

Fighting Fires and Battling the Clock: Advance Care Planning in Family Medicine Residency

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ABSTRACT

Background and Objectives: Few family physicians treating patients with life-limiting illness report regularly initiating advance care planning (ACP) conversations about illness understanding, values, or care preferences. To better understand how family medicine training contributes to this gap in clinical care, we asked how family medicine residents learn to engage in ACP in the workplace.

Methods: We coded semistructured interviews with family medicine residents (n=9), reflective memos (n=9), and autoethnographic field notes (n=37) using a constructivist-grounded theory approach. We next used the constant comparative method of grounded theory to develop two composite narratives describing participants' experiences that we then member-checked with participants.

Results: We identified six core categories of social process to describe how participants were taught to engage in advance care planning. These social processes included previously unidentified barriers to ACP that were specific to their role as learners. These barriers appeared to lead to cultural avoidance of prognosis, conflation of ACP and goals of care (GOC) conversations, and deferral of difficult conversations to nonprimary care settings.

Conclusions: Family medicine educators should consider developing interventions such as flexible clinic schedules, dedicated ACP time, deliberate observed practice, and structured teaching to address potential barriers identified in this exploratory research. Family medicine leaders may wish to consider directly teaching residents and preceptors about crucial differences between ACP and GOC discussions. Shifting curricular focus toward eliciting values and illness understanding during ACP could help resolve a cultural avoidance of prognosis that limits family medicine residents' attempts to engage in ACP.

INTRODUCTION

Family doctors are ideally positioned to initiate advance care planning (ACP) to help patients with serious illness ensure that the medical care they receive is concordant with their values and wishes.¹ Patients with serious illness engaging in ACP with their doctors benefit from better knowledge of disease,² mood,^{3,4} positive family outcomes,^{4,5} documented goals,^{4,5} and shared decision-making,⁶ and may benefit from care that is more concordant with their goals^{5,7} and location preferences⁸; additionally, they experience less decisional conflict,⁹ nonbeneficial medical care near death, and lower overall health care expenditure.^{3-5,8,10,11} Unfortunately, while family physicians play the most central role in assessing and treating patients at the end of life,¹² fewer than one in 10 patients have conversations about their values and care preferences with their family physician,¹³ despite an interest

from patients in initiation of such conversations. 14,15

Physicians attempting to engage their patients in ACP encounter a multitude of logistical, cultural, and educational resistive forces. Logistical barriers, such as insufficient time and poor electronic medical information transfer, appear to impede physicians' ability to have frequent, iterative, and well-informed ACP conversations. 8,11,16–18 Social barriers, including a perceived aversion to death and dying from both patients and providers, also appear to play an important role. 11,19–21 Physicians have reported low confidence in their ability to overcome these barriers. 22 Recent efforts to address this confidence gap have focused primarily on the use of structured communication guides 23,24 to facilitate ACP. 25 But this combination of communication guides and workplace education have found limited success. 3,26 This lack of success might be explained by cultural resistance hampering effective

implementation of such interventions outside of the education research setting. ^{6,18,22,27} More recently, though, a new line of ACP scholarship has suggested that this incomplete traction for current communication guides may stem from lack of scholarly attention to innovations that support learners to address illness understanding and elicit patient values in ACP rather than focus purely on having better goals of care (GOC) decisions about potential interventions. ²⁸

Rethinking advance care planning would benefit from a deeper understanding of workplace practice. Despite low clinician confidence and engagement with ACP, few studies have deliberately examined how postgraduates approach ACP during workplace-based learning. 11,29,30 Despite formal expectations that residents graduate with individual competence in facilitating advance care planning, 31 family medicine researchers remain unclear on how residents approach ACP conversations in clinical encounters, experience role-modeling of ACP, or encounter barriers to their learning and skill development. 30,32 Future efforts at systemic improvement of ACP face risk of continual failure if proceeding with ongoing attempts at intervention without deep understanding of the cultural and educational issues at play. 28,33

To meet this call, our research team deeply explored how family medicine residents learn to approach advance care planning during their residencies. We focused on eliciting the social processes family medicine residents encounter in their efforts in the hope that a rich understanding of the sociocultural aspects of this problem can inform future research, teaching, and curriculum development.

METHODS

Design, Recruitment, and Ethics

We designed this study of social processes based on a constructivist-grounded theory approach and aspects of autoethnography to frame the analysis. 34-36 We recruited from a large urban site (80-90 residents) comprised of two academic family medicine clinics (38 residents each) and a few smaller distributed clinics from a single university in Ontario, Canada. The study was approved by the Hamilton Integrated Research Ethics Board (HiREB #8320).

Data Collection and Analysis

The data included in the study consisted of nine semistructured interviews conducted from August 2020 to March 2021 with a convenience sample of family medicine residents (three year-1 and six year-2 postgraduates); reflective memos that focused on the interviewer's experience of receiving each interview; 37 autoethnographic field notes; and member-checking feedback from five of the nine participants. The interviews were semistructured in nature, telephone-based, 35.6 minutes in mean duration, audiorecorded, and transcribed verbatim. We used NVivo (Lumivero) qualitative analysis software to facilitate coding. We began with collecting three interviews and then analyzing the interviews, memos, and field notes using sentence-by-sentence open coding to create a preliminary framework that we then refined as an analytic team. We then

collected and analyzed three more interviews using focused coding to explore gaps in the initial analysis. The primary author (T.A.) then synthesized two composite narratives ³⁷ of participant experiences using the detailed open-coding categories and emergent focused-coding categories. Finally, we ended data collection after three additional interviews exploring lingering questions in the analysis through theoretical coding. Our approach to the completion of data collection and analysis relied on saturation of the theoretical framework to the satisfaction of the research team and member-checking feedback ³⁸ (five of the nine participants responded) to ensure participants' lived experience had been richly and sufficiently represented. ^{35,39,40}

Reflexivity and Rigor

Our team consists of a departmental research associate (O.V.); a family doctor and palliative care specialist working at one of the academic clinics in the study (E.G.); the senior author, who is a palliative care scientist (M.H.); and the lead author, who is a medical education researcher and was a resident physician in one of the academic clinics included in the study (T.A.). Our analysis is based on the constructivist premise that the findings of the study are inextricable from the perspective of the researchers. 41 So, rather than focusing on generalizability and reproducibility of analysis and coding, we chose an autoethnography-informed approach to grounded theory that uses the *narrative* influence of the authorship team to crystalize the lived experience of the participants through their stories. 42-44 The lead author's lived experience as a resident in the program under study inextricably shaped the content and tone of the analysis. Through stepwise, repeated, and thorough collaborative analysis, we brought the analytic perspectives of the research team and the lived experience of the participants themselves to the data to ensure that the narratives resonated with the participants' experiences of advance care planning. This constructivist approach to rigorous qualitative inquiry focuses on ensuring credibility through richly detailed storytelling and situational resonance of the findings rather than on positivist criteria of rigor such as generalizability and reproducibility. 45,46

RESULTS

Our findings detail the sociocultural and logistical complexity family medicine residents face when they attempt to engage patients in advance care planning. At the core of our findings lie two composite narratives depicting a process our participants characterized primarily using the language of struggle and conflict. While the narratives stand as the primary analytic contribution, ⁴⁷ in support of the narratives, we also have included an analytic description of the coding structure as well as additional representative quotes as supplemental material.

Composite Narratives

The composite narratives tell the story of learners struggling to initiate advance care planning conversations and encountering cultural and logistical obstacles. In the first narrative,

FIGURE 1. Composite Narrative 1: Logistical Barriers

Phillip started residency just six weeks ago. He is nearing the end of a two-month rotation on his home service of family medicine. Learning where to find family medicine-specific clinical guidelines to follow has been a struggle, but he is beginning to feel like he understands how to effectively manage his time. He is booked to see a patient every thirty minutes which includes bringing patients from the waiting room, taking vital measurements, taking the history of the patient's primary concern, completing a physical exam, and reviewing the case with his preceptor. He tends to run at least 20 minutes behind.

He walks to the waiting room to call in his next patient, Anna, to discuss her potassium levels. The week before, Philip's preceptor received Anna's blood work showing a mildly elevated potassium level and asked the clinic's receptionist to book Anna into Phillip's schedule. Philip read up on his patients the previous night. He planned to ask Anna questions that would help him work through the differential diagnosis of mild hyperkalemia while knowing that she was hospitalized twice in the last two years with exacerbations of congestive heart failure. Anna is in her 80s and has been accompanied by her son to medical appointments since her husband died three years ago. Once all three of them make it to the examination room, Phillip starts to ask Anna questions about possible symptoms from her elevated potassium while taking vital measurements like blood pressure and heart rate. Anna does her best to answer Phillip's questions, and her son is able to fill in some details like dates and medications when she is unsure.

During his initial examination Phillip finds Anna's blood pressure to be moderately high and makes note to ask her about symptoms of elevated blood pressure after addressing her potassium. Anna tells Phillip that she "feels a little weak" but nothing like before she was admitted to the intensive care unit "because of my heart two years ago." Phillip's eyes dart back to the chart in surprise, as he had missed this third admission in his chart review last night. To buy himself some time, he asks if they have anything they wanted to ask about the potassium. Anna's son pulls out a form for priority parking that he hopes Phillip can fill out if he is going to ask for any more blood work because it is hard for Anna to get to the lab because she is so constantly short of breath. Phillip makes note of the request as he attempts to search through the three different boxes in the electronic medical record where the information might be stored to better understand the ICU admission from two years ago. After a few moments of silence he hears Anna ask:

"When are we going to get these meds right? I don't want to keep ending up in hospital. I'd do anything to avoid going back there." Phillip scans her medications quickly and then pauses. He considers asking her about her understanding of the cause of fluctuations in potassium, the swelling in her legs, and her multiple recent admissions to hospital. He senses a gap in her understanding and looks to her son to see if he has the same question or if he has a different understanding of her complex condition.

"We've got to finally get this right. My mom's sister lived to 95, so we want to make sure my mom gets another decade too," her son says, tapping his mother's knee with his right hand.

Competing with his desire to dig into their understanding of her life-limiting illness is Phillip's recognition that he has already used twenty minutes of his allotted visit time. Moreover, he still has to ask questions about her blood pressure, teach them how to fill out the home blood pressure monitoring log, recheck her heart rate and rhythm now that she has endorsed mild weakness, evaluate her volume status due to her shortness of breath, and double-check that he can fill out the parking form as they've requested. He also remembers that his schedule is mostly full for next week and that he will be away for the next two months while on his emergency medicine rotation.

Phillip races through the rest of his work and notes in the "ongoing concerns" box in the top right corner of the electronic record that the patient requires additional conversation about home-based and comfort-focused medical treatment (patient's request), education on sequelae of heart failure, and clarification of goals of care given the patient's request to avoid hospital at all costs. He hopes that the next doctor to see Anna while he is away will read his note or see his addition to the chart. Phillip leaves the room now well behind schedule to review with his preceptor and tell Anna about the plan. As he walks down the hall alone he decides to focus his review on the potassium and dyspnea given that he is still running late, but he finds himself hoping that somebody will find time to have those important conversations before he ends up seeing Anna in the emergency department during his next rotation.

about Phillip and Anna (Figure 1), residency training-specific logistical barriers act as rate-limiting factors, including lack of control over schedules, truncated relationships with patients, lack of deliberate practice, and fractured service blocks. In the second narrative, about Suzanna and Robert (Figure 2), unspoken cultural norms regarding the care of patients with life-limiting illness, such as supervisory aversion to prognosis, lack of autonomy in practice, and lack of supervisory encouragement, make prioritizing advance care planning over other aspects of patient care difficult for residents.

Coding Structure

As depicted in the narratives, our participants described six unique social processes in approaching ACP: (a) feeling under-

prepared and cautious; (b) confronting overwhelming odds; (c) asking for more guided practice; (d) developing patience, comfort, and confidence; (e) acknowledging complexity; and (f) jumping in. These processes are not linear steps; instead, they are acts residents participated in as they navigated the sociocultural complexity of treating patients with serious illness. Additional representative quotations are available as supplemental material. Subscripted numbers following quotations denote the deidentified participant number.

The primary underlying vocabulary that emerged in our analysis was one of struggle and conflict. Residents described feeling underprepared and cautious as a function of a "lack of training" $_{(R2)}$ in how to have ACP conversations and a lack of clinical knowledge around "navigating some of the

FIGURE 2. Composite Narrative 2: Clinical and Cultural Barriers

Suzanna is an experienced family medicine resident nearing the end of her training. She has recently been away from family medicine completing rotations in emergency medicine, internal medicine, oncology, and anesthesia that have helped her become comfortable with complex and life-limiting illness. This morning in family medicine clinic, Suzanna noticed that her preceptor's patient, Robert, had booked an appointment with her that same day with the primary concern recorded as 'choking.' Suzanna has become familiar with Robert over the past eighteen months and knows that he is suffering from metastatic esophageal cancer. Between patients that morning, Suzanna quickly scans his chart and finds that Robert has run into two different kinds of difficulty.

Late last month Robert was discharged from hospital after a two-week admission for aspiration pneumonia. While he was discharged home with his wife, the doctor that discharged him wrote that he was still quite weak, having difficulty going up stairs, and that it might be good to put a hospital bed into the patient's living room. Suzanna also notes that Robert's oncologist visited him while he was admitted to hospital to discuss the results of his recent CT scan. Unfortunately, his recent imaging suggests that Robert has new metastases to his liver and lungs. Suzanna prepares to see Robert in the afternoon. She remembers that he had surgery and radiation on his stomach, but runs out of time to look up his previously completed chemotherapy regimens. She suspects thirty minutes might be more appropriate for the visit, but her clinic's rules don't allow residents to make changes to their schedules without approval and by that time another patient has booked in 15 minutes after Robert.

The last time Suzanna saw Robert he walked into her exam room on his own. Today, Robert walks beside his wife in a two-wheeled walker and he looks frail. Robert tells Suzanna that he is having difficulty swallowing water and he wonders if she might be able to help him get some fluid thickener like he had in the hospital. Suzanna spends the next few minutes identifying the kind of choking Robert is reporting and what might be causing it before agreeing that thickened fluid and a referral to a speech-language pathologist would be useful.

Robert is silent for a few moments, and Suzanna asks him if he wants to say something.

"I appreciate what you've done for me. The oncologist asked me if I wanted more chemo, but I don't know if I do."

At his remark, Robert's wife jolts in her seat and says "but we can't give up hope," looking to Suzanna for support. "There must be a way to beat this. He did really well with the last chemo. I think if he would just eat and drink like normal he would be strong enough for chemo," she says.

Suzanna listens closely to their concerns and tries to decide what to say. It sounds to her that, despite his metastases, Robert and his wife might have understood that his previous chemotherapy could cure his cancer. She wonders if his recently weakened state might improve and would make him a candidate for third line palliative chemotherapy.

"Maybe it is worth discussing your values and how they might impact your medical decisions," Suzanna offers.

"Oh, he wants everything done," responds Robert's wife. "We have two new grandchildren!" Robert simply smiles at Suzanna in response.

By now, they have long exceeded the scheduled 15 minute appointment but Suzanna decides to review the case with her preceptor. She wants to be prepared to offer home symptom relief in her next conversation with Robert about the choices before him, but she isn't sure what her preceptor would be willing to do for him after Suzanna completes her residency and leaves. She first discusses Robert's dysphagia with her preceptor who spends some time verifying that mechanical swallowing issues are most likely the culprit. Suzanna mentions that they have questions about chemotherapy and she would like to talk to them again in a week or so. Her preceptor suggests one to two months might be ok because Suzanna will get them re-involved with allied health and oncology in the meantime. Running behind and feeling discouraged, Suzanna decides to move on with her preceptor's plan leaving thoughts about Robert's options aside for the time being.

questions that might come with an ACP conversation . . . [about] prognosis if they do have a terminal illness." $_{(R4)}$ They described confronting overwhelming odds stacked against their efforts to initiate ACP conversations. Residents described fighting to start ACP conversations due to multiple logistical barriers, including "battling the clock," $_{(R5)}$ "lack of information in the chart, lack of ability to actually find any dictations," $_{(R2)}$ and competing clinical problems that render their clinic days "more firefighting than anything." $_{(R5)}$ Residents also described complex psychosocial and cultural barriers such as "aversion to consider[ing] one's own mortality," $_{(R1)}$ "the feeling that these aren't my patients . . . and [that] you're just parachuting into someone's care" $_{(R6)}$ while "the [attending physician] might approach it differently" $_{(R4)}$ than they themselves hoped to.

Our participants found themselves asking for more guided practice where a preceptor looks "at their patient roster and

then identifies people that would benefit from having some time to have one of these conversations, takes the initiative to book them an appointment with a resident . . . [and for] clinics to encourage their clinicians to do that or to build that into the structure of the way that appointments are scheduled." $_{(R1)}$ Despite their struggles, some residents found roundabout methods of *developing patience*, *comfort*, *and confidence* by using off-service acute care rotations where patients present to "hospital for symptom management and were having this conversation . . . [because] in the hospital there's more flexibility" $_{(R5)}$ than in the family medicine clinic where "it just feels like a harder conversation." $_{(R5)}$

Residents found themselves *acknowledging complexity* in ACP, which can feel "hypothetical" $_{(R4)}$ and dynamic because "people's circumstances change, they change their opinion, or their disease trajectory changes . . . [and] the outcome of

different interventions changes" $_{(R2)}$ ensuring that "it's not always possible" $_{(R5)}$ to clearly delineate care plans ahead of actual decisions. And, despite all that, our participants found ways to *jump in* and try to "be proactive about it, be the primary educator for patients: plant those seeds so that if and when . . . they're faced with life and death, those [previously made] decisions are followed through" $_{(R5)}$ despite obstacles encountered.

DISCUSSION

The findings of our exploratory qualitative grounded theory study support previous research identifying structural barriers to advance care planning in health care settings. Quantitative survey-based, observational, and experimental research has long shown that doctors struggle to engage in ACP because they do not have enough time in their days, enough flexibility in their schedules, or enough information transfer between doctors. 8,16–18 By looking closely at the way residents are taught to approach care of patients with life-limiting illness, we also identified avoidant cultural norms that lead to hesitance toward ACP from the earliest days of family medicine training.

Metaphorical Combat

All of our participants talked broadly and at length about their attempts to overcome their own resistance and personal aversions to advance care planning in inflexible clinical and pedagogical environments. Such barriers are not unique to resident doctors. For example, previous research on practicing clinicians identified cognitive barriers to initiating ACP such as difficulty finding the right moment, trouble with emotions related to ACP, and frustration with care plans that are too simple for complex medical issues. ¹⁸

Our findings suggest that resident physicians encounter an additional set of barriers unique to their roles as postgraduate medical learners. Residents battled the clinical priorities of their preceptors, their lack of authority to shape clinic flow, their limited exposure to deliberate practice, and a fear that the ACP conversation was not theirs to have. Ultimately, these unique logistical barriers conspired together to create an avoidant approach to ACP. Pedagogical focus on fighting the crisis of the day in the form of adjustments to symptom management or lab results led to an absence of support for examining the overall big picture, mapping the trajectory of the disease, or planning for the future.

Culture at Work

Residents collided with cultural avoidance of advance care planning. Many physicians in training are introduced to the reality that metastatic cancer (with a small number of exceptions), late-stage organ failure, frailty, and dementia are progressive life-limiting diagnoses. ^{48,49} In the moments where our participants expressed their hope to talk with patients about their illnesses, they found themselves guided by preceptors toward avoidance, other priorities, or deferral to other physicians.

This culture of avoidance appeared to create a gap in understanding about the purpose of advance care planning. Because many of our participants were discouraged from engaging their patients in ACP in the primary care setting, they shifted their focus to off-service acute care settings to hone these skills. With practice and supervision, they learned how to talk with sick patients in a moment of crisis about their medical options, such as invasive resuscitation or consent for life-prolonging procedures. For example, rather than learning how to slowly, gently, and iteratively discuss the downward trajectory of heart failure, they reported learning how to dissuade patients from invasive and nonbeneficial treatments at the time of admission to hospital.

Astutely, some of our participants identified the difference between such acute goals of care conversations and ACP conversations best suited to primary care when a patient is chronically ill. But they did so only insofar as to say that they missed opportunities to learn how to approach ACP in the primary care setting. This educational failure may play a role in creating the poor understanding in practicing clinicians ²⁸ of the difference between GOC conversations at the time of a clinical decision and ACP conversations. ^{28,50} Given low clinician confidence in ACP, clarifying the differences between ACP and GOC conversations—such as those about code status, for example—may benefit both residents and practicing clinicians. Addressing this confusion may help improve clinical teaching around ACP and rectify the low rates of ACP in clinical practice. ^{13,50–52}

Looking Ahead

Family medicine residents are uniquely positioned to learn how to iteratively discuss patients' personal values, wishes, and understanding of their illnesses. Resolving the unfortunate avoidance of advance care planning at the core of postgraduate family medicine training will require sustained attention, research, and education. Previous primary care postgraduate education research has examined didactic teaching, chart audit, reflection, simulated patient interactions, and role play. 32,53,54 Future family medicine researchers may wish to more robustly test novel educational interventions like flexible clinic schedules, dedicated ACP time, 55 and deliberate observed practice as in keeping with the principles of workplace-based learning inherent to competency-based medical education. 56

Most importantly, family medicine educators may wish to consider directly teaching residents and preceptors about the crucial differences between goals of care conversations focused on interventions and ACP focused on values and illness understanding. When offered, patients with serious illness tend to accept and appreciate conversations about the progressive course of their disease. 57–60 Teaching residents that such ACP is most effective when iteratively and longitudinally focused on values and illness understanding may both address this patient desire and also help resolve the cultural avoidance that limits residents' attempts to engage in ACP. ²⁸,61

LIMITATIONS

Constructivist qualitative research seeks to describe complex social experiences that resonate with educators. This methodological approach inherently seeks out tensions and sociocultural complexity rather than claiming with certainty what can be generalized to all learners across different programs, places, and preceptors. 45,46 As such, the limitations of this work are not related to sample size (9 interviews, 9 memos, 37 fieldnotes, and 5 member-checking letters) or absence of triangulation in coding but rather are related to the inherent tension between the space and voice limitations in scholarly publication and transparency of autoethnographic reflection. Given that these findings are highly situated in both their local context and in the subjective experience of the authorship team, we recommend that family medicine educators use the narratives to stimulate conversations in their local setting and design future research about advance care planning rather than use this research as a singular basis for decision-making about curriculum design or learner assessment.

CONCLUSIONS

In our study, we found that family medicine residents struggled in their attempts to engage their patients in advance care planning. Logistical barriers specific to postgraduate medical education and pedagogical avoidance of the natural history of life-limiting disease led residents to conflate ACP focused on values and illness understanding with goals of care conversations focused on specific interventions. Testing educational interventions specific to ACP and targeted education around the culture of avoidance of death and prognosis may be required before significant improvements in ACP in family medicine will be realized.

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