

REVIEW

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Medical, ethical, and legal aspects of end-of-life dilemmas in the intensive care unit

ABSTRACT

Physicians in the intensive care unit face a myriad of ethical dilemmas involving end-of-life care, yet they receive only minimal training about their jurisprudential obligations, and misconceptions about legal responsibilities abound. In particular, significant uncertainty exists among critical care physicians as to ethical and legal obligations for terminally ill patients. This paper presents 3 hypothetical cases to elucidate the medical, ethical, and legal considerations in common end-of-life situations encountered in the intensive care unit.

KEY POINTS

Addressing end-of-life care dilemmas requires careful analysis, an understanding of basic ethical and legal principles and perspectives, and access to reliable consultants.

Adults with decision-making capacity are entitled to refuse medical care, including life-sustaining interventions, but it is important to make sure such refusals are reasonably well informed.

When a patient lacks decision-making capacity, the care team should attempt to locate someone who can speak to the patient's wishes and values.

AMID THE VARIOUS CLINICAL DECISIONS that must be made for critically ill patients in the intensive care unit (ICU), physicians must often confront complex circumstances involving end-of-life care. Most deaths in the ICU occur within the context of medical orders limiting treatment, such as do-not-resuscitate (DNR) and do-not-intubate (DNI) orders, or measures instituted to ensure patient comfort such as comfort care.¹ These directives originate from the ethical and legal imperatives to honor the decisions of patients or designated surrogates to consent or refuse medical treatment, and from physician judgments about the benefits, burdens, and effectiveness of those treatments.²

Physicians receive minimal training about their jurisprudential obligations in determining end-of-life care, and misconceptions abound regarding their legal responsibilities in this area.³ Moreover, each state in the United States maintains its own medicolegal system, and many physicians practice medicine in multiple clinical settings and geographic areas, all of which complicate their ability to master the law. In addition, clinical terminology often differs substantially from legal language (Tables 1 and 2), making a synthesis of these 2 areas highly challenging.

These factors can contribute to significant uncertainty among critical care physicians regarding their ethical and legal obligations for terminally ill patients. Concerned with facing malpractice lawsuits, physicians may err on the side of aggressive treatment or overtreatment rather than forgoing treatments they

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TABLE 1

Select clinical ethics terms and definitions

Term	Definition
Autonomy	A patient's right to self-determination and to make personal medical decisions.
Justice	Similarly situated patients should be treated similarly. The distribution of resources should be fair and based on medical need and the likelihood of a "good" medical outcome.
Beneficence	Medical treatments should be provided to benefit a patient.
Nonmaleficence	The principle of "do no harm." This pertains to the potential burdensomeness of medical treatments. A balance between beneficence and nonmaleficence should always be considered when providing medical treatments and care.
Decision-making capacity	A patient's cognitive abilities to understand information and communicate medical decisions.
Implied consent	A situation in which a reasonable person would consent to medical care. It is relevant in a situation where a patient is unable to make his or her preferences known, no surrogate decision-maker can be identified, and failure to immediately provide medical care would risk loss of life or limb.
Medical futility	"Inability of a medical intervention to fulfill any of the patient's expressed goals and/or achieve any beneficial physiologic outcomes." ^a Note: this is a concept that can be difficult to define or quantify and is often an area of uncertainty, subject to debate.

^a From Chow GV, Czarny MJ, Hughes MT, Carrese JA. CURVES: a mnemonic for determining medical decision-making capacity and providing emergency treatment in the acute setting. *Chest* 2010; 137(2):421–427. doi:10.1378/chest.09-1133

judge to be medically inappropriate or overly burdensome.^{3,4} These practices persist despite a rich and consistent legal precedent that runs contrary to this perception (Table 3).

We present 3 hypothetical cases to elucidate the medical, ethical, and legal considerations in common end-of-life situations encountered in the ICU. After placing the cases in their medical and ethical contexts, a broad legal overview at the federal and state levels will be provided. It is the authors' hope that these case presentations and accompanying discussions will help inform the practice of physicians who deal with similar scenarios and increase awareness and understanding of medicolegal concerns in similar complex cases.

The information we present here is intended only for general informational purposes. It does not constitute legal advice and should not be construed as such.

CASE 1: A PATIENT WITH DECISION-MAKING CAPACITY REFUSES RECOMMENDED EMERGENCY MEDICAL CARE

A 22-year-old woman with severe refractory asthma is admitted to the medical ICU for a severe asthma exacerbation. The critical care team believes she requires emergency intubation and mechanical ventilation. However, she refuses intubation stating, "I am sick of living with this disease and don't want any more treatment." Her attending physician determines that she has decision-making capacity (DMC) and that she understands that refusing intubation may result in her death.

Medical perspective

In general, obtaining informed consent is a legal and ethical imperative incumbent on physicians before they initiate therapies or perform procedures.⁵ The process of informed consent can only be undertaken with patients who

Many patients in the ICU lack decision-making capacity

TABLE 2

Select medicolegal terms and definitions

Term	Definition
Medical law or health law	An area of law, which can be construed broadly to pertain to medicine and healthcare, including confidentiality, negligence, termination of treatment, and torts in the practice of medicine and clinical care.
Competency proceedings	Hearings conducted to determine a person's mental capacity.
Negligence	The omission to do something that a reasonable person would do, or the doing of something that a reasonable and prudent person would not do. The failure to use such care as a reasonably prudent and careful person would use under similar circumstances. Actionable negligence involves the breach or nonperformance of a legal duty; essential elements are duty, breach, proximate cause, and harm.
Malpractice	Professional misconduct or unreasonable lack of skill. Failure of one rendering professional services to exercise that degree of skill and learning commonly applied under all the circumstances in the community by the average prudent reputable member of the profession.
Medical futility	Varies by jurisdiction and may be fact-specific. There is no overarching, agreed-upon legal definition.
Medical directive	A document that expresses a patient's wishes regarding various types of medical treatment in several different situations where the patient may become incapacitated and thus unable to make or communicate such decisions on their own. This document can grant a power to make medical care decisions to another by means of a power of attorney, healthcare proxy, or living will.
Surrogate medical decision-maker	A person empowered by a medical directive, statutory law, or a court of competent jurisdiction with making medical decisions for a patient who lacks decision-making capacity.
Implied consent	Consent that is not expressed and manifested by explicit and direct words but is gathered by implication or necessary deduction from the circumstances or from the conduct of the parties. One example is an adult patient with decision-making capacity who voluntarily offers his arm to a healthcare provider for a vaccination.

Any procedure that alleviates discomfort or provides palliation should not be considered futile

have the cognitive abilities to comprehend, reflect, and communicate effectively. Patients are determined to have DMC if they can:

- Communicate a specific decision
- Demonstrate an understanding of relevant clinical information
- Recognize the consequences of accepting or declining recommended therapy
- Elaborate on how a decision was reached.⁵

Nonverbal communication can be an acceptable means to meet these criteria.

A robust informed consent process includes educating a patient in understandable and transparent terms about the nature, purpose, risks, benefits, and alternatives of a proposed treatment or intervention and the likely consequences of refusing the proposed intervention. This informed consent and educative process relies on the patient having adequate DMC for the specific decision under consideration.⁶

Although not impossible in most critical care situations, a robust informed consent

TABLE 3

Select legal decisions related to end-of-life care

Case	Decision
Terry Schiavo, 1990–2005	A series of federal and state court decisions, ending in 2005 when a court decision allowed the removal of a feeding tube from an incompetent patient who had suffered an anoxic brain injury. The patient's husband requested withdrawal of the patient's feeding tube and the trial court found that there was clear and convincing evidence that Ms. Schiavo would not have wanted a feeding tube, based on prior oral statements Ms. Schiavo had made to family members.
Texas Advance Directives Act, 1999	Provides in relevant part that, "A physician, or a health professional acting under the direction of a physician, who participates in withholding or withdrawing life-sustaining treatment from a qualified patient in accordance with this subchapter is not criminally liable or guilty of unprofessional conduct as a result of that action unless the physician or health professional fails to exercise reasonable care when applying the patient's advance directive." (§ 166.044) and that, "If an attending physician refuses to honor a patient's advance directive or a health care or treatment decision made by or on behalf of a patient, the physician's refusal shall be reviewed by an ethics or medical committee. The attending physician may not be a member of that committee. The patient shall be given life-sustaining treatment during the review" (§ 166.046).
Death With Dignity Act, 1994	Permits mentally competent, terminally ill patients to obtain a prescription from their physician for a lethal dose of drug provided certain conditions are met.
Patient Self Determination Act, 1990	Applies to institutions that receive Medicare or Medicaid funding and requires that patients must be informed of their rights regarding medical decision making, including the right to refuse life-sustaining treatment. Such institutions are also required to inquire as to whether patients have an advance directive and to document any advance directive in the patient's medical record.
Cruzan v. Director, Missouri Department of Health, 1990	US Supreme Court Case holding that, "(1) the United States Constitution did not forbid Missouri from requiring that clear and convincing evidence of an incompetent's wishes to the withdrawal of life-sustaining treatment; (2) state Supreme Court did not commit constitutional error in concluding that evidence adduced at trial did not amount to clear and convincing evidence of patient's desire to cease hydration and nutrition; and (3) due process did not require state to accept substituted judgment of close family members absent substantial proof that their views reflected those of patient."
Bouvia v. Superior Court, 1986	California decision that a competent 28-year-old quadriplegic patient had right to removal of nasogastric feeding tube inserted against her will.
Bartling v. Superior Court, 1984	California decision that a competent 70-year-old, seriously ill man had right to the removal of respirator.
California Natural Death Act, 1976	First state law establishing a formal procedure to allow certain terminally ill competent adult patients to refuse or have withdrawn life-sustaining interventions.
Quinlan, 1976	Supreme Court of New Jersey decision (70 N.J. 10, 355 A.2d 647 (NJ 1976)) holding that, "upon the concurrence of the guardian [here, the patient's father] and family of Karen [Quinlan], should the responsible attending physicians conclude that there is no reasonable possibility of Karen's ever emerging from her present comatose condition to a cognitive, sapient state and that the life-support apparatus now being administered to Karen should be discontinued, they shall consult with the hospital 'Ethics Committee' or like body of the institution in which Karen is then hospitalized. If that consultative body agrees that there is no reasonable possibility of Karen's ever emerging from her present comatose condition to a cognitive, sapient state, the present life-support system may be withdrawn and said action shall be without any civil or criminal liability therefor on the part of any participant, whether guardian, physician, hospital or others."

process is extremely challenging to put into operation⁷ due to the severity of the patient's underlying illness or the effects of sedation, or both. The presence of an endotracheal tube can also complicate matters as it may preclude meaningful verbal communication. If a patient is intubated, awake, and not unduly influenced by sedatives, communication can be accomplished through nonverbal means such as gesturing and writing and the use of word or letter charts and electronic devices. However, these alternative modes of communication can be cumbersome and time-consuming and are only effective when there is sufficient time to decipher the information.

Informed consent in an ICU must typically be obtained through disclosures and communication with surrogate decision-makers. If the patient has not previously appointed a surrogate decision-maker, the clinical team must identify the individual who would best reflect the patient's goals of care, which is deemed substituted judgment. Other considerations related to a patient's DMC include cognitive impairment (eg, severe depression, dementia), emotional status (eg, frustration with disease or treatment), and prior experiences. Issues specific to critically ill patients that do not necessarily affect DMC but may still impact decision-making include a patient's clinical condition and acuity and the general ICU environment.

It is advisable to obtain a second medical opinion when possible if there is any question or dispute about the patient's DMC. This second opinion should come from a provider who has appropriate expertise but who is not a member of the care team that is recommending treatment. When the specialized skill of a mental health professional is needed or when there is significant disagreement or uncertainty regarding the patient's DMC, it can help to have psychiatry, neuropsychology, or specialized providers from other relevant disciplines conduct a DMC evaluation. For example, although a cognitive evaluation can show a patient is unable to balance a checkbook, he or she may still be capable of understanding and appreciating the consequences of refusing intubation.

Because healthcare decisions can be influenced by the way information is presented, the perspectives, perceptions, and support of the clinical team can play a significant role. A

physician who has made a clinical judgment about a recommended treatment can appear to a patient or surrogate to be selling a care plan. Physicians must balance their role as experts who provide advice and recommendations with respect for a patient's right to voluntarily consent to or refuse treatment.

Clinicians should also consider obtaining and documenting additional information from the patient. For example, why is the patient refusing intubation? What is it about this intervention or this moment in time that has resulted in the patient's refusal? What is it about living with asthma that the patient finds burdensome and unacceptable? If any underlying issues can be effectively addressed and remediated (eg, concerns about pain or frequency of hospital admissions), the patient might consent to intubation. The ICU team should consider how to appropriately include the patient's surrogate or surrogates in this conversation (with the patient's authorization) because it could result in additional information that clarifies the patient's overall situation.

For the case described above, the clinician should try to persuade the patient within the time available to accept intubation and ventilation for a time-limited trial.⁸ The clinician should assure the patient that her comfort will be paramount and that the ventilator can be discontinued and nature allowed to take its course if the weaning process becomes unlikely or is overly prolonged, or if the ventilator becomes unacceptably burdensome to the patient or her surrogates. Family members or loved ones might be helpful allies in this process of persuasion and negotiation.

If the above interventions are unsuccessful, the clinician is faced with a young patient with a controllable disease and a potentially reversible acute condition who is declining a lifesaving measure. Her physician and care team are faced with a high-stakes dilemma: Should they honor an informed refusal of an adult patient with DMC, the result of which could be the patient's death?

Ethical perspective

Respect for persons and their autonomy is a hallmark of clinical practice in the United States and in many other parts of the world. This ethical principle is the foundation for

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the emphasis placed on obtaining a patient's informed consent before a clinical intervention. A corollary to informed consent is the always-present possibility of informed refusal by patients. In fact, a kind of moral maxim or rule of thumb has emerged in this regard: informed adult patients with DMC have the right to refuse treatment, including lifesaving and life-sustaining treatments. One example is the right of an informed adult patient who is a Jehovah's Witness to refuse blood products.

Ultimately, if efforts to persuade the patient to accept a time-limited trial of ventilator support are unsuccessful, the patient's refusal of life-sustaining treatment should be honored. From an ethical perspective, in this case and similar cases, if a negotiated middle-ground option cannot be reached, a patient's autonomy and informed refusal would trump the physician's judgment of what would be in the patient's best interests.

Legal perspective

Adults with DMC are entitled to consent to or refuse medical care, including life-sustaining interventions. From a historical and legal perspective, informed consent developed over time as a method accepted by the medical and legal communities of documenting patient consent to actions that, if done without consent, could be considered battery or assault, or both.

To the extent reasonably possible, it is important to ensure that such refusals are informed refusals. For instance, sometimes patients may clearly refuse an intervention but in actuality are refusing because of an effect that they believe is unavoidable (eg, pain, suffering, discomfort) rather than because they are not interested in the intervention per se. In order to make a responsible decision in this realm, it is important for clinicians to understand the reason for a patient's refusal.

This is not to say that patients are not permitted to refuse for any reason or for no reason, nor should unknown reasons be presumed to apply. For instance, it would be incorrect to presume that all patients who refuse intubation do so related to concerns about suffering. While respecting the general right of adult patients with DMC to refuse medical interventions, clinicians should also attempt, to the extent possible, to understand the patient's reasoning. In

that way, the clinician can be more assured of addressing a patient's actual concerns.

When a legal challenge to DMC is presented, the law will often require proof of a DMC evaluation and, if DMC is absent, the extent and detail of the deficit. Judicial decisions are also subject to being informed by the patient's values and the patient's desired goals of care. Therefore, it is generally advisable that the patient's DMC and information about the patient's values and goals of care be documented in the patient's medical record, including a detailed description of communications held with the patient regarding the proposed interventions, the patient's goals, the patient's understanding of the care plan, and the proposed interventions. Further, medical record documentation should indicate all patient and clinician communications regarding refusal of medical interventions and the patient's understanding of the consequences of refusal.

Proving DMC in a legal context can involve disagreement among the patient's surrogate, family members, and the clinical team. Thus, physicians should document any questions, concerns, or comments in the medical record that were articulated by the patient during relevant discussions. It is also advisable to provide documentation of the patient's historic expression of goals of care and any information regarding interventions of a similar nature or with a similar clinical goal that have been consented to or refused by the patient.

Again, as an adult with DMC, the patient generally has a legal right to refuse medical interventions, including intubation and other life-sustaining measures. The patient's goals, desires, and values should form the touchstone of understanding in this milieu. Clinicians should scrupulously avoid replacing the patient's goals, desires, and values with those of others. The ICU team should do everything possible to ensure that a patient's refusal is reasonably well informed, but should also not infringe on a patient's right to autonomy. The strategy of moving forward with an intervention a patient refuses in order to establish more evidence that a patient is well-informed is generally highly suspect. This can lead to a violation of patient rights and can result in a clinical course in which the patients' ability to communicate future wishes about their care

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will be significantly compromised. Such decisions should be carefully reviewed to make sure they are not an oblique strategy to override the patient's wishes in favor of others' values and goals.

■ CASE 2: A PATIENT WITHOUT DMC AND WITHOUT AN IDENTIFIED SURROGATE DECISION-MAKER

A 78-year-old woman with a history of multiple strokes and severe dementia is admitted to the medical ICU from an extended-care facility for treatment of septic shock. The patient never completed an advance directive and has no family members or friends. A number of urgent management decisions must be made, including intubation. The attending physician believes that shifting to comfort care is appropriate.

Medical perspective

Physicians often care for patients for whom discussions and decisions about goals of care have not been established. The discomfort many physicians experience when discussing matters pertaining to end-of-life care and the ambiguity about which clinical service is responsible for holding such discussions (eg, primary care, geriatrics, palliative medicine) also contribute to the lack of established goals of care.⁹

Physicians caring for patients with life-limiting clinical conditions must carefully distinguish between interventions that are beneficial and those that are overly burdensome and potentially medically inappropriate or futile. Although physicians are not obligated to provide futile therapy, there is little consensus for the definition of medical futility.¹⁰ Brody and Halevy categorized 4 conceptual definitions of futility¹¹:

- Physiologic futility: the intervention is unlikely to have any clinical effect
- Imminent demise futility: the patient will likely die soon regardless of the intervention
- Lethal condition futility: the patient's underlying disease is likely to impede long-term survival
- Qualitative futility: the intervention is unlikely to restore a patient's meaningful quality of life.

Any procedure that alleviates discomfort or provides palliation should not be considered futile.¹²

While these categories of futility are generally relevant, patients often have their own perception of what they believe to be futile. Some terminally ill patients may not want life-prolonging therapies (lethal condition futility) while others desire any and all interventions until the point of physiologic futility. In the absence of a pre-existing physician-patient relationship and without detailed knowledge of the patient's life and goals, patient preferences for managing clinical situations are often unknown or uncertain.

In the case of this 78-year-old patient, the physician must decide whether treatment is beneficial. If the physician feels that treatment would be beneficial, then he or she would provide all indicated treatments to the patient while simultaneously searching for more guiding information. On the other hand, the physician may find the treatment to be futile or nonbeneficial. A declaration of futility is not performed through a standardized procedure or algorithm but rather is determined on a case-by-case basis. At times, physicians invoke an arbitrary 6-month predicted survival metric used by the US Centers for Medicare and Medicaid Services to define a terminal condition.¹³ Most often, however, futility is a clinical judgment made in partnership with a patient or the patient's surrogates, in view of achievable goals of care. If the physician feels the therapy is futile, then he or she is not obligated to provide any therapy that would be considered futile, harmful, or nonbeneficial.

Because failing to intubate the patient may result in immediate death or death within a very short time, the magnitude of this consequence could argue for using temporary intubation to create a window of time to attempt to locate someone who can speak to the patient's wishes and values. If it is not possible to locate such a person after a thorough and diligent search, then clinically appropriate next steps should be taken as they would for any patient. Policies, procedures, and applicable laws and regulations regarding patients without surrogate decision-makers should be followed. This approach is not without its pitfalls, however, because the physician and other clinicians are likely to feel uneasy about providing treatments that could have little or no benefit and be overly burdensome.

Although physicians are not obligated to provide futile therapy, there is little consensus for the definition of medical futility

Further, there is also a societal responsibility to distribute resources in a fair manner based on medical need and the likelihood of a good medical outcome, however defined. Providing futile treatment may also be economically unreasonable.⁹ Physicians should aim to provide care and treatment that will likely lead to a successful patient outcome. Judgments and conclusions about futility should be consistent with the reality of patients' medical conditions and prognoses.

Ethical perspective

How should the physician manage this patient without DMC whose previously expressed wishes are unknown, and who currently has no one to speak on her behalf? What would be an ethically and legally supportable treatment plan for this patient?

The physician must do what is best for the patient. Beneficence is the driving principle for the patient-physician relationship and often aligns with its corollary to avoid harm (nonmaleficence). As such, the physician, as the expert in the matter, must undertake a risk-benefit assessment within each situation to determine if interventions pose more potential harm than benefit, or vice versa.

Moreover, irrespective of the potential short-term outcomes, the clinician must determine if the interventions are clinically indicated or futile in the broader picture. The balance between beneficence and nonmaleficence depends on the clinical condition of the patient and the patient's values. Ideally, clinical decision-making proceeds through a partnership between patients, physicians, and other members of the clinical team. Patients bring to the decision-making process their knowledge and expertise about their values, preferences, wishes, and goals, whereas clinicians and other members of the care team bring their knowledge and expertise about clinical interventions and treatments, diagnoses, and prognoses.¹⁴ Within this partnership model, patients and healthcare professionals negotiate agreements and decisions about treatments and goals of care. This relationship-centered communication has been demonstrated to have a therapeutic effect in and of itself.¹⁵

The gold standard for the partnership model for clinical decision-making occurs when a

patient has DMC and can participate directly in the process. The silver standard comes into play when a patient lacks DMC but surrogates or advance directives such as a living will are available to provide a substituted judgment on behalf of the patient and what he or she would want.¹⁶ In the case of this patient, neither the gold nor silver standard for decision-making can be actualized. By default, the ICU physician and team must use a bronze standard of making decisions based on the patient's best interests, which entails maximizing benefits and minimizing burdens of treatment.¹⁷

On a practical level, there are ethically supportable strategies for clinical management aimed at promoting a patient's best interests. Often, but not always, hospitals have policies and procedures to guide clinicians' decisions for patients lacking DMC in the absence of healthcare proxies. For this 78-year-old patient, it would also be appropriate to include a social worker to further explore the existence of family members, friends, and others who may know something about the patient's values, lifestyle, and activities of daily living prior to her strokes and dementia. For example, the social worker could contact the extended-care facility to see if the patient had visitors while there or if there is a record of an advance directive or next of kin. Finally, the hospital's ethics consultation service¹⁸ should be asked to review the case and to provide ethically supportable recommendations. Throughout the patient's ICU stay, intensive efforts should be given to ensure the patient's comfort.

Legal perspective

As noted above, for adult patients who have DMC, legal considerations are significantly guided by the patient's goals, desires, and values regarding medical interventions. If the patient lacks DMC or cannot communicate this information, an effort should be made to determine whether the patient has historically communicated this information to anyone else. For instance, the patient may have an advance directive that provides such information, or the patient may have had discussions at some time in the past with a clinician, including a primary care provider, another member of the clinical team, a surrogate medical decision-maker, or a care provider or loved one who may be able to

Ideally, decision-making proceeds through a partnership between patient, physician, and other members of the clinical team

offer insight into the patient's perspective.

However, the patient's goals, desires, and values should form the touchstone of understanding how the patient would like to proceed in this milieu, and clinicians should be cautious not to substitute their own values or goals or those of family members, surrogates, or others for those of the patient. This is not to say that the values and goals of others should not receive respect, but it should be recognized that these are distinct from those of the patient. The care a patient receives should not be infringed upon based on the goals, desires, and values of others if they contradict the patient.

Additionally, clinicians' assessments regarding the utility of specific interventions is an important part of the legal analysis pertaining to whether proposed clinical interventions will achieve the patient's desired goals of care and comfort within the context of the patient's values and desires. A common way to emphasize consensus among physicians is to provide notation by a second independent physician confirming the plan of care. A more robust discussion of the legal considerations in cases of physician-determined futility follows in case 3.

The care a patient receives should not be infringed upon based on the goals, desires, and values of others if they contradict the patient

■ CASE 3: A PATIENT WITHOUT DMC, BUT THE SURROGATE DECISION-MAKER WANTS MEDICALLY FUTILE TREATMENT

A 92-year-old man with metastatic prostate cancer is admitted to the medical ICU with hypoxic respiratory failure and sepsis. The source of the sepsis is found to be a lower urinary tract obstruction. He is intubated and placed on vasopressors. After 6 days of treatment, the ICU team believes he will not achieve a meaningful recovery. The patient's resuscitation status is "full code." His son, who is also the surrogate medical decision-maker appointed by a medical power of attorney, wants to continue with intensive therapies including chemotherapy to shrink the prostate and possibly relieve the obstruction. The patient has a cardiac arrest and the son is not present. Should the team attempt cardiopulmonary resuscitation (CPR)?

Medical perspective

The initial responsibility of the care team is to assess the clinical status of the patient and the utility of the intervention. For example, car-

diac arrest stemming from a reversible cause such as hypovolemia or a vasovagal reaction would differ from cardiac arrest secondary to generalized worsening of the patient's clinical status. If the clinical judgment of the team, confirmed by ancillary information or testing, is that there is no reversible cause to the arrest, then the team would be justified in believing that further resuscitative efforts would be futile. It goes without saying that the medical team's primary responsibility is to communicate this medical knowledge to the family and, in the name of transparency and intent, to explain the clinical and scientific rationale for their opinions.

There are 2 separate but related issues in this scenario: whether to honor a family member's request for interventions unlikely to favorably impact the patient's long-term survival, and whether to initiate a DNR order without family consent, based on the belief that CPR would be medically inappropriate, overly burdensome, or futile. Requests by family members or surrogates to provide ineffective therapy is a common situation in an ICU. Discordance between clinical teams and families can result from different levels of knowledge, poor communication, different expectations, cultural and religious beliefs, and family dynamics. Respectful interactions with the family or surrogates, including multidisciplinary conferences, will often help to identify differences of opinion, perspectives, and achievable goals and can build trust.

The importance of clear, consistent, compassionate communication cannot be overemphasized in helping to navigate these differences. More concretely, the American Medical Association's Council on Ethical and Judicial Affairs recommends the following steps to deliberate and resolve potential conflicts¹⁹:

- Negotiate an understanding of what constitutes futile care in advance of such a situation arising
- Strive for joint decision-making
- Enlist the assistance of a consultant or patient representative, or both, to facilitate discussions
- Involve an institutional ethics committee
- Transfer the patient's care to another physician or institution.

The effectiveness of CPR in providing

meaningful recovery has been overstated in popular culture and the media. For example, a study of CPR performed for cardiac arrest on 2 popular television programs showed survival rates significantly higher than those reported in the literature, ie, a success rate for short-term survival of 75% on television vs 40% in the literature.²⁰ A number of factors make meaningful recovery less likely, including old age, the presence of a terminal condition, and the absence of a discernible electrical rhythm.²¹

The perception and expectation among healthcare professionals is that CPR should be attempted for all patients after cardiac or pulmonary arrest, regardless of comorbidities or prognosis, unless otherwise specified to the contrary by a DNR order.³ However, as with all other medical interventions, physicians should be cognizant of the clinical circumstances and likelihood of success of CPR before initiating it. The critical process of risk-benefit analysis is no less applicable to CPR than to other clinical procedures. Even if CPR is not physiologically futile, eg, a patient recovers spontaneous circulation and has a prolonged survival, it may still meet criteria for other categories of futility and will not ultimately and favorably impact the patient's overall outcome. Therefore, providing CPR could be unreasonable and professionally objectionable because it promises more than medicine can deliver.²²

Each hospital has different policies on how to deal with this situation. To the extent permissible under local laws and hospital policies, the physician should clearly communicate to the patient and family that futile therapy will not be offered, and this communication should be documented. An order for DNR should be written, and CPR should subsequently not be offered. Some hospitals require a written opinion from a second physician to place a unilateral DNR order in the chart, and some jurisdictions and hospitals do not permit unilateral DNR orders. If the family insists on care that the clinical team deems unreasonable, attempts should be made to transfer the patient to another physician or facility.

Ethical perspective

Patients and families at times disagree about the plan of care recommended by clinicians. These disagreements may be unavoidable,

especially in situations involving diverse religious and cultural values. These disagreements may be a natural consequence of an attempt by a family member or surrogate to participate in the care of a loved one being treated by strangers.

The word futility should be used cautiously and viewed as a relative (or "relational") term, because an action can be considered futile only in relation to a specified goal. In clinical settings, treatments or interventions such as CPR, intubation, and dialysis can only be appropriately described as futile after a specific goal for that treatment has been identified and there is virtual certainty that the medical intervention cannot achieve the identified goal.²³

In the case of the 92-year-old man, if his goal is to stay alive and to have his physiologic life extended regardless of quality of life or his ability to interact with his children or his environment, then continued treatment in the ICU including intubation and ventilation would not be strictly futile. However, that does not mean that continued ICU care is necessarily medically appropriate. There may be other ethically supportable reasons and other strategies for communication and negotiation (such as the steps recommended by the American Medical Association) that should be used in this case.¹⁹

At the core of many medical futility dilemmas is a conflict between patient autonomy and a physician's obligation to maintain professional standards of care.²⁴ However, many such conflicts can often be prevented by optimizing communication, providing comprehensive clinical information, and conveying realistic expectations for a patient's outcome. When aiming to optimize communication, clinicians should never label or talk about the patient's care as futile. Some authors discourage clinicians from using the word futility altogether, replacing the term with "potentially inappropriate."²⁵

The word futility should only be used to describe the inability (or virtually certain inability) of a specific treatment to achieve an identified goal of the patient.

In the event that a conflict emerges, the participation of third-party mediators such as palliative medicine specialists and ethics consultants may be helpful. If hospital per-

Effectiveness of CPR in providing meaningful recovery has been overstated in popular culture and the media

sonnel perceive a pattern of such conflicts arising related to CPR, it would be appropriate to proactively address these issues in the hospital's DNR policy, procedures, and guidelines. The patient's surrogates should be made aware of any relevant hospital protocols and policies.

Ideally, the issue of providing or not providing CPR should have been addressed proactively with the patient's son. If the ICU team preemptively judged that CPR would not benefit the patient or would be overly harmful to him, this should have been communicated to the son and a DNR order strongly recommended. If the ICU team had no intention of providing CPR in the event of cardiac or respiratory arrest (which could have been ethically supportable), this should have been clearly communicated to the son. There is no ethical justification for deceiving the son by performing a "show code" or "slow code" on the patient.²⁶

For case 3, based on relevant CPR outcomes data and on the clinical judgment of the ICU physician, there is ethical support for not attempting CPR immediately after the cardiac arrest. This is the official position of the American Medical Association Council on Ethical and Judicial Affairs.¹⁹

Legal perspective

Absent a law that provides an affirmative obligation or circumstances in which a physician agrees to take on an affirmative obligation, physicians are generally not obligated to provide treatment that in their professional medical judgment is deemed inappropriate.^{27,28} This general construct applies to CPR as well as other medical interventions. However, different jurisdictions have different laws about end-of-life issues, including CPR and DNR orders, and healthcare facilities and organizations differ in their policies and procedures pertaining to CPR and DNR orders. Different states may also have different laws on whether the consent of patients or their surrogates is required for DNR orders. Clinicians should be familiar with applicable laws, regulations, and institutional policies for CPR and DNR orders. If they are unfamiliar with these matters or have questions about how they might apply in any given circumstance, legal counsel

should be sought.

Physicians in this context may have questions about whether or not they can be sued for certain actions or inaction, particularly when their care plan runs counter to the wishes of the patient, family, or surrogate decision-maker. Clinical decisions in end-of-life situations tend to be fact-specific, and laws can vary widely depending on the jurisdiction. Physicians with questions or concerns about the legal impact of their decisions would be wise to consult with appropriate medical, ethical, and legal experts. This is especially true in any patient-care situation that involves withholding or withdrawing life-sustaining treatment where there is not clear agreement between the clinical team and the patient or, if the patient lacks DMC, the patient's surrogate medical decision-maker.

Practically speaking, physicians may be able to mitigate their risk by taking the following steps:

- Appropriately documenting the futility of a specific intervention that they believe is inappropriate, as well as the clinical basis for an intervention they believe is appropriate
- Seeking a well-documented second opinion from an appropriately objective and qualified physician regarding the intended intervention or nonintervention, and proceeding only to the extent that the second physician opinion is in agreement with the intended intervention or nonintervention
- Responding appropriately to any dissonance that might arise in medical opinions regarding a particular patient's care
- Including the hospital's or healthcare institution's ethics consultation service and legal counsel in the decision-making process.

However, whether or not such actions provide legal mitigation in any particular set of circumstances or for any particular individual is a question for legal counsel.

An appropriate surrogate medical decision-maker (eg, a person appointed as a patient's surrogate through a valid legal process, such as a medical power of attorney or a court order) is often permitted the same decision-making authority as the patient. But such legal vehicles for conveying surrogacy can

Clinicians should be familiar with applicable laws, regulations, and institutional policies for CPR and DNR orders

be written in a manner that is more or less limiting, so it is important to make sure that the actual legal document is a fully executed legal document. This means that it is read in consultation with legal counsel as appropriate and that there is a full and complete understanding as to the legal powers the document conveys. The overarching role of a surrogate medical decision-maker is to communicate what the patient would have wanted, if known, and if not known, to communicate information about the patient that assists the clinical team in making decisions that reflect the patient's goals, desires, and values in the healthcare context.

■ TAKE-HOME POINTS

Critical care is rife with medical, ethical, and legal dilemmas involving end-of-life care. The

physician must be acutely aware of the ethical and jurisprudential considerations that should be balanced in navigating these sensitive situations. The cases presented here provide a small sampling of common issues that arise in clinical practice, although they clearly represent only the tip of the ethical and legal iceberg. Addressing these dilemmas requires careful analysis, an understanding of basic ethical and legal principles and perspectives, and reliable consultants to assist physicians and other clinicians in their time of need. A synthesis of medical, ethical, and legal concerns unique to each case is necessary to provide the most appropriate care to patients and families. ■

■ DISCLOSURES

The authors report no relevant financial relationships which, in the context of their contributions, could be perceived as a potential conflict of interest.

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