



THE FUTILITY TRAP: HOW THE ICU PROLONGS DYING

Alicia Brunelle, MD
Pulmonary – Critical Care Medicine Fellow
Virginia Commonwealth University
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Disclosure

- I have no actual or potential conflict of interest in relation to this program/presentation.

Objectives

- At the end of this discussion, participants should be able to...
 - Discriminate between quantitative and qualitative futility
 - Discuss the benefits, as well as, limitations of evidence-based approaches to limit non-beneficial patient care
 - Navigate a challenging clinical case by employing evidence-based algorithms to attempt limiting non-beneficial care



ICU: MORE $\neq$ BETTER

We have many resources at our disposal in the ICU

Ventilators

Vasopressors

Dialysis

Inotropes

Mechanical
support devices
(Impella, Balloon
Pump, LVAD)

Tracheostomy

Etc...

“THE ROAD TO
HELL IS PAVED
WITH GOOD
INTENTIONS”



Quick Figures

One in five American deaths occur in an ICU¹



10 – 20% of critically-ill patients receiving life-prolonging interventions that should not be provided^{2 3 4}



DEFINING FUTILITY

Futility

- Noun; the act or state of uselessness, serving no purpose⁵
- There are two forms of futility
 - Quantitative futility
 - Physiologic ineffectiveness
 - Examples: CPR on a decapitated patient
 - Qualitative futility
 - Though physiologically effective, does not provide beneficial value
 - Examples: initiating dialysis for a patient in a persistive vegetative state²

Decision-Making Approaches Used to Limit Potentially Nonbeneficial Life-Prolonging Interventions

Jason N. Batten, MD, MA; Sofia Weiss Goitiandia, MA, MSc; Julia K. Axelrod, BA; Helen O. Chernicoff, MD, MS; Ariadne A. Nichol, MD; Lorraine M. Pereira, BA; Jacob A. Blythe, MD, MA; Jacqueline M. Kruser, MD, MS; Elizabeth W. Dzeng, MD, PhD, MPH



- 101 clinician interviews at 3 academic medical centers on the west coast
 - 52% attending physicians
 - 16% trainee physicians
 - 6% advanced practice providers
 - 21% nurses
 - 3% chaplains
 - 2% social workers
- Emergency medicine, Ethics, Geriatrics, Critical Care, Internal Medicine, Palliative Care
- Based on interviews, categorized approaches into 6 different frameworks ⁶

(1) Providing an informed choice regarding interventions

- Physicians present multiple options including at least 1 that limits life-prolonging interventions
 - "These are the options on the table... wanting to be somewhat realistic so that the individual can make a more informed decision"
 - "really explain that even if they are going to offer that treatment... they do not believe that it would further the patient's life outside of the hospital"
 - "I try to open the door for them not to choose life-prolonging interventions and not be afraid of it"
 - "The attending offered a tracheostomy...didn't really have a discussion about what life would look like afterwards" ⁶



(2) Making a recommendation to limit interventions

- Physician presents multiple options to the patient/surrogate and conveys professional recommendation to limit interventions
 - "I try to take the burden off them and say that I don't recommend doing some these things"
 - "I don't know if this would help you, but this is what I would do with my mom or dad"
 - "I do leave it up to them to actually make the final decision" ⁶



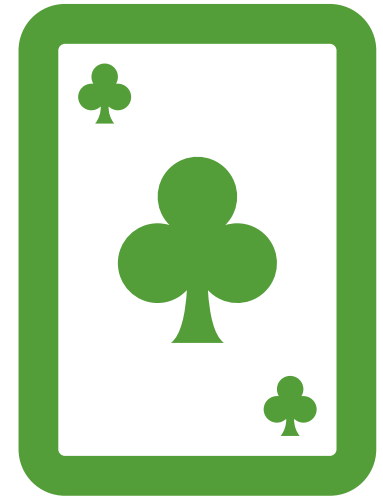
(3) Stating a plan to limit interventions

- Physician states a plan to limit interventions in presence of known alternatives and proceeds unless there is dissent
 - "I think a recommendation is sometimes too hard for families because it's their decision again."
 - "Now it's up to me as the physician to do what I think this patient would tell me to do"
 - "Family members are looking for the burden to come off their shoulders"
 - "I'm willing to be confident with my delivery. And I am very happy to back down if the family goes bonkers over this." ⁶



(4) Explicitly not offering interventions

- Physician states a final decision to limit interventions without providing a choice to patient/surrogate
 - "I think that it's not appropriate to do dialysis in this situation. I think she's telling us that she's dying, and so, I am not going to offer dialysis"
 - "We told the family absolutely not [to CPR]. The family objected. We felt we had an obligation only to offer therapies that had some potential of being effective." ⁶



(5) Silently withholding interventions

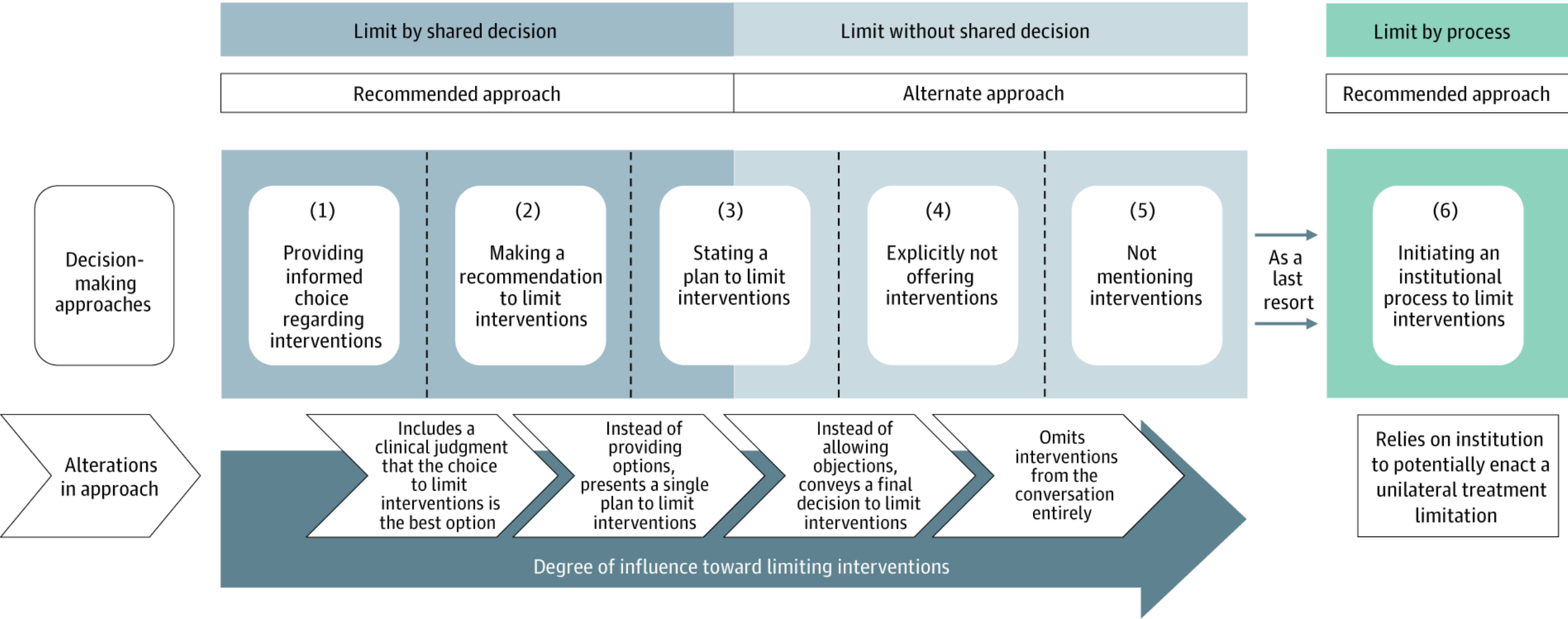
- This physician omits an intervention from the discussion entirely, does not consult the team responsible for the intervention
 - "I don't feel like I need to present every single option. I don't necessarily present everything we can do"
 - "I have had patients where, knowing the nephrologist who was on, I have not called nephrology because I did not want that patient to end up on dialysis"
 - "Sometimes, I give a little bit less information if I think family members are going to grab on to something that has 0.0005% change of happening" ⁶



(6) Invoking an institutional process to limit interventions

- The institutional process limits interventions over the objections of patient or surrogate, supported by hospital policy structures, or described as option of last resort
 - "We did a unilateral 'no dialysis' and gave them 7-days notification"
 - "We have a mechanism where if the Ethics Committee decides in the doctor's favor, there's a hospital policy where it can overrule the family"
 - "I really try to reserve unilateral decision-making as a last resort" ⁶





Challenges with shared-decision making



Difficulties faced with making profoundly difficult, life-ending decisions

Can be time-consuming and emotionally - draining experience

With delays in decision-making, patient may suffer or clinical team distressed

Challenges with Institutional Process



Likely to worsen relationship with patient or surrogate causing resentment or suffering



Fear of consequences like legal action or media scrutiny



Only truly successful if a unified team with administrative support (not always present)⁶

Concerns with physician-set limitations



Without a shared-decision, risk imposing physician's own values and biases on patients



There is ambiguity with ethical permissibility of the nature of certain interventions (ECMO vs. Dialysis) and physician specialty (surgery vs. Medicine) ⁶



RE-DEFINING FUTILITY

AMERICAN THORACIC SOCIETY DOCUMENTS

An Official ATS/AACN/ACCP/ESICM/SCCM Policy Statement: Responding to Requests for Potentially Inappropriate Treatments in Intensive Care Units

Gabriel T. Bosslet, Thaddeus M. Pope, Gordon D. Rubenfeld, Bernard Lo, Robert D. Truog, Cynda H. Rushton, J. Randall Curtis, Dee W. Ford, Molly Osborne, Cheryl Misak, David H. Au, Elie Azoulay, Baruch Brody, Brenda G. Fahy, Jesse B. Hall, Jozef Kesecioglu, Alexander A. Kon, Kathleen O. Lindell, and Douglas B. White; on behalf of The American Thoracic Society *ad hoc* Committee on Futile and Potentially Inappropriate Care

THIS OFFICIAL POLICY STATEMENT OF THE AMERICAN THORACIC SOCIETY (ATS) WAS APPROVED BY THE ATS, JANUARY 2015, THE AMERICAN ASSOCIATION FOR CRITICAL CARE NURSES (AACN), DECEMBER 2014, THE AMERICAN COLLEGE OF CHEST PHYSICIANS (ACCP), OCTOBER 2014, THE EUROPEAN SOCIETY FOR INTENSIVE CARE MEDICINE (ESICM), SEPTEMBER 2014, AND THE SOCIETY OF CRITICAL CARE MEDICINE (SCCM), DECEMBER 2014

Official ATS/AACN/ACCP/ESICM/SCCM Policy Statement (2015) ⁷

- Recommendation to use "potentially inappropriate" rather than "futile"
- To manage cases of dispute:
 - Enlist expert consultation to continue negotiation
 - Give notice of the process to surrogates
 - Obtain a second medical opinion
 - Obtain review by an interdisciplinary hospital committee
 - Offer opportunity to transfer to an alternate institution
 - Inform surrogates of opportunity to appeal
 - Implement decision
 -



PHYSICIANS SHOULD PROVIDE EMOTIONAL SUPPORT AND ESTABLISH A TRUSTING RELATIONSHIP; DISCUSS PROGNOSIS IN CLEAR LANGUAGE, ELICIT PATIENT'S VALUES AND PREFERENCES



BASED ON THIS CONVERSATION, PHYSICIAN SHOULD DISCUSS WHICH TREATMENT OPTIONS FIT WITH THE PATIENT'S GOALS



IF SURROGATE REQUESTS TREATMENT THAT CLINICIAN BELIEVE ARE NOT CONSISTENT WITH A PATIENT'S VALUES OR INTERESTS, ARE OUTSIDE THE BOUNDARIES OF ACCEPTED PRACTICE, CLINICIANS SHOULD NOT SIMPLY ACQUIESCE TO THESE REQUESTS ⁷

"When time pressures (such as a rapidly deteriorating clinical condition) make it infeasible to complete all steps of the conflict-resolution process and clinicians have a high degree of certainty that the requested treatment is outside accepted practice, they should refuse to provide the requested treatment." ⁷



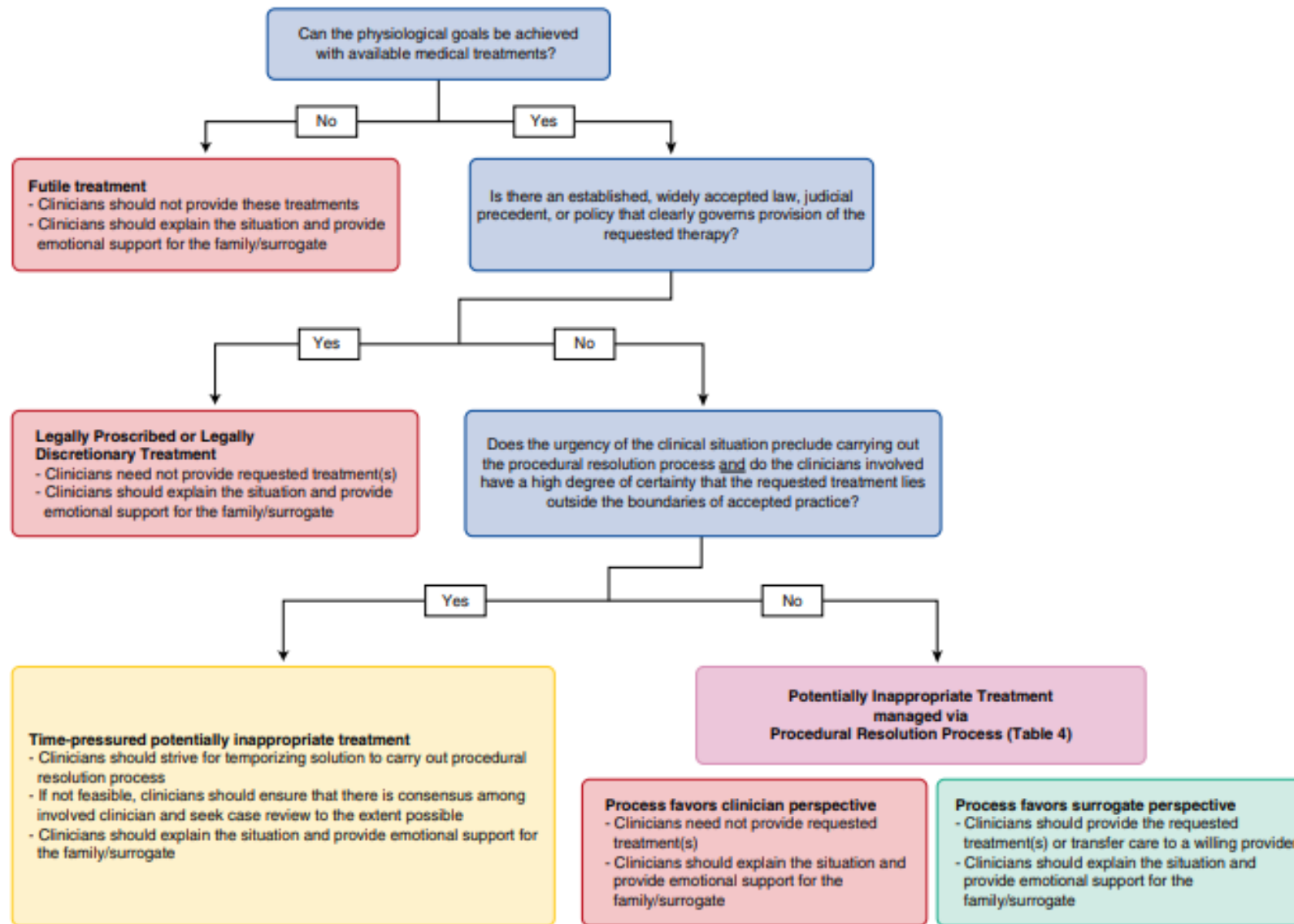


Figure 1. Recommended approach for management of disputed treatment requests in intensive care units.



PATIENT CASE

- 74 yo independently living F with history of HTN, HFrEF (35-40%), Afib s/p Watchman, and CAD s/p PCI (2025) admitted to the MRICU after being found down at home.
 - Last seen by family 3 days prior to admission, found on bathroom floor during wellness check with O2 saturation 76% and GCS 11
 - ER workup found elevated troponin (7), lactic acid (3.5), and elevated Cr, CK, and AST/ALT. CT images showed bilateral segmental and subsegmental pulmonary emboli with extensive clot burden, as well as, colonic thickening and numerous liver lesions concerning for potential malignancy. CTH with concern for potential embolic infarcts.
 - Admitted to MRICU for monitoring of high-risk PE, but mental status quickly deteriorates prompting intubation for airway protection.

Patient Background

No Advanced directive on file

LNOK shared between 3 adult children (two daughters, one son)

Adult Granddaughter also heavily involved in care

Overall poor health care literacy, limited insight into patient's chronic medical conditions prior to hospitalization

Patient and family of Christian faith



Early ICU Course

- Infectious workup notable for Klebsiella UTI and completes antibiotic course
- Follow up TTE showed further reduced EF to 35-40%
- Follow up MRI shows multiple embolic infarcts
- Despite negative cEEG, unrevealing LP, and withholding sedation for several days, she continues to be minimally responsive

Initial Thoughts?

- Prognosis is likely poor
- Multi-organ failure:
 - Encephalopathy
 - Heart Failure
 - Renal Failure
 - Respiratory Failure

What would you offer?



Liver biopsy to confirm cancer?



Dialysis if renal function continues to worsen?



Tracheostomy for inability to wean from ventilator?

Navigating Difficult Family Dynamics

- Different personalities between adult children and grandchild
- Unrealistic expectations within the health care system
- Splitting between health care team members
- Changing team members

- Per Oncology,
 - “Honest discussion with family members including 2 daughters, son, granddaughter. Conversation by phone. I told them she is not a chemotherapy candidate now and with little change of neurologic recovery I don’t foresee we will ever get to chemotherapy and the cancer in the liver will continue to progress and eventually take over the liver. They were tearful at this news, understandably.”

Consultants

- Enlisting chaplain,
 - “Shared concerns about communication with primary team. Family is Christina and uses faith to cope with life challenges. This writer advocated for family by sharing her concerns with charge nurse.”
 - “Realizes her mother will not come home. Wants mother to keep fighting. Is trusting God even as she experiences her mother’s decline.”
 - “Two children would like to move to comfort, but XX shares she believes pt is going to die, but I am not ready.”

Spiritual Support

ICU Course Continued

Remains mechanically ventilated for nearly 1 month

Code status changed to DNR/DNI prior to extubation

Moves to hospital medicine 5 days later

Mental status remains poor – will open eyes to voice, but does not track / follow commands



Has a Dobhoff in place for artificial nutrition



Multiple ongoing goals of care discussions with hospital medicine attendings and palliative care

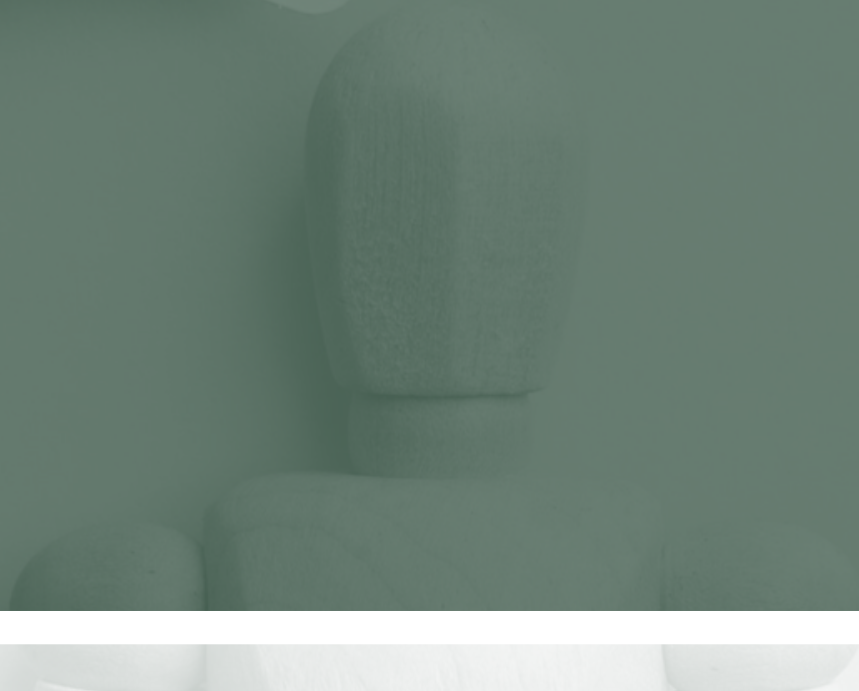
- Family still not ready to transition to hospice

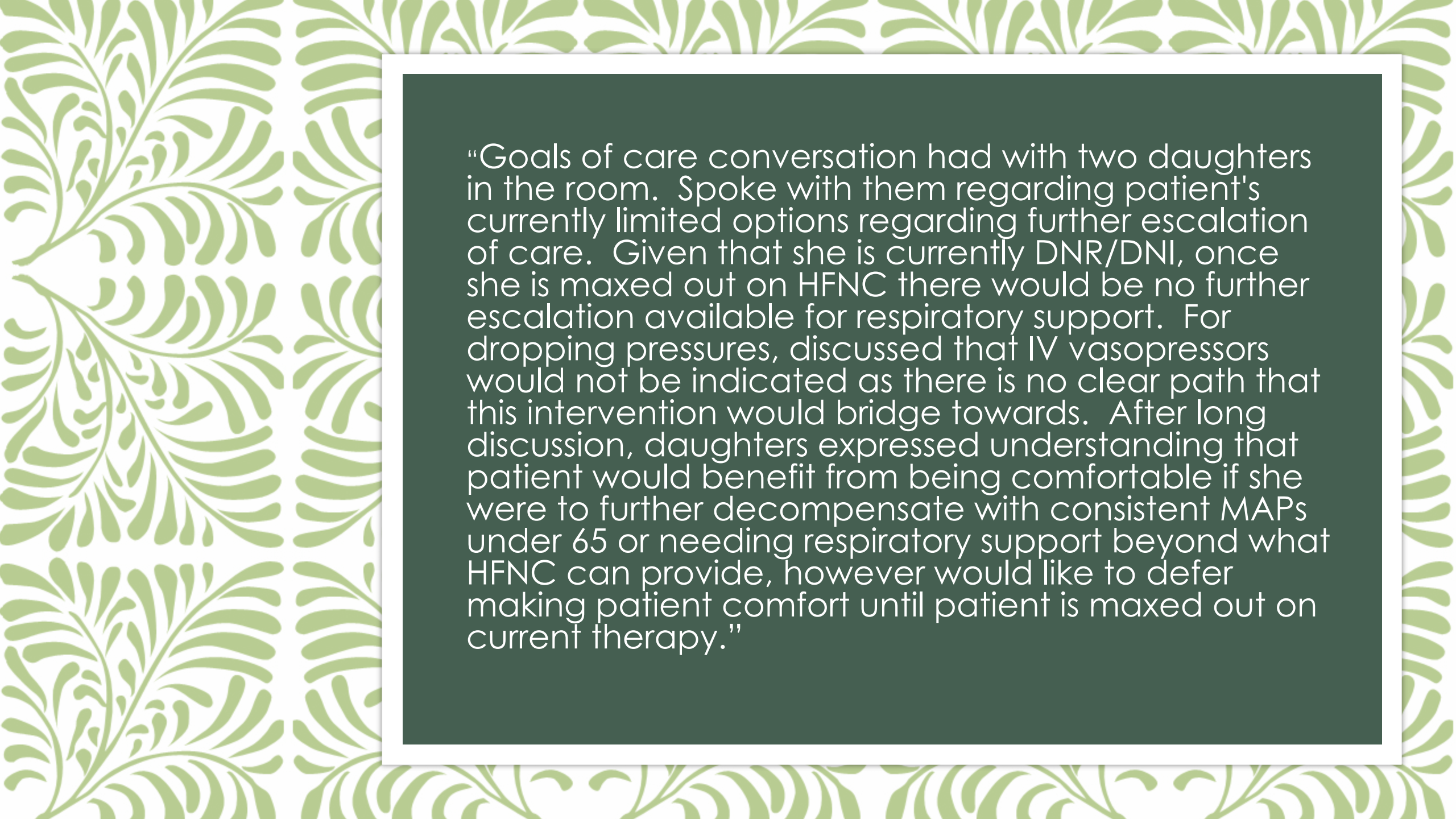


15 days after extubation has an aspiration event on the floor, requiring maximum HFNC and is re-admitted to the MRICU. Develops hypotension and need for vasopressors

Hospital Course

What would you offer at this time?



The background of the slide features a repeating pattern of stylized green leaves and branches on a white background. The leaves are elongated and pointed, with some showing internal vein details. The branches are thin and curving, creating a dense, organic-looking pattern.

“Goals of care conversation had with two daughters in the room. Spoke with them regarding patient's currently limited options regarding further escalation of care. Given that she is currently DNR/DNI, once she is maxed out on HFNC there would be no further escalation available for respiratory support. For dropping pressures, discussed that IV vasopressors would not be indicated as there is no clear path that this intervention would bridge towards. After long discussion, daughters expressed understanding that patient would benefit from being comfortable if she were to further decompensate with consistent MAPs under 65 or needing respiratory support beyond what HFNC can provide, however would like to defer making patient comfort until patient is maxed out on current therapy.”



WHAT WOULD YOU
HAVE DONE
DIFFERENTLY?

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 - Navigate a challenging clinical case by employing evidence-based algorithms to attempt limiting non-beneficial care



QUESTIONS?

Thank you for your participation!

References

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