**eTable 2: Illustrative quotes from 78 responses supporting three key themes.**

**Theme 1: Conflict about provider roles**

Autonomy concerns

|  |  |
| --- | --- |
| Comment | Job |
| Nurses should not place consult. Should be MD/PA making consult. | Fellow |
| I think PC consults work well in carefully selected patients. This should be a decision made by the rounding ICU team and should be no different than calling a nephrology consult. ID has managed to force consults but I don't think this should be the model. | Attending |
| Important to maintain primary team's role in determining whether pall care consultation is appropriate. | Fellow |
| Flexible guideline [should be the model]. | Attending |
| I don't want to be inundated with palliative care consults and meetings requested by other providers. I would rather approve the consult, not a nurse. | Attending |
| Can they be triggered without ICU team approval (like an RRT)? | APP |
| Sometimes PC consult should not be voluntary. | Fellow |
| I think as long as the system allows for attending approval despite meeting triggers a significant number of patients will be overlooked.  | Nurse |
| [Should be] broad spectrum and not dependent on all attending physicians agreeing. | Nurse |
| I think needing the ICU team approval will still limit early conversations to define goals of care. | Nurse |

 Stakeholder engagement

|  |  |
| --- | --- |
| Surgeons have to be on board.  | Fellow |
| Any system must include [the primary] surgeons as well as [surgical] intensivists. | Attending |
| This survey has ignored the role of the primary surgical team. Any such system will fail unless that team is included. | Attending |
| I think the biggest obstacle is the perception of the palliative care team by the surgical team. | Fellow |
| Implementation should involve discussion with attending surgeon | Attending |
| Different attendings have very different thoughts on palliative care; some are more open than others. | APP |
| I know that there needs to be buy-in from attendings, but there is also [patient/family member] bias against palliative care. It is often thought of as a euphemism for comfort care. In my opinion it is an extension of the American culture that is surprised we do not live forever. | Nurse |
| I think it would be very important to get buy-in from primary team (both surgeon and medicine teams) who may otherwise be resistant to implementation of an automated consult system. | Fellow |

**Theme 2: Usability and implementation concerns**

Usability concerns

|  |  |
| --- | --- |
| Comment | Job |
| People tend to bypass computer option sin the interest of time—they get lost in an already complicated, excessive documentation type system like the electronic health record (EHR) system.  | APP |
| Happy with the least amount of screens and buttons to deal with the system. The least time consuming with regards to charting, computer, etc. | Nurse |
| Must be fairly simple and easy to use. | Nurse |
| Any trigger system which is implemented needs to be simple to follow. Anything which is too busy will not be received in a positive manner. | Nurse |
| But we already have trigger overload. | Attending |
| Computer based triage via EHR often are overlooked secondary to “pop up fatigue;” provider will likely just ignore. | Attending |
| I would dislike having more boxes to click through that automatically pop up. I think this may lead to providers being annoyed and just clicking through. I would, however, like to see a tool that you could voluntarily access or stats show up. | Fellow |

Specificity of Triggers

|  |  |
| --- | --- |
| Triggers may need to be different for each ICU. Poor Glasgow Coma Scale (GCS) may be trigger [in the neuro ICU], but may not have a great use everywhere. | APP |
| My concern with a trigger system is that neurologic issues don't fit as neatly into a one prognostic score and think it is better to take a holistic view of the whole situation and assess family/patient needs. | Attending |
| All of my patients would continuously cause triggering for a [specialist] consult. | Attending |

Workforce shortages

|  |  |
| --- | --- |
| I think this is a good idea, but currently there are not enough staff to meet current needs. The system needs to be redesigned and support patients early and often not just for the end of life.  | Attending |
| Worried about a consistent person in the ICUs to monitor for patients who trigger system. | Nurse |
| I suspect an automated trigger system will show us just how much we underutilize this service. I think you are going to need more staff to be able to keep up. | Nurse |
| I feel bedside RNs would provide a "constant" with the trigger system. Our residents cannot (many times) take on basic duties, let alone add this to their load. Realistically, the residents, I feel, might not be as quick to assess for triggers as bedside RNs have more face time with families, [can recognize] condition changes, etc. | Nurse |
| ICU nurses already do a lot, and a lot of the time ICU teams are hesitant to involve palliative care until too late for patient to be involved in discussion. I think the palliative care team should search and identify patients. | Nurse |
| I am worried about the sustainability of such a trigger system, as there have already been several occasions when we have had to wait a day or two for a consult because of the burden on the palliative care teams, and in increased workflow expected with increased automatic catchment of such a system may delay my requested consults even further. Especially if they are for complex situations which don't meet the final call triggers. | Fellow |

**Theme 3: Family perceptions and clinician-family relationship**

|  |  |
| --- | --- |
| Comment | Job |
| My concerns lie with family perceptions of the intent. So many people, medical staff and lay persons, associate palliative care with end of life only so triggers should also trigger us to begin framing our care plan around long-term goals. | APP |
| In my experience there is a risk of patient/family getting hit over the head with the palliative care stick too much.  | Attending |
| Triggered consults could lead to conflicting information and confusing messages for families. | Fellow |
| Video/resources should not be distributed to families until this has been a face-face discussion with a team member (ICU MD, PA/NP, or Palliative Care provider).  | APP |
| Social situations (i.e. difficult family dynamics) need to somehow be incorporated. | Nurse |

**Other General Comments**

General support

|  |  |
| --- | --- |
| Comment | Job |
| Great stuff | Attending |
| I love this idea | Nurse |
| [I used triggered consult system] in hospital on east coast very effectively in combination with standardized family meeting within 72 hours of admit. | Nurse |
| Good idea - could address patient and family needs better.  | Attending |
| This is needed stat. | Nurse |
| Great idea! | Nurse |

Support of systems approaches

|  |  |
| --- | --- |
| I believe it could help bring attention to the possibility for hospice. And the palliative care team could help in insuring optimal patient and family outcomes where otherwise it could be missed or ignored. | Nurse |
| Really, [this should be used for] any patient on any type of life support (not post-op craniotomy) to start the conversation before it is imminent. Options and multiple discussions…some people don't always realize that palliative is actually an option or the team doesn't feel that they have exhausted [all other] options yet. | Nurse |
| Trigger system sounds like it only triggers nurses to ask for palliative care on rounds. I strongly believe nurses already know (without a trigger system) whether or not their patient needs a palliative care consult. However there is hesitation from the medical team to consult many times when it is appropriate. | Nurse |
| It would provide goals of care to be discussed and an opportunity to document GOC now and for future admits for continuity of care | Nurse |
| It’s a bandage for a bigger problem—engagement from attending MDs is what’s needed. | nurse |
| Trigger systems could initiate earlier pall care consults. | Attending |
| Some intervention with families at some point earlier the admission could better help to explain palliative services [and] to alleviate misconceptions that patients consulted on by palliative care are being given up on. | Nurse |

Support of palliative care

|  |  |
| --- | --- |
| Palliative care is a great addition, I encourage to be more active in ICU and exceptionally with families. | Nurse |
| Palliative care consultation should be more routine and less special/unique. | Attending |

Disapproval

|  |  |
| --- | --- |
| Better utilized on floor, not in ICU. For myself here in the ICU this is part of critical are, and I am very comfortable having these discussions and it comes second nature to most of our staff. | APP |
| I would not like to have such a system | Attending |
| I think that palliative care teams are too often aggressively increasing their scope of practice and often do not add much to patient care when the family/patient are still <4 weeks [since ICU admission]. | Attending |
| My enthusiasm for a trigger system is limited because I personally don't need it having been trained in some palliative care. Triggers might be useful to residents, younger physicians and in ICUs with a less integrative and more consultative approach. | Attending |

Evidence base

|  |  |
| --- | --- |
| I am assuming this trigger system will be studied prospectively, otherwise my enthusiasm is tempered. | Fellow |
| The effect of any system would have to be studied. I hope that evidence rather than opinion could be used to address this questions. | Attending |
| Not familiar with evidence suggesting trigger systems lead to better outcomes. What is evidence that more palliative care = better outcomes? What is evidence that we don't already appropriately consult? | Attending |
| I would like to know more about different trigger systems. | Nurse |

Suggestions for specific triggers

|  |  |
| --- | --- |
| Based on prognosis and diagnosis | Attending |
| Couldn't it be multiple triggers? | Nurse |
| It could be a multi-layered system with input from personnel at different levels. | Attending |
| Mechanical devices plus duration. | APP |
| Trigger should be low and decision to accept low. Nursing and surgery should be usual trigger initiators. | Attending |
| Strongly believe that multiple organ system failure of 3 or more organs is equal to a poor prognosis. Also infection with gram negative, multi-drug resistant organism. | Attending |
| Add frailty, the “surprise” question [i.e., ‘would you be surprised if the patient died in the next year?”] | Attending |
| I think it is important to include the bedside nurse, as they spend the most time with the family/patient. | Nurse |

Alternative approaches

|  |  |
| --- | --- |
| Here is what we need, not triggers but (a) before rounding on next patient, someone asks "would it help to have palliative care involved" and (b) we see someone from PC who asks us "is there anyone you want us to see?" | APP |
| The thing that seems to be lacking more and more each year in medicine is people actually having a conversation with other people. MDs with families, MDs to MDs, MDs to nurses, etc. It seems using electronic "fixes" erode a culture of just talking to people. I think a co-rounding model would be best. | Attending |
| Education re: end of life needs to occur in the community, way before critical illness hospitalization. | APP |
| Education on palliative care for MDs needs to focus on changing the mind set from "death" to mean helping people to lie their life more comfortably and as symptomatic free as possible. | Nurse |
| I believe palliative care rounding with teams would be much more effective than a trigger system. | Nurse |
| Please check the following reference for an idea for a "palliative care needs checklist" Creutzfeldt et al. Palliative care needs in the Neuro-ICU, Crit Care Med 2015;43(8):1677-84 | Attending |
| My issue with "trigger system" is that patients with some diagnoses/prognosis have very different goal and palliative care needs based on my experience. Which is why I think a palliative care rounds where each patient is at least 2-3x a week is a better "trigger" because otherwise hard to identify comprehensively who really needs pall care. | Fellow |
| Serious educational initiation with respect to role and utility of palliative care. | Fellow |
| The potential downside to using a trigger system is that it doesn't change physician's attitudes towards palliative care consults. They may be more likely to agree to a consult if they are being approached by a palliative care team. | Nurse |
| I think the best way to increase pall care consults/involvement will be to have palliative care team screen all patients M-F then discuss with fellow or attending. This works well for PT/early mobilization. | Attending |