

**Massachusetts Coalition for Serious Illness Care
Exploratory Qualitative Focus Group Study
Aggregated, De-Identified Four School Focus Group Report
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“I wish there were more of an emphasis on living a good life and having a good death. I don't think that we do that enough.” - Fourth year medical student, Spring 2021

I. Background

The Coalition has brought together the four Massachusetts medical schools to better understand the current landscape and needed future improvements for undergraduate medical education in palliative care and serious illness communication. The Coalition contracted with Dr. Goldman, Clinical Professor of Family Medicine at Alpert Medical School of Brown University, to conduct a total of eight focus groups with fourth year students who experienced the clinical curriculum at their respective schools. The intention of the focus groups was to inform the Coalition’s production of a standardized set of processes, tools, and curricular content for use by medical schools across the country, as well as improving the existing curricula at the Massachusetts schools.

II. Objectives

Two focus groups were conducted at each school (Total N = 8) in late winter 2021 with fourth year medical students to understand:

- Students’ perceptions about, interest in, comfort with, and self-assessed skills with serious illness conversations and palliative care;
- Students’ assessments of their own learning experiences and curricular offerings around serious illness conversations and palliative care;
- Students’ recommendations for improvements in the curriculum.

III. Methods

Ethics approval.

This study was approved separately by each school’s IRB.

Recruitment and communication with students.

Each school recruited students for its own focus groups by advertising the invitation to participate, aiming to involve approximately 7 students in each group. Once recruited, Dr. Goldman alone communicated with the students, by email, and faculty were not told which students ultimately participated.

Instrument.

The focus group question guide was developed by Dr. Goldman along with project faculty. Core questions were open-ended and supplemented with follow-up probes.

Data collection.

Due to the COVID-19 pandemic, the 1.5 hour focus groups were conducted virtually on Brown University’s secure Zoom platform, moderated by Dr. Goldman. Groups were audio and video recorded, transcribed and then de-identified.

Data analysis.

Project faculty were given access only to the de-identified transcripts from their own school's focus groups. Each school's project faculty were invited to read and take notes about their two focus group transcripts and join a meeting with Dr. Goldman and Stephanie Chan (Associate Director of the Coalition) to discuss key findings and insights from only that school's transcripts. Dr. Goldman wrote a brief overview report for each individual school. Next, using a template style qualitative analysis approach (Crabtree & Miller, 1999), a defined code book was created by Dr. Goldman and Patricia Stebbins, MA, MPPM, based on the initial faculty discussions about focus group content, topics included in the focus group question guide, and test coding of two transcripts. After finalizing the code book, Ms. Stebbins, in consultation with Dr. Goldman, conducted line-by-line coding of each transcript using the qualitative software, NVivo. Finally, Dr. Goldman and Ms. Stebbins used the immersion/crystallization qualitative data analysis approach (Borkan, 1999) to read and take notes about the code query reports generated in NVivo, to come to final identification of patterns and themes across transcripts and schools.

IV. Results

Students' definitions of serious illness, palliative care, and hospice.

Students typically offered partial definitions of these categories of care, which, taken together, constituted comprehensive definitions. At the same time, some students offered descriptions and characterizations that were at odds with some aspects of clinically-accepted definitions.

Serious illness.

When asked to comment on how they would define the term serious illness, students typically initially mentioned cancer, followed by other "life-threatening" diseases, and then moving on to discuss diseases that require extended time in the hospital and/or conditions that significantly alter or shorten life. They included in their definitions ICU care, and characterized serious illness as: "when it is uncertain the patient will recover", having "multiple complex diseases", entailing "difficult decisions" and "difficult care." Students also described serious illness as an "exacerbation of chronic disease", "debilitating", "life changing", "affecting daily life and/or length of life", potentially having a "devastating impact on health and life and mortality", and involving family meetings to discuss goals of care. "I think of an illness that's either going to result in death or is going to seriously change your quality of life or your future plans."

Several students highlighted the subjectivity of assessing serious illness, and noted that, depending on one's role in the care process, one may have a different definition: "It doesn't feel terribly precise."

"I was thinking that serious illness to me actually seems almost to be more of a phrase from a patient's perspective than from a provider's perspective because that's not really a term that we use in medical settings. Really, like I've never heard anyone say, like, 'Such and such is a serious illness' and 'Such and such as not as serious illness'. But I think a lot of the things that patients would conceive of serious illnesses are largely because of [having] a psychosocial impact."

Palliative care.

When considering the term palliative care, it was common for students to state that what first comes to mind is end-of-life care. While some conflated palliative care with hospice, most recognized that palliative care is applicable to a wider range of care scenarios. For example, some expressed that

palliative care can include comfort *and* curative measures, and is applicable to patients “who are not on their deathbed” but have “difficult” chronic conditions that are life-changing. Most understood palliative care as involving understanding patients’ and families’ goals of care, and “how can we use either the psychological, emotional, existential, spiritual pain that people are going through and make their quality of life when they’re going through this illness a little bit easier”.

“When I did my palliative care rotation, the work the palliative care team does is really split into two domains. One is really symptom management. Then the other domain is really kind of end of life and I think I never quite realized that the symptom management was a large part.”

Students also associated palliative care with exploring patients’ and families’ values, enhancing quality of life, symptom and pain management, and easing burden of disease at the end of life. One student associated palliative care with “maximizing quality of life and maximizing patient-centered care and autonomy”.

Palliative care teams.

When discussing experiences with the often interdisciplinary palliative team, students highlighted their ability to devote “time and knowledge of resources” as well as their ability to navigate patient and family “situations that are particularly complicated.” In particular, students mentioned palliative care specialists’ ability to communicate sensitive information with directness and sensitivity to provide patient-centered care and facilitate patient autonomy as much as possible, as well as decision-making about how to maximize quality of life. One student called palliative care providers “super skilled communicators” and another defined the aim of the palliative team as “Having the hard conversation the main team *doesn’t want to have.*” Or put another way, students noted that the palliative team provides care communication that other physicians are *not skilled at having*: “Well, to be quite honest, I think we’ve all seen certain physicians who you probably wouldn’t want their style. Maybe speaking to your loved one around like a goals of care discussion. So I think the connotation might be that palliative care teams, by definition, come with a certain empathy.” And some students asserted that many physicians *do not want to talk about end of life*:

“End-of-life care is something that doctors and a lot of other specialties end up punting to palliative care. Because we know that it’s under their umbrella and all human beings hate talking about death just because of the nature of being human beings and not wanting to face existentialism and death and, like all that stuff. And so, like if you’re not in palliative care it’s not something you’re that comfortable doing. And I think, as a result of that, the conversations that a lot of doctors should have with their patients and I think personally should be comfortable having with their patients like end up being conversations that are allocated towards palliative care.”

In contrast, palliative care teams and specialists were seen as handling these conversations with deftness, a skill most students saw as critical to providing appropriate care to palliative patients,

“I kind of look to the palliative care team as really being experts and being able to lead those discussions and help patients either come to terms with their diagnosis or think about what their goals and priorities are. I think that physicians across all specialties should be able to do that and have those

conversations, but I think that the palliative care docs are really experts in kind of leading those discussions and trying to help patients and families understand what the best options are in the setting of, you know, a chronic disease or a, you know, a life altering illness.”

One student said palliative care should have increased funding but believed hospitals are unlikely to provide this when they are more interested in the high income yielding procedures.

Hospice and end-of-life care.

Most students viewed end-of-life care as being somewhat synonymous with hospice. They associated end-of-life care with the last stages of life, but without a specific time frame. In contrast, they considered hospice to be a service for end-of-life care when death is expected within six months, and as providing comfort care only, without curative measures.

“I think of end-of-life - it's very like, last couple weeks, where the patient is very aware of what's happening. Versus hospice - there's a little bit more of a six months associated with it.”

“I guess when I think of end-of-life, bringing someone comfort and kind of enhancing the quality of the time they have left, and maybe that's not distinct from palliative care. And then when I also think of end-of-life I immediately like link hospice and sometimes think about a six-month time frame, maybe a little bit more so than I do when I hear palliative care.”

Which medical students should learn about serious illness care, and what is the value of this learning?

By and large, focus group participants were emphatic that palliative care training is valuable and necessary for all students, regardless of which specialty they go into, though they acknowledged that some students will be more interested in learning these skills than others. Nevertheless, participants varied in terms of how much knowledge and training they thought was needed. Some participants viewed palliative care as permeating all disciplines, while others pointed out that palliative care skills are likely to be more relevant to some specialties than others, and also that irrespective of one's specialty, it will be the palliative care physicians who are experts in leading goals of care family discussions with their patients. Participants generally agreed that all students should become familiar with core knowledge and skills (“Maybe like a general working knowledge, but not like the nitty gritty.”), understanding when it is appropriate to call for a palliative team consult and when it is not appropriate so that they do not call for the consult too late or too early. Students described that it was often up to them to suggest and/or make the call, a decision that could sometimes be influenced by their colleagues' opinions as to what was appropriate, and several participants described circumstances when their suggestion to call for a palliative consult was rejected.

“When I was working on surgery last year, one of the things I noted was like there was a really negative connotation that the surgeons associated with palliative care and there was often a lot of... Like you would get a very negative reaction from the surgeon if you would bring up, you know, maybe we should get palliative care involved.”

“I remember one of my medicine residents was telling me how, you know, palliative care is awesome and we should definitely incorporate more, but it should never be the first few things that you bring up in patient care because that's not doing anyone a service.”

Students said that if palliative is called too late in patients' hospitalizations, not only will patients not benefit from the palliative care they could have gotten sooner, but the palliative team becomes yet another team of providers that the patient does not know well, which can hamper their efforts. On the other hand, one student said,

“I think there's something to be said for being honest with yourself, like ‘Am I consulting palliative care because this is truly a complex situation that is beyond my expertise to handle, or is it just that I don't want to talk about death, it's scary and I'm uncomfortable?’”

Students noted that goals of care conversations and eliciting patients' and families' understanding of patients' health status, while vital to providing appropriate, patient-centered care, often “fall to the bottom of the list”. They expressed strong discomfort with this and those with little or no experience in participating in these conversations related their fear of leading these conversations in ways that could be harmful to patients' and families' abilities to process the difficult situations they are facing. Participants strongly emphasized the value of being exposed to other, more experienced doctors navigating these conversations and “seeing the different providers and how they approach these complex issues was just really beneficial”. Students recognized that most will need to have these conversations when they become interns, and many stated concern that they will not be ready.

“As much as I think the canned phrases and templated conversations that are out there are very good once you get a little bit of practice using them, it's really difficult to find enough opportunity to practice in med school, and practicing in sim is helpful at the margin, but not really adequate. So, I don't know how feasible it is to get people up to what we would kind of hope for by early in their intern year.”

Students expressed concern about the goals of care conversations not going well when led by lesser trained and lower skilled physicians. “Harm can come from that conversation going poorly, and so I think that's why people tend to lean on palliative care the way they do.” A student explained how he felt completely unprepared to have a serious illness conversation on his own:

“I would argue that it's not only important to do well in residency. We're also being exposed to this stuff during medical school. And it's important to have that early exposure not only for our future and being stressed as a resident, but also because our patients will ask us these questions sometimes as well. And I'll just share: I was part of the longitudinal integrated clerkship at Cambridge, and one of my longitudinal patients who is 51, severe crippling anxiety, and end-stage COPD, had been admitted to the hospital. She came back to see me in primary care clinic and looked me in the eye and said, ‘[Student's name], did I almost just die?’ And I had no idea what to do with that, you know, like the model of my internal medicine clerkship said that I would have these sort of longitudinal relationships with my patients, and I would evaluate her before I was presenting my full assessment and plan to my preceptor in the room with her. And so, I

couldn't just defer to somebody else on the team because I was the team in that moment. And, you know, we, we had a conversation about it and we got through it, but it left me deeply unsettled because it felt like, you know, here I am being placed with patients who do have serious illnesses and yet I don't know the first thing about responding when somebody has a question like that or is making a disclosure. It makes me think about work we've done about teaching students to respond to disclosures as early as the first year of medical school, and we know that within six months, a third of students had received a disclosure of trauma that had not had any training on it. And I think it's kind of both for a patient and family distress thing and for a potential medical student distress thing when we're exposed, but we don't have anything to draw on or anticipatory guidance can be really bad."

Some students stated that since they must learn a whole new set of resources when they enter residency, it makes more sense to focus on patient-centered care, compassion, empathy, and listening to patients rather than receiving didactics about resources: "I think the skills part of that is important and is pretty broadly applicable unless you are a pathologist or the radiologist who never leaves the reading room." A student asserted that learning skills is most important "not really for the people who are going to be doing them all the time because they're going to develop their own styles, but for the people who aren't going to be doing it all the time," and all physicians should know when to refer appropriately to palliative care.

Some students shared insights about how previous personal experience and/or learning around palliative care may impact students' interest in attending optional palliative training.

"I know a lot of people just from our ages - by now you probably know people that have had hospice or palliative care. So it can be a really sensitive subject for the learner as well and I think that that's something that people forget to touch upon. It's like we've probably all had family members that have passed away, and/or loved ones. I think that [third year] is a proper setting for it, rather than first year, when you're less likely to see it in practice."

"What you enter medical school with experiences with end-of-life care. I did a hospice training course, and I volunteered as an end-of-life companion with some of my friends in college. And then, when I entered medical school I felt like I never went to any of the lectures about palliative. I felt like I had experience in it, and I saw it on the wards and because it was optional, I never sought it out. And I think there are probably other students, whether they had experience in palliative care because of family reasons or because they had experiences prior to medical school, I think that does influence your desire when it's optional. We always get emails where 'Oh there's this training in palliative care and end of life discussions'. I don't know if those are things that influenced us whether or not we go to them, but I'm sure each student is different."

Where and how students learn about serious illness care.

The extent and methods of learning about serious illness care varied greatly among participants. Some students observed few if any family meetings, while others, particularly those who had taken a palliative care clinical elective, described high participation in meetings or actually running the meetings

themselves. Students described their learning as occurring through direct teaching and mentorship, but for the most part occurring through observation:

“I think it's a really interesting part of medical education that we expect people to learn through observation. And I think you can glean a lot, especially in these sort of interpersonal interactions, about how to be successful and effective by watching other people give you either good or bad examples. It's very interesting, though, because there are very few other things that people do professionally or otherwise where we expect people to gain proficiency through observation alone.”

Students were at odds in terms of when they thought the most appropriate time to learn these skills should be. Some students felt that learning in the preclinical years is essential because without it they would not have the knowledge and skills they need to apply during the clinical years, and they might “pick up the stigma or biases or misperceptions”. Others felt they really could not understand serious illness care when learned in a lecture or simulation prior to having experience in the hospital with patients. “Sure I learned it in the preclinical years, but I had like a much better understanding of it through the clinical experiences because it's just like I'm exposed to it a lot and so I'm thinking about it a lot.” Overall, most students said more training in both preclinical and clinical years is needed, including a reminder during or just prior to the clinical years, and again toward the end of medical school.

“There are some acronyms that you go through before you give bad news, SPIKES, and then the ‘I hope, but I worry’ statement, which seems kind of ridiculous, but then I saw it used in practice and it was one of the most powerful tools. I feel like a lot of the palliative care doctors actually used it, which was amazing to see. But I feel we did that day, and then I got to third year and my first rotation was on an oncology service. And so, there's a lot of palliative care, but I could have definitely used some sort of refresher, or some more structured curriculum around it because I definitely saw these really skilled palliative care doctors using tools, and I could see them doing something, but I would have liked to learn more specifically what they're doing and why they're doing it.”

Taken together, students talked about learning “the words” in preclinical years and receiving guidance on how to use the words in clinical years.

“I think it's very important especially during third and fourth year when we're actually having those conversations with real patients and real people and families. But also, before that in didactic years, preclinical years, to actually learn about what's out there medically and what we've been taught, but also like meeting patients and seeing what they prefer.”

Nevertheless, students had fairly vague recollections about where they learned about serious illness care during the preclinical years. The experiences they remembered were few and scattered, and varied across schools. “I remember hearing all these various things first and second year, but never like really sitting down and being like this is a cohesive conversation.” Some students recalled learning about the six-step SPIKES protocol for giving bad news during a session in the first year Doctoring course or a didactic lecture, and those students who recalled learning it generally described it as helpful. One student spoke of taking ethics courses in the preclinical years which addressed issues that are useful for serious illness care. In one school, students attended palliative care lectures in a second-year brain

course. Students recalled having patients speak to their class about their illness experiences. Students from two schools read and discussed Atul Gawande's book *Being Mortal* as an educational activity.

"First year, one of the deans does a *Being Mortal* book club and I actually thought that was a really great way to start to introduce these topics early. I felt like the first time that I saw a patient die, I reflected back on that experience. I didn't understand it fully when I was in the *Being Mortal* book club, but I found that I would reference those conversations in my head when experiencing these things later, on the wards. And so, I actually thought it was sort of nice to have an initial introduction early on to how to frame and think about death and dying and the patient experience, and then before actually experiencing it on the wards."

One student explained what other students felt as well about the value of participating in simulations: "I think even if it's not a real patient, that's the beauty of it - you're not harming someone the same way you would a real person. So, I really like the simulation." In contrast, more students felt that it is difficult to really learn from simulation or didactics prior to having real-world experience in the hospital.

"I was thinking about how useful some of the training we get in this area is sometimes, and sometimes when they're teaching us like phrases to use and having us role play and more of like a lecture in digital format it's not - I tell you for me at least, the stuff doesn't solidify until I actually get to do this in a real life situation. So I think incorporating more into our education won't necessarily fix the problem. I don't think people will be comfortable with it, even if there's many more lectures on it. I think it's something we should clinically be required to rotate through and have those experiences if we want to effectively train physicians to be better at this. To me, to have actual patients and families and situations to deal with that are real."

"First or second year, whenever we had that day, it felt a little fake, to be honest, because we are dealing with a standardized patient and it seems kind of silly to be going through these motions. And I wonder, instead of trying to practice it ourselves as a first or second year medical student, going to a family meeting or sitting in a family meeting and seeing an actual palliative care conversation take place would have been a lot more powerful. Not to participate at all, but just to observe and then go and learn about these terms and the SPIKES mnemonic. That would be I think much more powerful for people than just doing it on the standardized patient to begin with because when you're seeing it done in real life with real patients it would be much more impactful I think at that point in our training.

The contexts in which students recalled experiencing useful learning about serious illness care were mostly in-patient rotations. Rotations that were specifically mentioned were: the liver services summer sub I, gynecology-oncology sub I, general medicine sub I, other sub I's, medicine clerkship, ICU, NICU, SICU, PICU, COVID ICU, neurology critical care, non-ICU inpatient medicine, cardiology, renal consult, pediatrics, pediatric neurology, surgery, oncology, inpatient neurology, hematology-oncology, medicine segment of the LPM, acting internships, from any interactions with the palliative care team in the hospital, during the palliative care elective, and at one school in optional fourth-year palliative care workshops. One student mentioned participating in end-of-life discussions in the family medicine clerkship.

In the inpatient setting, family meetings were most often associated with students' learning about serious illness and palliative care. Students commented that they were initially concerned that family members would not want them to attend these meetings (especially if the student did not know the patient), but all who mentioned this noted that they never felt unwelcome by the families.

"I remember that was one of my big fears third year, especially going to a few [family meetings] the first week, like this family isn't going to want me there. I'm going to make things worse because I'm just an extra body. But then I feel like through the year I realized that they really don't mind having you there and they like to see that future doctors want to learn these things. So, I don't know, it's hard to tell someone at the beginning of third year that people really don't mind having you there and sometimes they like it. But that can be helpful."

Timing of learning was brought up by many students in that most felt that they did not yet have the skills and words they needed when they were faced with clinical situations that called for these.

"I think about how there were so many times in the hospital that actually knowing how to approach those conversations would have been really helpful. And it wasn't until I was a fourth year in the ICU that I actually interfaced with the palliative care team. I had one session where I got to sit down and learn with [a student on the palliative care team] and with his team and it totally changed the way I've approached every conversation since. It has been helpful for almost every single patient conversation I've had to have since because you can apply the skills to so many different types of conversations. The SPIKES model that I always just lean on."

Students felt that they saw both good and less good role modeling.

"I saw the most beautiful discussion about DNR DNI from a resident. He was trying to determine whether [the patient] would want resuscitation or not. He was kind, he explained everything. He managed to convey the seriousness of resuscitation. But, in a way that wasn't frightening or trying to scare her. It was such a beautiful discussion. He did an amazing job."

"We had a patient who passed away on the service like my second or third day of third year [on the medicine clerkship]. Not someone that I knew particularly well, but I had just rounded on. And so, we had a lunch with the team, the senior resident, the intern, and then myself and a medical student, and our attending brought the paper that the SPIKES criteria came from, and just like talked through the whole process with us over lunch and she bought our lunches, very nice."

"I'm sure I've had multiple PowerPoint [lectures], but seeing the resident I was talking to walking me through conversations with patients who are on dialysis or seeing how, when I was on the renal service or seeing how he spoke with adult children of people who were imminently at risk of dying, I mean that will stick with me."

I feel like the place where people actually start to practice that, it mostly appears to be as an intern. And I have seen it done so poorly. Not only in code status conversations, but breaking serious news about 'You are going to need dialysis' or something like that. I think it would be really good if we could train people enough in medical school for people to be less

uncomfortable and less likely to have a really bad version of that conversation. As much as I think the canned phrases and templated conversations that are out there are very good once you get a little bit of practice using them, it's really difficult to find enough opportunity to practice in the med school and especially practicing in sim is helpful at the margin, but not really adequate. So I don't know how feasible it is to get people up to what we would hope for by early in their intern year."

"I think that's just like medical students, particularly medical students that are moving between teams, are like we're just, we're just forgotten in all sorts of settings. I've been forgotten all over the hospital. Again, it's not like a PICU thing, it's not an ED thing. It's like I have been like the kid left in the Walmart parking lot so many times in medical school. I think it's just something that it feels a little more acute once a patient has died or suffered a terrible outcome and you're just standing there alone, while the rest of the team debriefs without you. And, it just feels different than when you get left behind, while the rest of the team goes to the operating room or goes to clinic - of all the places I have been left behind that definitely felt the most acute."

All students expressed admiration for the way palliative care team members provide care and, in particular, praised their ability to lead serious illness discussions.

"I do think what they bring in terms of just relative to other specialties, is really the ability to structure and to guide conversations in a way that other physicians, regardless of how well trained they are, often are not as attuned to. The palliative care physician that I worked with always described - in comparing themselves to a surgeon - so a surgeon's kind of primary instrument is a scalpel, and for the palliative care physician their primary implement is their words and their ability to shape conversations. So I think having someone who is able to in a very detailed way, kind of deconstruct how a conversation had gone, and really be able to evaluate it at a broad level and also have a very fine-grained level. I think that [what the palliative care team did] was a very high level in terms of understanding how to approach these conversations and what sorts of considerations they have running through their mind almost as second nature, that most of us probably would not even think to do."

Many students described witnessing or hearing about serious illness conversations that did not go well when they were led by physicians who were not part of the palliative care team.

"Oh, wonderful role modeling. And it is prompted a lot by that experience on clerkships and then also during my Sub I, just had admission after admission of folks who had metastatic cancer and didn't know it yet. And we were having those conversations over and over and I just did not feel able to kind of sustain it. So I worked with [clinician name] for a week and then [another clinician name] for a week. Two very different teams, but I think a few things that came out of that was how to deal with a few really common symptoms that we see a lot and, when they explained it, it felt not that complex. And yet, I'd seen treatment of cancer pain just stump preceptor after preceptor I'd had before, or intractable nausea. We came in and instead of it being a sort of a 'throw up your hands we just don't know what to do', there are a few concrete

steps that we could do that could have been done by the primary team. But it felt like I was armed with this knowledge and armed with a kind of – ‘we actually *can* get under a patient's symptoms’. And it felt like a manageable number of things to get my arms around, which I was not expecting. I expected it to be just huge, like the rest of medicine. Sitting in on these illness conversations and then also hearing about ones that had not gone as well that had been led by folks outside of the palliative care team who had not had exposure to that during their training. The level of skill that somebody approaches facilitating those conversations feels like a huge determinant of whether they go in a way that supports the interest of the patient and their family or it just goes into this horrible spiral. So, I think - feeling really empowered coming out of that. Like it's actually not that that that much. I can get a basic knowledge for a primary care doctor and for residency, know where to start, and then also it matters and it's not impossible to lead this skillfully.”

There were obstacles to learning in the clinical setting, including attendings recommending that students stay away from very complex cases, and timing of family meetings such that students could not attend:

“The conversations have taken place at times where I wasn't there. And I just like met with the patient on my own and I feel like it's kind of awkward because as med students you spend the most time with patients. But then when something that serious is happening and you're not even part of the conversation. . .”

“I think there are barriers to students on the wards getting exposure to patients who have palliative care or without doing an actual rotation.”

“I found in my experience that on multiple occasions, ‘Oh this patient is really serious illness. They're very, very complex family dynamic. How about you take someone easier?’ I've rarely outside of palliative care carried any of those kind of patients.”

“I think part of the problem is a lot of what we learn in med school and on the wards is dependent on what our residents and attendings think is important for us to learn and what roles they think we should have. And so I have noticed that a lot of core competencies are things that residents think students should be doing, and having serious illness conversations often isn't a top priority.”

A few students believed that they should have had more opportunity to lead a family meeting, but understood why the task was usually done by residents:

“I've found, and this is not an entirely negative comment, but I found that they're often the attendings, and just on the medicine services in general, are more inclined to have somebody more senior lead the conversation. Often that's because the second or third year resident on the primary team, when I was on pal care, they would want to lead the meeting because they wanted the opportunity to practice, to get feedback from the pal care attending. They don't do these that often that they're really getting comfortable with them, so it's sort of like any procedure that for it to get to the med student everybody else involved has to be already happy with their level of experience with it. So that has not been my experience that there are lots of opportunities to do this. If

you're talking about going and revisiting goals of care with somebody in the afternoon and sort of, you know, fitting it into your schedule, but not in a formal family meeting sense there's lots of opportunities to do that."

Given her experiences of being left out of learning opportunities, one student vowed, "As an intern I'll think about those med students that want to be in on the family meeting and try to advocate for them so they can at least observe."

The Role of Luck in Participating in Serious Illness Care Learning Opportunities

The theme of luck arose in many students' discussion about accessing opportunities to learn about serious illness and palliative care in the clinical setting. Students asserted that having luck determined whether they experienced good role models and whether they were able to participate in family discussions and patient case debriefings during their rotations.

"Oh, I think [you] kind of get, like lucky. So you're usually around with the team and they'll kind of point at you and say 'Hey, you know, we're having a meeting for your patient. Will you join?'"

"I don't necessarily think that we get enough of [serious illness conversation training] and the times that we do get it are if you're lucky enough to be on a clinical team where there's someone who's comfortable doing that and is happy to guide you in that process, which I feel fortunate that I've had a few times."

"I think the residents are a really good resource. Maybe I got lucky with the team that I was on, but the first couple family meetings that I had attended were because the residents were like, 'Oh, this patient that is on our team is going to be having a meeting at this time and you should definitely go.' And so, they kind of helped me get there because my medicine rotation was the very first one so I was kind of like, 'What am I doing?' I didn't know what was going on. So I lucked out because my residents were like, 'This is important; you definitely should see this'. And they got me the time and the place and the palliative care team knew I was coming. And so, I was just like handed it, but that's not the case for everybody."

"But I was also surprised that in my clinical experiences, avoiding these conversations and avoiding palliative care was something that was actually pretty easy to do if you weren't focusing on it. But I think even due to serendipity I just met a couple of attendings who felt very passionately that we should be educated to a greater degree about palliative care and really pushed me to consider how can I have these conversations? How can these best benefit our patients? And having that additional propulsion, I would say, and the encouragement to really tackle those conversations, I definitely came out feeling rather surprised I was able to have these conversations even if we were having a really heavy workday. Even if the family situation or social economic circumstances were really difficult."

While some seemingly by chance had more experiences than others did, a few noted they made their own luck by actively advocating for themselves in order to have more opportunities to join family meetings. A small number of students had found themselves in a position to lead a serious illness discussion or family meeting, which was most successful when coached by attendings.

“When I was on the peds floor and I had a family meeting regarding my patient, my attending sat me down and went through everything with me, like had me practice what I was going to say, what my goals were. And that really helped me with my language. But I don't think that's a universal experience for everyone and that's very attending-dependent. And for some situations I've been in, I think an example is, I had to break difficult news as a second year to a patient, and I didn't have any really support from the faculty.”

“It was always an option that was offered by the attending, usually, not by a resident. It was usually offered directly from the attending to say, ‘You know, do you want to try to start this conversation? And I'll be here the whole time so you can shift off to me if there's a point that you feel uncomfortable or if you have questions’. And then the first couple of times, we went through it outside the door as well as how I was going to approach it and what I was going to say. Those experiences were very memorable and I think very important and made me feel very prepared to have those discussions as a resident. ... But I think that sitting in on all kinds of family meetings has been really helpful. I would always try to sit in on any family meeting on the team and try to just expose myself to that and see what different styles were. And thinking about what my own style would be and what would work for my personality and the way that I approach patients differently.”

Informal Curriculum.

Students observed that the palliative care team appeared to be very well respected on some of their rotations, but not on others. They noted that a palliative consult is usually not called until “the patient is going downhill”. Students who participated in the focus groups admitted that they were drawn to the opportunity to learn about palliative care in ways that other students may not have been. They felt that the roles and functions of the palliative care team are not always clear in the minds of students, in part because residents and attendings may have their own biases and opinions that they project.

“I just wonder if there is a bit of stigma around palliative care or even going into this specialty. I don't actually know anyone in our class off the top of my head that's going into the field. I think that could be a reflection of what specialties are valued, what specialties we get exposure to, and this conception of what is it that palliative care is and who needs a rotation or who needs exposure to it. Maybe it's harder to put into a clean box than, like, cardiology, or a specific organ system. It's a specialty that's not really an organ system. It's something greater than that. And because of that, it can seem more vague to someone who doesn't know about it.”

“We've been talking about stigma and different ways that [palliative care is] perceived, so I think without intentional education of medical students to understand what palliative care or serious illness care is, and how it integrates with patient care - I just don't think it's something we're going to pick up on the wards if it's not intentional, or we'll pick up the stigma, or the biases, or maybe some of the misperceptions that people have. So I think having a coherent plan to educate medical students on this topic is important because otherwise I don't think it will happen consistently.”

"I have noticed that there's a lot of core competencies, things that residents think students should be doing, and having serious illness conversations often isn't a top priority. So on the wards I often had to advocate, like 'I really want to have this conversation with this patient. Can I give it a try?' And the resident is, 'Oh yeah, sure, if you want to.' But it wasn't valued in the same way as, like, 'Oh, I want to try and do this procedure, put in this line or take on this new admission.' So I think it's part of the value system and part of the medical hierarchy. And unfortunately, as med students, we're victims, or not victims, but we just tap into what the hierarchy tells us to value and that's what we reinforce."

Students commented that they need to learn both how to use palliative care skills themselves, and how to appropriately incorporate the palliative team, which is not always clearly delineated.

"I think as physicians, we need to know how to not only how to have these conversations, but in the end, in the future if we're not going into palliative care, we're going to need to know how best to incorporate the palliative care team into our practice and into the care of our patients. And I think that's something that medicine as a broad field, we're learning slowly how to better use the palliative care team. And I think that's only going to be sustained if medical students from here on out are trained and better know what exactly palliative care is, and what did they do. And I feel like, because that's not something that you could learn in lectures, they can't give us a lecture like these are the types of scenarios in which you should start calling the palliative care team - it doesn't make sense at all to me. Not only learning how to have difficult conversations and having the right words and the right tone, and you know emotions in the right setting and everything, but also knowing when is most appropriate for the palliative team to come in and also how to work best with them. Because it does seem like we're saying there are some hospitals and settings where it seems like the palliative care team works very seamlessly with the other care teams, but in my experience that hasn't been the case, and so it seems to be very variable."

"We'll talk about [palliative care] on rounds or on the wards. We're like, 'Oh let's consult palliative care for this', and most of the time it's always with end-of-life discussions. But I've found that sometimes it's also just like trying to reorient patient goals and values and even though end-of-life might not be that close."

Debriefing Difficult Clinical Situations and Addressing Emotions.

Students admitted that they had learned about palliative care conversations and how to deliver 'bad news' during their preclinical years, but most felt that what they had learned had not stayed with them, and in any case, was not sufficient to prepare them for effectively communicating with patients. A student explained, "We sympathize. But we don't really learn how to help patients process their emotions or how to manage situations where things are tense or people are very emotional."

In regard to managing their own emotions, similar to how students described learning through observation about speaking with patients and families, they described what they learned through observation of attendings' strategies for processing difficult situations.

“I remember in a third year medicine rotation - my first rotation - one of our patients had died and the attending kind of talked us through because it was a lot for us to think about and talk about. So we actually did have a debrief and even before that we talked about what to do when our patients are deteriorating and how it feels to have these patients and the emotional toll it might take on us. I don't remember the specifics of the conversation because it was a while ago. I remember appreciating it because I needed to take a moment before I went to the next patient, because that was really, really troubling just to walk in and be like, 'Okay, this is something that has happened, this is traumatic and it's messy and we've talked to the patient's family and I have to see the next patient'. But how do we learn how to feel the emotions we are feeling but also be ready for the next person?”

Students described mixed experiences, again depending on luck, regarding debriefing difficult or emotional patient situations, with some having received quite a bit of support and others feeling that this type of support was missing.

“I think some helpful ways to help learners is to be very open with how you're feeling and do these kind of debriefs or quick check-ins afterward to just like let them know that you understand that was emotionally charged, to understand that you might be having difficulty. Some not great ways I've seen people handle it is with just a really terrible sense of humor.”

“It was really variable depending on the resident and it was really resident dependent who would come to me and sometimes it would be fantastic and we'd have like a full 15 minute debrief just talking about our feelings. And sometimes it wouldn't get addressed and I had to seek out another mentor, another kind of resident I trust, and talk about it.”

“And this attending was amazing. She, I think, maybe had some training in palliative care, she was an oncologist. It was like my first day as a student and so I didn't even know the residents, really, but we all debriefed and immediately they checked in with me to make sure I was okay. And I think like we went and got like tea or something afterward later in the day when there was a moment. And I felt like that was a really good introduction into how I would want to be as a resident and an attending, like making sure that your student is not overwhelmed by seeing a patient die on their first day. That was a really positive debrief.”

A student described how impactful it was when after a harrowing patient situation toward the end of her OB/GYN rotation residents and attendings checked in with how she was feeling:

“[I was] just observing and it was scary. But I was kind of numb to it because everybody else in the room seemed so calm and was totally fine and were very much, like didn't seem like it was affecting them at all. They were very much in control of their emotions in the room. And then, after [the patient] stabilized and we all left the room, 10 or 15 minutes later the resident came up to me in the hallway and just said, 'Hey are you okay? That was really scary. Do you want to talk about anything?' And it was so simple, but I had been going through the first half of the third year thinking that the residents

and attendings were just not affected by any of this and that they were just used to all of this scary stuff that was happening. And so, for her to stop me in the hallway and say that it was like 'Wow, she thought it was scary too'. I thought that she was totally fine in there. ... It was really meaningful to me that she did that and after that point, I was much more open about mentioning if something was affecting me. It probably only happened maybe three times the whole remainder of med school where something really affected me and I said something to the team. But I wouldn't have done that had that first interaction not opened the door, because I thought that I was just supposed to have it together because it seemed like all the residents had it together. I hope that I can provide that space and kind of model that, you know, it's okay to be scared or sad about things that are happening because these are serious life and death situations that we deal with every single day."

When students experienced a positive debriefing experience, it seemed to hold a lot of meaning for them and supported their ability to better cope with and move through emotionally challenging patient experiences:

"I've had a decent amount of people who, afterwards, we all kind of turn to each other even if it's not like a formal debrief, we're still you know 'Oh wow, that was really hard'. And one of them might say what they're feeling in that moment and I've had the opportunity to share what I'm feeling. And even if it's just a short, couple minute debrief, I do appreciate that and I think it's a valuable thing. And I would say that it's more of the norm to have that, at least in my experience, than just like having the meeting and being like 'Okay, let's go back to work' or whatever, without really talking about it."

"My attending had a full team debrief. We talked about what would make us feel better. He invited the whole team to join them for a phone conversation to check into the family. It was just a really good model for how to make sure the team felt okay and took a little bit of time in the afternoon to accept what had happened to a patient who had been on the service the whole time. And versus like the first time I saw a shoulder dystocia and it was just a very, very tense afternoon and the attending took the resident aside and talked to them and like explicitly didn't invite me to join the conversation. And so then I just kind of walked around in shock for the next two days because I was like, 'Oh my gosh, I can't believe I saw that, I don't know how to understand this.'"

"A lot of times residents or attendings will want to debrief with the rest of the members on the team who are involved in that patient's care and kind of talk about, kind of reflect on her own emotions, reflect on how the conversation went, what went well, what went poorly. And that kind of helps almost give us more closure on the subject and sort of tie up loose ends or give our final thoughts, which I appreciate."

"I remember as a third year we lost a patient on the hemonc team and I felt like I hadn't really processed all these patients I'd seen die on neurology and that was my first rotation. The intern came in and I could tell she had been crying and then she gave me a hug and I just lost it and I started crying, and I was on like the seventh floor of the hospital. And she was an intern at the time and now she's going to be one of the chief residents and she brought me into a room in the medical school and she was crying and I was crying and we had this really wonderful moment of talking about patient death."

And I was mortified that I had done this in a hospital, but I just had seen so much death and like, my first month of third year, I couldn't handle it. And so, I was so lucky that that was the person that I was with at that time that would take half an hour and we just sat in a room and talked about patient death. And I was so lucky that that's who I was with at that time because I can think of a lot of people that wouldn't have done that for me and I'm really grateful to her that she did that for me."

"I actually had a situation where it was really difficult for me not to cry during a family meeting. And I was successful; I did not cry. Afterwards, I went to my attending and I was like, 'Wow, it was so hard not to cry during that' and she was like, 'Oh my gosh, why would you try not to cry? You can cry in front of them, they're losing their wife. They want to see that you care too'. But she said these three rules: never start crying before the family, never keep crying after the family stops crying, and never cry harder than the family. As long as you follow those three rules it's okay to cry. And so, I was like 'Okay, that's easy enough'. and thankfully I haven't had a situation where I wanted to cry since, but I think if that happens in the future, I'll know what to do."

"I am thinking of an attending with whom for the first time I was watching a patient be pronounced dead. And I thought that would be like just the most draining, sad experience. And then he had sublimated and talked about how it's really a meaningful and treasured moment for him because it's so human and he gets to be with the family. And I thought it was a very impressive framing considering this is probably something that will be part of him for the rest of time in his specialty, and he had really approached it with much positivity and humanism."

While many students experienced at least some helpful debriefs on inpatient teams, a theme that arose frequently in students' discussions was that residents and attendings were often not cognizant that students may not have seen such seriously ill patients previously and that students may need to debrief and talk about their emotions.

"I've seen a lot of very positive examples and I've seen a lot of negative examples. And then I've seen positive examples from people who are teaching me but don't realize it's my first time seeing a lot of these things. I feel like I saw, not just on medicine, but on every single rotation I've done, no matter what subject some sort of serious illnesses come up. On my psychiatry rotation, I saw a woman who was so catatonic that she stopped eating and developed very serious medical complications and, and, and that was before I had a medicine rotation. The first time I saw a patient really truly dying and air hungry was on my neurology rotation and the team was unaware that that was my first time seeing somebody that ill. And that affected me emotionally. I even told the clerkship director about it who basically was shocked, and said to me that he assumed that everybody had had a medicine rotation first. And I had come from OB/GYN and peds and I hadn't necessarily seen something like that besides patients who were terminally ill on my GYN rotation. I was on GYN onc and I saw that, but I didn't see someone so acutely ill. And so, I think it's so easy for them to forget what it was like to see some of that stuff for the first time. And oftentimes as medical students, frankly, we're ignored or we're forgotten and yet we are the ones tagging along in these rooms and seeing all these things."

“We are frequently forgotten, like we're kind of accessories, you know, and we don't really have a role. And so, it's hard for us to feel like we can demand any more of anybody else's time because people have so much stuff to do, right. I remember there was one time when a general surgery resident who was on the SICU rotation, you know, could tell that I was kind of bothered by the patient. They had gotten into a very bad car accident and died early, like five minutes on arriving to the to the SICU. And it was the first time I had been in a real code, it just like was part of the chest compression sort of line up, and I think she could tell that I probably looked a little shell-shocked. And so, she, you know, took me aside and we went to get a coffee and she said, ‘are you okay?’ You know, like, ‘you don't have to stay, you know, like you look like this might be a difficult night for you.’ And I just really appreciated that somebody cared enough to say that to me and say,, you know, ‘it's okay if you're affected by the fact that’. I had seen people die before, but I never had my hands on their chest when they died, you know. So yeah, I think just like you both feel like I have to project competence, I have to project that I have seen those before, that I am not fazed by this, and also that I don't need any special attention or hand-holding from other people because then all the other medical students will like, you know, think that we're all cry babies that can't hold our own, but at the same time I really just wish somebody would tap me on the shoulder and say, like, It's okay if you're upset about this.”

“We sort of feel pressure to not let on that we've not been put in a similar situation before, that it's not a first time. And so, I think that perpetuates the cycle of us being put in situations for the first time, feeling like we can't show that we haven't seen that before. And then afterward, feeling like there's no space for us to react or to reflect on what we've just seen.”

Students described numerous disturbing situations where they were provided no guidance or mentoring, and had to process their experience and emotional responses alone. For example:

“As a third year med student, I'd already presented my patient. I'm literally just standing there and this woman is dying alone. It just felt like a horrible experience, and it felt like, it felt like something that shouldn't happen. And so, we just never talked about it, we just stood there for three hours rounding, until she died, listening to her, and no one talked about it. We went back to the workroom and everybody just acted like it hadn't happened and I was like breaking on the inside.”

“One time we had a list with a lot of patients who were CMO. And then the next morning the list was really short and the residents were just like, ‘Did they get discharged or did they die?’ They were just like very casual and that was really jarring. I remember being nervous that I was going to become that jaded throughout residency.”

“I'll share that I had a very curious experience in that I found out that my patient had died through the electronic health record, which was just very jarring I think in retrospect, like to look at the vitals as I'm checking all my patients' vitals in the morning, and I look at the vitals, and I'm like, ‘What?’ as I watched them sort of drop off, essentially incompatible with life.”

A few students felt comfortable enough to actively seek out the debriefing they needed:

“In these settings where I feel like the person's been really rigid, I normally try to put it upon myself to say, ‘I actually found that to be really sad. I feel really bad for them, that must be really hard.’ And then the attending will take a step back and be like ‘yeah’ or the resident will take a step back. And someone actually thanked me for doing it once, but I don't think it's the norm. And I think in those situations if I hadn't done that that wouldn't have happened. But I have had an attending who modeled it really well, who walked out of the rooms like, ‘That was really sad, how are you doing?’ I always feel rattled in those situations and I thought that was just really excellent, but she was like her, and another palliative care doctor were like really the only times.”

“I had a patient who was cared for in the ICU and then on the floors as well who passed away. And I thought that I didn't have anyone to really debrief with and I had to sort of make my own opportunity to debrief with the attending. I had to ask specifically ‘Hey, can we sit down and talk about this situation just because I, you know, I've never dealt with this?’ And I feel that, at the very least, attendings or residents should offer to at least have a little conversation with you when something tragic happens on the floors or with one of your patients. And I don't know, I feel like that should just be standard practice for most physicians, and it's something that I thought was neglected at the very least for me.”

At one school, all the interdisciplinary clinicians from across the university system involved in palliative care, attend a meeting during which they include time to honor patients who have passed away with a few words and a moment of silence. A student who attended these staff meetings commented, “I think that probably does more than we realize to help people process these things, even if they're not the most verbal person in terms of their feelings.”

Palliative Care Clinical Elective.

One or two students in each focus group had taken the palliative care clinical elective at their school, and in all focus groups there were other students who had tried to take it but were unable to get a slot. All students who took the elective gave extremely positive descriptions of their experiences, role modeling from faculty, participation in family meetings, and other learning opportunities.

“At the end of my palliative care rotation I felt pretty prepared. The thing that helped the most was just being given a framework to have these conversations. I think we all have been trained in various ways to be empathetic and to acknowledge concerns and all those other smaller aspects. But before having this framework to really put it all together in terms of how you structure the conversation - you ask this part first and then you ask this other part and then you use that information or go to the next part. I think between getting the reference for how they normally conduct these conversations, and then really trying to be very deliberate about observing how practicing palliative care clinicians actually use that framework, created the environment where ultimately I was coming to the conversation having all the necessary details and I knew how to approach the conversation.”

Most students asserted that the clinical elective opportunity should be expanded to include more students. One student had ideas about how palliative care role modeling and skills could be integrated into the curriculum at logical junctures for all students:

“I think an elective would be really helpful. The thing I worry about is if it becomes a parallel part of the curriculum, rather than something that more people are exposed to. And I also think about what if instead of, or as well as, developing a separate elective that a few people would be able to take, you work with the SICU preceptors and the MICU preceptors and think about across [the training] where is serious illness already bubbling up most intensely, and maybe incorporate some tactics on that or have some money to hire a person who's attending to the experiences of the people on the team, or the trainees on the team, or have abilities to debrief that's not sort of siphoning from the people who are taking care of patients. Just thinking about where could you present these concepts when they're coming up already, but have more of a framing around it and more support around it?”

Students' choices for most important serious illness communication skill.

See Appendix for a listing of Serious Illness Communication Competencies as defined by the Coalition.

In terms of selecting the most important competency, most students vacillated between choosing Competency #3 and Competency #1, with more ultimately choosing Competency #3. Those who settled on Competency #3 felt that this competency included more concrete, practical steps that must be learned for patient- and family-centered care and that may receive less attention in the curriculum so “fills a void” in education. One student referred to Competency #1 as “the end goal”, and another called it “foundational”. A student explained, “Number 1 just seems like the most unruly, but also kind of the most authentic in some ways.” Some of those who chose Competency #1 over #3 did so because they perceived #3 to be too narrowly focused on end-of-life. Following is how two students made different choices between Competencies #1 and #3:

“Because I was thinking Number 1 - essentially the goal is to really understand what the perspective of the patient is and to create a plan that is concordant with their needs, but I feel like Competency 3 is really like the upgraded version of that as it's patient-centered. It describes all of the different aspects of serious illness and really just I think applies to the understanding of the patient.”

“I'm leaning more towards 1 now, thinking about like, the skills aren't written in there, but being able to do that means being someone who's really having the skills of Number 3, but having a space for them to talk about the type of care they might want in the future which I'm not sure that that is in Number 3 as much - care at end-of-life. You're describing it, but what would they want?”

Some students chose Competency #4 about managing one's own emotions, particularly because this is often “unacknowledged in the rest of training in the formal curriculum”. As a student explained, “I'm just thinking about on an airplane they always say you put your own oxygen mask on first before helping someone else. So that's what I think for us is really important because you have to be able to cope with it so you can give effective care.” A few students chose Competency #2 about addressing patients' and families' emotions, while one student stated that this competency is appropriate for residents but too advanced for medical students. Another student asserted that while important, both Competency #2 and #4 are difficult to assess in students:

“Both Competency 2 and 4 required demonstrating things. Those are always a little bit tricky because there's a lot of pageantry in medical education right? So you kind of have

to not only be able to do it, but you have to do it in a way that, like, it's you have to show that you're doing it.”

V. Discussion and Recommendations

Summary.

While there was overlap in how students conceptualized serious illness care, palliative care and hospice/end-of-life care, by and large, students appeared to be able to distinguish among the concepts. Students understood that those who volunteered to participate in focus groups are likely a somewhat skewed sample, and acknowledged that not all students are likely to be as interested in this area of care as they are. They also noted that there are some negative connotations to palliative care that they were informally exposed to in terms of when and why palliative consults are or are not requested. Nevertheless, all focus group participants believed that this is an important area of learning for all students, regardless of which field of medicine they plan to go into.

Much of the students' learning about palliative care occurred through observation and/or mentorship, and there was great diversity in terms of the helpfulness of these approaches, with most students able to recount as many inspirational experiences of mentoring as disappointing or unhelpful ones. Students generally described helpful experiences as including direct, empathetic discussions around goals of care for patients and their families, as well as ample debriefing and acknowledgement of the emotional difficulty of such work for the members of the care teams. Disappointing experiences typically included attendings or residents who modeled poor or callous communication with patients and families, and/or who failed to acknowledge or address with students the difficult feelings associated with some of the more tragic patient circumstances. In addition, while students understood the importance of these experiences and the opportunity to participate in palliative care discussions with patients and their families, many felt that often they were forgotten or deliberately left out of these important meetings. Most worried that they would not be ready to independently lead family meetings by the time they reached internship.

There was a tension between wanting and needing more learning about serious illness care earlier in the curriculum, and the need to have this learning repeated and reinforced again later in the curriculum. Some students felt that didactics and simulation training in the preclinical years were necessary for them to be able to apply concepts and skills in the clinical rotations, others felt that it was impossible to internalize the teachings about serious illness care prior to seeing them modeled with real patients, and still others suggested that preclinical training, followed by refresher training just prior to or early during the clinical years would be most beneficial, with additional training right before graduation and moving on to internship. The following quotes from two students sum up these perspectives:

“One of the things I would give as advice is not to try obsessively from a medical education standpoint to distill everything into PowerPoint lectures. There are lots of things we learned through formal academic education, and then I think there are other things that are not best taught through a formal classroom setting. And I actually think things like the SPIKES model - Some people don't have great social skills and I think hitting the basics of just be in a quiet room, make sure you're alone, lead in, don't just walk in and be like 'Oh, so yeah I saw that you have stage four lung cancer'. I think giving

that basic overview is good. But in general, my takeaway would be that there's only so much that the classroom setting can accomplish with building this skill.”

“I wish that towards the end of med school there was more of just like, ‘This is a sit down, you really need to know this and learn this before you go into residency so that you at least have a foundation’. Going into residency in a few months, I would feel very unequipped to lead one of these [serious illness] conversations.”

Students’ recommendations for changes to the curriculum and faculty development.

1. Two schools use the book *Being Mortal* for discussion in the preclinical years. Students said this was a powerful tool for enhancing their understanding at that stage of their education, and this book could be used regularly for discussion at all four schools.
2. A student mentioned that observing residents do simulations for serious illness care conversations was very instructive. Might there be places in the curriculum where each student has this opportunity?
3. When teaching preclinically about serious illness care, emphasize that these skills are transferrable to different kinds of illness scenarios where attention must be paid to patients’ and families’ hopes, fears, supports, and goals of care. Explain that this is all part of good patient care in all specialties, which must be emphasized as some students believe their specialty choice will not encounter serious illness conversations.
4. In preclinical teaching, provide students with a concrete template or framework for conducting serious illness conversations.
5. During the clinical years, leverage small group sessions that are already in the curriculum in each of the schools to specifically discuss students’ reactions to the clinical cases they were recently involved in; provide opportunities in these sessions for students to discuss their emotions; have faculty advise on coping strategies.
6. Have attendings and residents in each rotation talk to students about how palliative care integrates with their specialty.
7. Reinforce the concepts, language, SPIKES components, and behavioral skills taught in the preclinical years by adding refresher didactic and simulation sessions at the start of the clinical years and again just prior to graduation.
8. One school offers an optional palliative care workshop for fourth year students. Students found this to be very beneficial, although some felt that it would have been better to offer the workshop earlier in the curriculum. This type of workshop could be adopted at all schools.
9. Expand the number of slots available for students to take a palliative care elective.
10. Students frequently mentioned the phenomenon of ‘luck’ influencing whether and when they experienced good clinical role modeling and were included in learning opportunities around serious illness care. To maximize these opportunities for all students, establish and enforce policy such that attendings and residents take responsibility for including students in debriefing of difficult or disturbing clinical situations and following patient death. If debriefing is not occurring for the entire clinical team, ensure that someone checks in individually with students.
11. Establish and enforce policy such that attendings and residents take responsibility for including students in family meetings, particularly around patients the students have been involved with. Students recognize that they are likely to have no more than an observational role, but if appropriate, they are interested in being coached and supported through taking a role or leadership. In contrast, students should not be put into the position of telling a patient or family ‘bad news’ without preparation and support from attendings or residents.
12. When the palliative care team is consulting, invite students who had been involved in the care

of patients as part of the non-palliative care teams to observe family meetings led by palliative care.

13. Provide additional training to attendings about best practices in modeling leadership of family meetings, delivering 'bad news', and eliciting goals of care.
14. Provide additional training to attendings about exactly what palliative care is, how and when it can benefit patients, appropriate circumstances for requesting a palliative consult, and best practices for integrating the palliative team into patient care.

Considerations and recommendations of Coalition faculty from the four schools based on their reading of focus group transcripts.

1. It must be considered whether palliative care skills should be embedded in all specialties or whether the curriculum should provide more specific palliative care experiences for all students. A long-term goal should be to have all the skills demonstrated in all the specialties. Since this is not realistic in the short term, all students should have the opportunity to see serious illness care done by palliative care specialists. If students see this done poorly, and feel negative emotions associated with the experience, they might choose a field based on what they experienced with palliative care learning, and they might choose a specialty that they perceive to have less potential to involve them in these experiences.
2. Consider that serious illness care teaching can contribute to medical schools' ability to fulfill their accreditation goals for communication competencies. A strategy for expanding serious illness care in the curriculum may be to move away from the idea that this training is specific to serious illness care, and encourage application of the conceptual framework to providing the best patient care, generally. This perspective could enhance standard care, and facilitate all students developing skills for communication, leading family meetings, self-care, empathy, etc.
3. Learning about serious illness and palliative care is multi-modal – the definitions students provided demonstrate that they are influenced by social media, varying settings in medical school, teams in hospitals, and exams. Consider, therefore, how to better 'market' palliative care and how to reframe it so that students truly understand the benefits and appropriate ways to engage the palliative care team.
4. Different learning styles among students results in no consensus among students about the usefulness of simulation experiences through OSCEs. There is an important opportunity in later years of medical school to use didactics to reinforce some of the skills that may have been missed or undervalued when taught in earlier years. Consider creating a curriculum on a continuum through the medical school years.
5. For simulation training, very good actors are needed. Possibly the Coalition can train actors who are shared among all the Massachusetts medical schools.
6. Ensure that students understand the full nature of what hospice offers and does not offer. For example, only one student noted that home hospice is a privilege many cannot afford since relatives who might care for the patient at home need to be out of the house to work. Consider adding a hospice experience to the curriculum for all students.
7. Since students have more time available than the rest of the clinical team has, students should be leveraged to reach out to families outside of formal family meetings and to organize family meetings.
8. Serious illness training appears to be evolving positively as students in the focus groups seem to have a better understanding of what palliative care is than students did about a decade ago. Students in the focus groups do not seem threatened by palliative care at this time, and respect the knowledge and skills of the palliative team in terms of being experts in chronic pain management, eliciting goals of care, and understanding family members' goals. This may

indicate a significant change having occurred for the field of palliative care, and students generally sound like they are sensing this from the lectures they attended and directly from the residents and attendings.

9. Cognitive dissonance exists where students experience a disconnect between the preclinical years when they are encouraged to pay attention to their emotions, and then during rotations in the clinical years where frequently emotions are not addressed.
10. A preconception may be persisting within medical student education that learning about caring for dying patients is not as important as learning about treating disease. Therefore, student education lags behind in terms of how to process the high emotional impact of seeing a patient who is seriously ill or dying. While attendings have become habituated to death and dying among their patients, they should not assume that students have already had experience with dying patients and other serious illness situations. Attendings and residents should be reminded to assess when debriefing with a student is necessary, and to include students in all occurring debriefing sessions. Students have learned to be pragmatic and not have or at least not show their emotions; they need to learn how to manage their emotions both in front of patients and families, and then possibly differently after the patient/family encounters. Serious consideration must be given to the best way to train attendings to debrief emotional situations, and to include students in this.
11. In medical education, there is a need to work on professional identity with students. It has been a theme in medical practice for some time that if physicians focus on comfort or end of life, then they have failed. This is an issue of specialty identity, individual identity and how comfortable physicians are with end-of-life discussions.
12. Students are exposed to little or no outpatient palliative care.
13. There may be a necessary distinction between basic and advanced faculty development palliative training. All faculty should have at least the basics: understanding how they are feeling and processing the situations that occur with patients and families, and how to teach students this. Accomplishing this in the manner a palliative care physician would may be too high level to expect from most other specialty physicians. However, at the minimum all attendings should be able to recognize students' emotions and conduct debrief sessions.
14. Students recognize and even experience trauma when they witness serious illness conversations that do not go well. Students expressed feeling intimidated by and fearful of making mistakes during serious illness conversations. It is therefore important not to impart to students that this one conversation is the only conversation the family will have, and that the family will carry the experience of this conversation with them forever. Students must be willing to try things and learn from the experience, and faculty must teach students how to cope with discussions and events that do not go well.
15. Might palliative care skills be added to the core list of chief complaints that are required of all students?
16. Since students do not always identify a serious illness conversation as such when they experience it, attendings should be trained to explicitly label it when it occurs.
17. Students were vague in some of their definitions of serious illness, palliative care and hospice. Therefore, when attendings associate the 'What Matters Most' component specifically with palliative care, rather than as the responsibility of everyone involved in the patient's care, students form perspectives about when to call for the palliative consult. Students experience confusion around the difference between palliative and hospice, palliative care and pain management, who calls for the palliative consult, and subsequently, who is responsible for what in subsequent patient communication and care.
18. Consideration must be given to how students should be taught that they need to understand

how the diversity of the specific patient populations they care for should influence their conversations. After students learn the general fundamentals, they need exposure to how to tailor serious illness communication for different patient populations.

19. Schools must consider how to ensure that students who are on away rotations or at community hospitals that are not primarily teaching hospitals receive appropriate serious illness role modeling and learning opportunities. How should attendings at these hospitals be trained?
20. Consider whether every rotation should have at least one lecture on palliative care tailored to the specialty.
21. The focus groups may have served as an intervention itself in allowing the students to describe their experiences and express their need for different types of training. Providing this opportunity earlier in medical education, on a regular basis, may be useful.
22. Students should be invited to hear the results of the focus group study.

VI. References

Crabtree B, Miller W. (1999) Using Codes and Code Manuals: A Template Organizing Style of Interpretation. In B. Crabtree & W. Miller (Eds.), *Doing Qualitative Research* (2nd ed., pp. 163-177). Sage Publications.

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VII. Appendix: Serious Illness Communication Competencies

Mission statement: Upon graduation, medical students will have acquired the foundational knowledge, skills and inspiration to engage as residents in goal-oriented conversations with seriously ill patients, with commitment to lifelong learning and deliberate practice.

Competency #1: Explores patient and family understanding of illness, concerns, values, and goals in order to develop goal-concordant treatment plans across settings of care.

Competency #2: Demonstrates effective approaches to exploring and responding to strong emotions in patients and families facing serious illness.

Competency #3: Applies a patient-centered framework to sharing difficult news, exploring pain and symptom burden, assessing prognostic awareness, discussing resuscitation preferences, and describing care at end of life.

Competency #4: Demonstrates awareness of one's own emotions and attitudes, and coping strategies for managing stress and uncertainty when caring for seriously ill patients.

Competency #5: Defines and explains the philosophy and role of palliative care, and differentiates hospice from palliative care.