursing students for 2 years. Two weeks prior to the session, learners were sent two 50-minute videos as presession work. The first video reviewed ACP concepts (Appendix A), and, based on the facilitator’s preference, could also be given as a 50-minute didactic lecture using the slides provided (Appendix B). The slides contain notes with an outline for a script. The second video (Appendix C) demonstrated a patient-physician ACP discussion. One week prior to the session, the students were given the Ask-Tell-Ask Approach handout.
(Appendix D), which summarized important concepts from the two videos, and could be used in patient encounters. The small-group facilitators received a Facilitator's Guide (Appendix E) in advance of the session to provide the facilitation framework and a suggested timeline of the workshop, including when to use each appendix. Each scenario (Appendices F-I) also includes a facilitation timeline on the first page.

Facilitator preparation and confidence is paramount in successfully teaching medical and nursing students the art of ACP. Given that many clinicians have had experience with ACP, but have had little experience teaching ACP, the course coordinators conducted a brief preworkshop meeting to review the materials and objectives. We also recommended facilitators review the two preworkshop videos (Appendices A & C). As many clinicians do not know how to name some of the skills they use in a family meeting, the videos provided a consistent vocabulary for teaching the skills they perform clinically. For additional consistency among the small-groups, a rubric for evaluating competencies within each scenario guide was provided to give the facilitators guidance on providing constructive feedback both during the role-play and the debriefing session. Should consultation regarding the role-play arise, faculty who had taught this before were in rooms adjacent to new faculty as an additional supportive contact.

In preparation for the session, students were divided into groups of six with three medical students and three nursing students. Each group was assigned their own room with a table and chairs for each participant. The table is recommended due to the large number of handouts for each scenario. We found it helpful to print each scenario on different colored paper to help prevent confusion between the scenarios. Each group had one facilitator, most of whom were clinicians, but some of whom were residents and chief residents.

After a 10-minute introduction and orientation to the activity, learners began reviewing the scenarios, spending 30 minutes on each. The four scenarios focused on common chronic disease states:

- Scenario 1: Discussing CPR with a patient with cancer (Appendix F).
- Scenario 2: Discussing intubation with a patient with chronic obstructive pulmonary disease (COPD; Appendix G).
- Scenario 3: Discussing dysphagia in advanced dementia (Appendix H).
- Scenario 4: Goals of care in a patient in hospital with congestive heart failure (Appendix I)

Each role-play scenario contained a facilitation timeline, a prognostic fact sheet for the disease process in the scenario, a competency sheet with specific competencies for the scenario, and five roles with suggested dialogue specific to each role. The scripts were based on high-quality discussions utilizing the Ask-Tell-Ask communication approach26 and are adapted from questions proposed by Atul Gawande and Susan Block for understanding a patient’s values during ACP.27

Each scenario began with the facilitator assigning students to roles by handing them the appropriate role sheet from the scenario packet. The facilitator then spent 4 minutes reviewing the scenario fact sheet of prognostic information and setting the stage using the statement at the top of the competency sheet. The students then briefly reviewed their roles and began their role-play. The facilitator observed and took note of whether the students addressed the scenario-specific competencies. The facilitator remained silent during the role-play unless the students got stuck, in which case the facilitator called a time-out to give guidance. Once the role-play ended, the facilitator spent 5 minutes debriefing the group on their observations and key prompts provided for each scenario. For example, in Scenario 4 patient depression is a consideration; therefore, the facilitator is prompted to discuss depression and anticipatory grief while debriefing. They are also asked to discuss what it is like to tell someone they are terminally ill, and what it is like to tell someone their prognosis. The facilitator competency sheets did not have to be returned to the students.

Each student took turns playing the role of the physician, nurse, NP, family member, and patient. In scenarios one and four, the physician discussed prognosis and a plan, while the NP assessed the patient’s
values and summarized the discussion. In scenarios two and three, these responsibilities were reversed, allowing the NP to discuss prognosis and a plan, while the physician assessed values and summarized the discussion. This allowed both types of students to practice and observe all aspects of the discussion, and further appreciate the benefits of an interprofessional team. The workshops were evaluated via an online survey following the session (Appendix J).

Results

This IPE workshop has been held twice yearly since 2015, serving approximately half the medical students completing their third-year clinical rotations, and half of the nursing students enrolled in their junior-year ethics course. The survey data from a total of 85 students collected over the last four course offerings were collated and summarized. Please note that the objectives evaluated in our results are slightly different from the stated objectives for this workshop. This is due to editing and improving the wording of the objectives while creating this educational material to improve their measurability. However, the content of the workshop is the same as when this data was collected.

When asked whether learning objectives were met, and to reflect on clinical relevance, teaching effectiveness, and the overall workshop experience, most participants reported a good to excellent rating. On a 5-point Likert scale, with 1 = Poor and 5 = Excellent, seven of the eight items received a mean rating of 4.2 or higher (Table 1). Similarly, when asked how strongly they felt they achieved the learning objectives on the 6-point Likert scale, with 1 = Not Provided and 6 = Strongly Achieved, respondents gave an average rating of 5.0 for two objectives and 5.1 for one objective, translating to a perception that the objectives were well achieved (Table 2). The remaining two survey questions were open text fields that were grouped into themes. Not every student offered comments, but frequencies and percentages of theme occurrences were analyzed based on total possible students that could comment (Table 3). When asked what they liked the most, the majority of those who responded liked things in the category of skill development (38%) or being a part of an interprofessional group (34%). The primary category in which suggestions for improvement were mentioned was that of course delivery (27%).

**Table 1. Descriptive Statistics for Workshop Evaluation Design (N = 85)**

<table>
<thead>
<tr>
<th>Domain</th>
<th>M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Design of Workshop</td>
<td>4.10 (0.81)</td>
</tr>
<tr>
<td>Learning Principles Met</td>
<td>4.20 (0.75)</td>
</tr>
<tr>
<td>Learning Objectives Met</td>
<td></td>
</tr>
<tr>
<td>Didactic</td>
<td>4.20 (0.66)</td>
</tr>
<tr>
<td>Small group</td>
<td>4.20 (0.71)</td>
</tr>
<tr>
<td>Clinical Relevance</td>
<td></td>
</tr>
<tr>
<td>Didactic</td>
<td>4.30 (0.77)</td>
</tr>
<tr>
<td>Small group</td>
<td>4.20 (0.78)</td>
</tr>
<tr>
<td>Teaching Effectiveness</td>
<td></td>
</tr>
<tr>
<td>Didactic</td>
<td>4.30 (0.71)</td>
</tr>
<tr>
<td>Small group</td>
<td>4.30 (0.76)</td>
</tr>
</tbody>
</table>

*Five-point Likert scale (1 = Poor, 5 = Excellent)*

**Table 2. Descriptive Statistics for Evaluation of Objectives (N = 85)**

<table>
<thead>
<tr>
<th>Objective</th>
<th>M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Describe the “Ask-Tell-Ask” approach to having ACP conversations with patients and families.</td>
<td>5.00 (0.98)</td>
</tr>
<tr>
<td>2. Explain the value of an interdisciplinary team in having discussions with patients and families about their goals for treatment.</td>
<td>5.00 (0.98)</td>
</tr>
<tr>
<td>3. Report the role for patient specific estimates of prognosis in shared decision making with patients and families.</td>
<td>5.10 (0.79)</td>
</tr>
</tbody>
</table>

*Six-point Likert scale (1 = Not Provided, 2 = not achieved, 3 = poorly achieved, 4 = achieved, 5 = well achieved, 6 = Strongly Achieved)*

Abbreviation: ACP, advance care planning.
Table 3. Learner-Provided Open-Ended Evaluation Qualitative Themes (N = 85)

<table>
<thead>
<tr>
<th>Qualitative Question</th>
<th>General Response Theme</th>
<th>Response Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>What did you like the most?</td>
<td>Development of the skills themselves</td>
<td>32 (38)</td>
</tr>
<tr>
<td></td>
<td>Being a part of an interprofessional group</td>
<td>29 (34)</td>
</tr>
<tr>
<td></td>
<td>Hearing input from faculty facilitators</td>
<td>8 (9)</td>
</tr>
<tr>
<td>What are your suggestions for improvement?</td>
<td>Course delivery (i.e., organization, unify feedback regarding the cases themselves, improve instructions, enhance prework)</td>
<td>23 (27)</td>
</tr>
<tr>
<td></td>
<td>Fewer cases</td>
<td>15 (18)</td>
</tr>
<tr>
<td></td>
<td>Increased interactions between the nurse and physicians in the groups</td>
<td>6 (7)</td>
</tr>
</tbody>
</table>

Discussion

ACP is necessary to provide the highest quality of care possible to patients. Practicing this skill with a role-play workshop is a helpful method to gain experience before attempting it with patients. While there were a few modules addressing ACP on MedEdPORTAL at the time of publication, there are no other modules on MedEdPORTAL with an interprofessional approach to ACP. Although more research is needed to assess the impact of this workshop, its implementation with an interprofessional group of medical and nursing students appears to be feasible and appreciated after 2 years of application. It is important to note that the purpose of this workshop is not to make students become proficient in ACP, but to provide exposure to and appreciation of the concepts, and provide a framework that allows the learner to continue to hone his or her ACP skills. The creation of this IPE workshop helps to achieve one of the goals that the Institute of Medicine has asked health care providers reach: improve high-quality conversations between the provider and the patient.¹

Lessons Learned

This ACP workshop has been part of the third-year medical student curriculum for 10 years, but the workshop has been an interprofessional project with both nursing and medical students for only 3. Several changes have been made since the first year of the interprofessional project to increase the quality and reality of the interprofessional interactions. For example, when the nurse and NP role were added to each scenario, there was no specific guidance for showing how the physicians, nurse, and NP should work together. Seeing participants struggle with this led us to create scripts in order to portray interactions between the clinicians, and allow for shared discussions between the NP and physician. The scenarios also initially had the health care providers, patient, and family members all sitting in the same room, which is not generally the case in real clinical practice. We tried to make this more realistic by creating premeetings (rounds and phone conversations). Finally, in the original roles the health care providers all had the same background information, but these roles have since been tailored with specific information for each provider, making them asynchronous, requiring realistic collaboration to reveal the whole story through teamwork and communication.

We also changed the scenarios to be more adaptable to different learner groups and learning formats. Initially, the patients and family members had specific names and genders, but this made it difficult for both the facilitators and students, of differing genders, to immerse themselves in the role-play. In addition, attempts to remember role-play character names distracted from the case. Therefore, the roles were edited for every member to be able to be any gender, and the students used their own names. To further reduce the burden of the activity we created the two presession videos and reduced the session from 4 hours to 2 hours, to be more respectful of the students’ and facilitators’ time. We found that the new focused role-playing session had a more significant impact.

The content of the scenarios was simplified in order to maintain focus on ACP. Physician’s orders for life sustaining treatment, which is referred to as the physician’s orders for scope of treatment (POST) in West Virginia, was initially reviewed in the cases. Although the POST paradigm is important, we found it resulted in a greater focus on the language and logistics of the form instead of on practicing the ACP conversation. It was important that the role-play remained focused on ACP as a process applicable for adults at any age.

¹10.15766/mep_2374-8265.10644
or stage of health to aid in understanding and sharing of their personal values, life goals, and preferences regarding future medical care, rather than for process of completing advance directives or medical orders. For these reasons, the POST form completion portion of the activity was removed.

The content of the four scenarios was then further refined to reduce repetition. Initially the four scenarios were in a different order and each scenario covered a complete ACP discussion, which led to a much longer IPE workshop. For the efficiency and to maximize the purpose of each scenario, the scenarios were modified so that the complete ACP discussion did not occur until the fourth case, and the first three focused on common individual ACP topics: CPR, intubation, and feeding tubes. This scenario order allowed specific ACP concepts to build upon each other, and prevented fatigue at the end of the workshop. This was a key change because earlier evaluations showed how fatigue in later cases reduced both student and facilitator concentration and led to less immersion in the role-play.

The scripts for the scenarios originally focused on a decision to forego interventions such as dialysis, intubation, and CPR. Student feedback asked for a scenario leading to an intervention, and the COPD case was changed to focus on a patient interested in a time-limited trial of intubation. We also gave the patient the freedom to decide which intervention they wanted in the scenarios. Although guiding the conversations in a certain direction may be perceived as less role-play, it helps with conveying important concepts and common patient values.

Some may find the scripts given to the students to be too restrictive. However, we created them for several reasons including evidence that early in training, scripts have been shown to be effective for learning history taking skills. Similarly, scripts have been reported to allow for repetition of certain language which improves retention of key ACP concepts. After the first year of implementation we discovered that the scripts facilitated the interprofessional approach, provided the roles with specific cues for interaction, and homogenized the educational experience, thus ensuring that the students in the many different groups had a similar experience. Role-playing can be uncomfortable, particularly for introverted people. Without scripts, the discussions often became flippant, an understandable defense mechanism. The scripts fostered a higher-quality discussion, which improves the role-playing experience.

Limitations

While increasingly feasible through modifications made during each year of implementation, there are still several limitations to implementation, facilitator recruitment, and the current level of evaluation. The primary limitation for implementation of this workshop is scheduling. Finding enough small rooms for each group can be challenging. In the past, a lecture room was used with smaller breakout spaces for the group sessions, but due to excessive noise, this type of setting was found to be unconducive to learning. Therefore, individual rooms became the standard, with each being checked before the workshop to determine appropriateness, specifically in regard to ambient noise levels, temperature, and seating.

Another limitation is recruiting facilitators with ACP experience. Facilitators were recruited by the course coordinators, who were themselves practicing as either a physician, NP, or nurse faculty in the academic medical setting. Recruitment of facilitators was based upon personal and professional relationships within these departments and has always resulted in a group of facilitators who all had previously participated in ACP discussions in the clinical setting. A major incentive in the recruitment of facilitators included written recognition for their annual review of participating in an end-of-life IPE workshop which promotes both scholarship and service to the institution. Nursing and medical faculty at our academic institution are expected to promote student learning in various formats and recognize the value in teaching interprofessional collaboration and teamwork.

As with many educational workshops, the limiting factors to enrollment are the number of facilitators with adequate experience in ACP and the time it takes to complete to role-play scenarios. If a 1:6 facilitator to student ratio is not achievable, a 1:12 ratio would be feasible, with every two students sharing and collaborating on their one role in the scenario. Although this would result in less direct experience for the...
individual student, it would at least allow for exposure to the ACP experience, and foster teamwork and collaboration within the student dyad.

Results of the perception-based evaluations were largely positive in nature. However, since evaluations were only obtained immediately following the workshop, true evaluation of the workshop itself and objective achievement may not have been captured. Another significant drawback to the data is that evaluations are perception-based and not in the practice setting. As with most Likert scales, students’ answers may be influenced by previous answers given on the evaluation, and extremes are often avoided.

Future Directions
This IPE workshop is generalizable to other academic medical institutions. The workshop can be utilized in many other levels of education, such as fellowship training for hospitalists or oncologists, in family medicine and internal medicine residency programs, in a graduate-level nursing or physician assistant curriculum, or an interprofessional workshop for practicing physicians and nurses.

Optimizing the interprofessional experience of this workshop took careful thought, planning and strategy. It is simply not realistic to put everyone at a table and call the scenario interprofessional. Although that occurs occasionally in clinical practice, many important nursing and physician interactions occur away from the patient.

Unfortunately, the patient-physician ACP video (Appendix B) we created is currently not interprofessional. Since the interprofessional experience has been in progress for only a few years, work to integrate more professions in the video and the IPE workshop is ongoing.

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Informed Consent
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Ethical Approval
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References


