Withdrawal of Life-Sustaining Medical Treatments

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Introduction for the Learner (Resident/Fellow)

Prior to your evaluation of competency

• Complete the web-based palliative care training program “Medical Resident Training in End-of-Life and Palliative Care” before you undergo this competency assessment. The training program is available on the UMMS Intranet, click on Physicians. The course is listed under “Helpful Links.” It is also available via the internet at http://134.192.120.12/canRes/htdocs/login.asp

- Review Part 1 (Learning Objectives), Part 2 (Teaching Outline) and Part 3 (Evaluation Checklist) of this document THOROUGHLY so that you are aware of what is required of you.

• Review Unit III Modules 2, 3 and 4 (Setting Treatment Goals, Discussing DNR Orders and Conducting a Family Conference) and Unit V, Ethical and Legal Issues of “Medical Residents Training in End-of-Life and Palliative Care” the Web-based palliative care training program.

• Ascertain that the attending/faculty member is certified to conduct the Palliative Care Competency Evaluation.

Field evaluation of competency

• During the course of a clinical rotation, it is anticipated that you will have opportunities to demonstrate your competency in discussing Withdrawal of Life-Sustaining Medical Treatments that are not meeting the treatment goals for a patient with a terminal illness during morning work rounds with your Clinical Faculty Evaluator/attending, and also throughout the day or during times of night call or cross-coverage.

• Identify a faculty member to evaluate your competency – current service attending recommended, if s/he is certified to conduct evaluation.

• ASK FACULTY MEMBER TO REVIEW THIS COMPETENCY ASSESSMENT TOOL PRIOR TO YOUR PERFORMING THIS TASK.

• Faculty must accompany and observe Resident.

• Faculty completes Evaluation Checklist (Part 3) and shares with you.

• You will also complete the self-evaluation portion of the Evaluation Checklist as a measure of competency in practice based learning.

• Evaluation Checklist must be signed by the Clinical Faculty Evaluator/attending and you (Resident/Fellow).

• Return Evaluation Checklist to Dr. Susan Wolfsthal, Internal Medicine Residency Director or Dr. Heather Mannuel, Medical Oncology Fellowship Director.

Introduction for the Clinical Faculty Evaluator

How to perform this competency assessment

A Medical Resident or Oncology Fellow has requested that you assess their competency in a selected palliative care domain during the time you are the Clinical Faculty Evaluator/attending physician on this service. To assist you with this evaluation, please do the following.

Preparing for field evaluation of competency

• Review this Competency Assessment Tool thoroughly including the Learning Objectives (Part 1), Teaching Outline (Part 2) and Evaluation Checklist (Part 3) prior to pre-discussion counseling with Resident (required).

• Review Unit III Modules 2, 3 and 4 (Setting Treatment Goals, Discussing DNR Orders and Conducting a Family Conference) of the Web-based palliative care training program, “Medical Residents Training in End-of-Life and Palliative Care.” The training program is available on the UMMS Intranet, click on Physicians. The course is listed under “Helpful Links.” It is also available via the internet at http://134.192.120.12/canRes/htdocs/login.asp (optional).

Format of competency evaluation

Before the discussion with the patient and family (if included), ask the Resident/Fellow to:

• Summarize the patient’s medical history regarding the current illness, the conventional therapeutic options open to the patient (risks and benefits of each), and possible therapeutic trials.

• Assess the patient’s prognosis, the current goals of care, and the likelihood that the various life-sustaining treatment(s) currently employed are meeting these goals.

• Discuss the patient’s advance directives (if any), decision-making capacity (and patient is non decisional, which person is the patient’s named health care agent or proxy), and which family members and treatment team members should be present during the meeting.

• Describe where you think the patient views him/herself on the continuum of understanding the prognosis, current clinical status and potential treatment options.

During the clinical rotation

• Based on the Learning Objectives (Part 1), Teaching Outline (Part 2), and Evaluation Checklist (Part 3) of this document, evaluate whether the Resident or Fellow meets the Learning Objectives during the course of this clinical rotation.

• Provide constructive feedback to the Resident/Fellow throughout the rotation regarding this competency.

During the discussion

• Accompany the Resident/Fellow to the discussion, observe the Resident/Fellow without intervening, unless specifically asked for help by the Resident/Fellow. If questions are addressed to you by the family member, make an effort to direct them to the Resident/Fellow.
• Based on the Learning Objectives, Teaching Outline and Evaluation Checklist in this document, evaluate how the Resident/Fellow conducts the discussion of withdrawal of life-sustaining care for a patient with terminal illness.

• Suggested behaviors include: preparing an appropriate setting, assessing the patient’s decision-making ability, ascertaining the patient’s knowledge concerning his/her disease, reviewing the patient’s current condition and expected prognosis, reviewing treatment goals, discussing the relative benefits/burdens of withdrawal of care, reinforcing the concept the “withdrawal of life-sustaining treatment” does not mean “withdrawal of care” or “do not treat symptoms.”

End-of-rotation feedback

• Review strengths and weaknesses of competency evaluation with Resident/Fellow

• Provide constructive feedback to improve Residents/Fellows’ performance and patient outcomes.

Complete Evaluation Checklist (Part 3 of this document)

• Share with Resident/Fellow; allow Resident/Fellow to make his/her own self-assessment of competency performance

• Clinical Faculty Evaluator/attending and Resident/Fellow must sign this Evaluation Checklist (Part 3)

• Resident/Fellow is responsible for returning Evaluation Checklist to Dr. Wolfsthal (Residents) or Dr. Mannuel (Fellows)
Part 1: Learning Objectives

Note to learner and Clinical Faculty Evaluator: The Learning Objectives are listed in terms of fulfilling the six ACGME core competencies, listed below; these are reflected in Evaluation Checklist in Part 3 of this document.

LEGEND to ACGME core competencies: http://www.acgme.org/Outcome

<table>
<thead>
<tr>
<th>OBJECTIVES – A competent Medical Resident or Oncology Fellow will be able to:</th>
<th>ACGME Competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illustrate situations when it is appropriate to discuss treatment withdrawal.</td>
<td>X</td>
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<tr>
<td>List, in legal order, who can make decisions for a non-decisional patient.</td>
<td>X</td>
</tr>
<tr>
<td>Use a 6-step approach for discussing withdrawal of life-sustaining treatments with a patient and/or proxy and family.</td>
<td>X</td>
</tr>
<tr>
<td>Manage conflicts between physician care recommendations and the patient/proxy/family.</td>
<td>X</td>
</tr>
<tr>
<td>Effectively manage physical and psychological symptoms that may accompany withdrawal of a life-sustaining treatment, such as ventilator withdrawal.</td>
<td>X</td>
</tr>
<tr>
<td>Partner effectively and efficiently with allied health professionals when planning a discussion of treatment withdrawal.</td>
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LEGEND:
PC – Patient Care
MK – Medical Knowledge
PBL&I – Practice-Based Learning and Improvement
IPCS – Interpersonal and Communication Skills
P – Professionalism
SBP – Systems-Based Practice

Part 2: Teaching Outline for Learner and Clinical Faculty Evaluator

- Recommend Unit III of “Medical Residents Training in End-of-Life and Palliative Care.” The training program is available on the UMMS Intranet, click on Physicians. The course is listed under “Helpful Links.” It is also available via the internet at http://134.192.120.12/canRes/htdocs/login.asp

Introduction

Situations arise in clinical practice where patients with terminal illnesses receive aggressive medical treatments that, while technically “life-sustaining,” may only prolong the process of dying/suffering without meeting the goals of care that should have or would have been established in a patient/family conference (see CAT 1C: Establishing Treatment Goals: Conducting a Family Conference). Such aggressive treatments typically include ventilator support, dialysis, pressors, artificial nutrition and/or hydration. Often such treatments are instituted at the time of an acute deterioration in the patient’s condition, without knowledge of the patient’s own advance directives, and before the terminal nature of the illness became apparent. In some cases – where the benefits of aggressive treatment were uncertain – a timed-trial of treatment (e.g., ventilator support) may have been instituted, hopefully with specific end points for improvement stipulated.

This Competency Assessment Tool is designed to assess the proficiency of a Resident or Fellow in assisting a patient with a terminal illness and their family in transitioning care from aggressive medical treatments to palliative or hospice care at a time when the aggressive treatments do not meet patient goals. Proficiency in withholding or withdrawing artificial nutrition and hydration under such conditions is assessed in CAT 3B, Nutrition and Hydration in Terminally Ill Patients.

How life-sustaining treatments are initiated contrary to patient goals or advance directives

There is a wide range of life-sustaining treatments that might be considered for an individual patient and family. These include cardiopulmonary resuscitation, elective intubation and mechanical ventilation, surgery, dialysis, blood transfusions or administration of blood products, artificial nutrition and hydration, diagnostic tests, antibiotics, other medications and treatments, and future hospital or intensive care unit admissions.

For patients with terminal illnesses, the primary physician is responsible for writing orders to ensure appropriate care. It is their responsibility to make certain that the patient’s wishes (e.g., as specified in advance directives or a patient/family conference) are followed across care settings. In the hospital, one major study demonstrated that the majority of patients in intensive care unit settings die without attention to issues of life-sustaining treatment (1). Many of these patients had undergone some form of invasive medical treatment against their previously stated wishes (1).

All too often, patients are transferred from home or a chronic care facility to the acute care setting, where inappropriate life-sustaining measures are administered because the appropriate treatment plan and physician’s orders have not been completed and placed in the patient’s chart. One study demonstrated that fewer than 25% of advance directive orders were carried from the nursing home to the acute care hospital (2). The fact that physician’s orders may not transfer across settings (e.g., nursing home, ambulance, acute care hospital) also exacerbates the problem.

Emergency medical technicians are regulated by statute, and sometimes by city ordinance. Although requirements vary, in general emergency medical technicians are required to provide all resuscitative and life-prolonging treatments unless a physician’s order is in place to the contrary.

Legal Perspective – principles for withholding or withdrawing life-sustaining therapy

All states in the United States have statutes covering issues related to withholding or withdrawing life-sustaining treatments. The Quinlan case (1976) established that artificial nutrition could be withdrawn even from a patient in a persistent vegetative state (3). In 1983, the President’s Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research found that no treatments, including artificial nutrition and hydration, were obligatory (4). This was confirmed in the United States Supreme Court decision on the Cruzan case (1990), which established that artificial hydration and nutrition are like other life-sustaining treatment (5). It was upheld again in Florida courts in the 2005 Schiavo case.

It is also legal and ethical to withhold or withdraw nutrition and hydration for the patient who lacks decision-making capacity (6). States may differ in the degree of evidence that is required if the patient lacks decision-making capacity. For example, in New York and Missouri, there must be “clear and convincing evidence.” In the other states, substitute decision makers can make the decision.

Institutional policies of many hospitals or other health care institutions tend to include considerations, perhaps drafted by ethics committees, to protect patients’ rights and interests and considerations, or possibly crafted by risk management officers to protect the institution from risk. Institutional policies are often written in response to the general perceived legal imperative to, when in doubt, provide treatment to prolong life. Institutional policies may or may not be in the best interest of a particular patient. If the appropriate goals of care are other than “life at all costs,” then the physician needs to write orders that are specific enough to accomplish the intended goals.

Influence of culture and religion

Culture plays a role in decisions to withhold or withdraw care. For example, many studies have shown that nonwhite patients are less likely than white patients to agree to “Do Not Resuscitate” (DNR) orders or to withhold or withdraw care and are less likely to have advance care directives (7-9). In Asian cultures, filial piety, the obligation of children to care for their parents in gratitude for the parent’s caring and sacrifice, is a central value. Making a decision to withhold or withdraw life support from a parent may be seen as unfilial (10). If the integrity of the family...
as a whole is valued more than the wishes of an individual family member, even the patient who would not want life support may expect the family to do everything possible to prolong his or her life. To do otherwise would bring dishonor on the family. Different cultures may have varying views of the role of suffering. Although many nurses and doctors may support withholding life support at the end-of-life as a compassionate act that prevents unnecessary suffering, not all patients share this value. Some cultures view suffering as redemptive and something to be endured as a test of faith rather than avoided. The idea that only God, not doctors, knows when it is time to die may also affect how patients view the use of life-sustaining therapies.

Religion: Various religions have espoused specific opinions about the use of artificial hydration and nutrition. Most teach that when death is inevitable and not due to the absence of hydration or nutrition, withholding both can be appropriate. However, some religious leaders teach that human beings must do all in their power to prolong life. In situations of conflict, it is wise to engage leaders or teachers of the religious faith in question.

Discussing withholding or withdrawing life-sustaining treatments with patient/proxy/family

Deciding that life-sustaining treatments are not meeting goals of care is never easy for family members, doctors, and other medical staff members. For a patient with incurable, advanced illness (e.g., advanced cancer refractory to treatment) where the overall treatment goals are palliative (patient comfort), it is critical that the medical team establish in their own minds whether the current life-sustaining treatments are meeting the patient’s goals. This should be done prior to any meeting with the patient or family members/loved ones. In starting this process, it is wise for the medical team to change their approach from a tactical one (focusing on the interventions) to a strategic one – defining the overall treatment goals (11). After determining the strategic goals of care, discuss each specific life-sustaining treatment amongst medical team members to determine which if any of those treatments will possibly help achieve the overall goal. Consider discussing with the ethics committee as well. Once consensus has been reached, then discuss this with your patients and families. At a minimum, try to discuss an invasive and a noninvasive intervention to get a general idea of a patient’s priorities for making treatment decisions. Decisions about surgery and antibiotics are often strongly predictive of other invasive and noninvasive decisions, respectively (12).

The principles of such discussions are outlined in CAT 1C: Establishing Treatment Goals – Conducting a Patient/Family Conference.

Below is a six-step plan for discussing withdrawal of life-sustaining treatments for terminally ill patients:

Step 1. Before talking to the patient/family:
   a. Review the medical facts of the case, the diagnosis, prognosis, the life expectancy, the current treatment plan and possible future options
   b. Review any predictors of poor survival after a resuscitation attempt (metastatic cancer, pneumonia, renal failure, sepsis, multiple organ failure, acute stroke). Determine if you think that withdrawal of treatment be appropriate for the patient, given his/her medical condition and prognosis.
   c. Discuss which family and team members should be present. Ask patient for permission to invite family for a discussion, if he/she has decisional capability. If not, make sure that the legal decision-maker will be present. In the state of Maryland these are (in hierarchical order): Healthcare agent named in an advance directive; court-appointed guardian; spouse; adult children; parents; adult siblings; a friend or other relatives.
   d. Arrange for an interpreter, if the patient and/or family members do not speak English or are deaf.

Step 2. Create an appropriate context
   a. If possible, find a quiet, comfortable room with enough chairs to accommodate the expected number of participants
   b. Turn off beeper (better, have someone cover your beeper for you), cell phone
   c. Check personal appearance

Step 3. Start the meeting
   a. Introduce all of the participants to each other
   b. Explain the purpose of the discussion
   c. Determine what the patient and/or proxy or family knows concerning his/her medical condition, and their expectations for outcome.

Step 4. Help the patient/proxy/family establish his/her/their own treatment goals
   a. Review with the patient/family his/her current medical condition and expected prognosis
   b. Review with the patient/family the treatment plan
   c. Discuss the relative benefits/burdens of withdrawing treatment within the context of the patient’s current condition and personal goals. This should be expressed as one aspect of the patient’s course, while stressing the positive things that will be done (pain control, other symptom relief).
   d. Give the patient and family members a chance to express their emotions, ask questions.
   e. Be aware of cultural beliefs and attitudes that will influence decision making.
   f. If patient and family members do not feel that they are capable or reaching a decision, see if they are open to the possibility of a follow-up meeting, possibly with just the patient and closest family, to discuss the decision again once the patient has had time to think about it. Ask if there is any more information the patient would find helpful in making this decision.
   g. Emphasize that you will still continue other efforts to support the patient, and that you will continue to be his/her doctor.

Step 5. Document the discussion
   a. Review the withdrawal of care decision with involved staff: Resident, nurse, social worker
b. Implement the planned treatment withdrawal (see section 6. below).

c. Write a progress note documenting the discussion, including the people present at the discussion, the indications for the DNR order, the decision-making capacity of the patient or the authority for use of a surrogate.

**Step 6. Manage conflicts: patient-family-physician**

Conflicts between the family and the health care team, or conflicts between family members, typically surface after such discussions. This is especially true when the questions listed regarding non-acceptance of the situation are verbalized. Common reasons for such conflicts include the following:

- **Grief/Time** - family members have not had sufficient time to psychologically adjust to imagining their life without the dying person.
- **Information** - incorrect, misleading, or conflicting information has been provided to the family by other health care providers.
- **Anger/Guilt** - long lasting intra-family issues may disrupt or preclude logical decision making; in severe cases, the struggle you observe may be the result of long-standing serious family dysfunction—issues of past or current drug or alcohol dependence and/or physical, verbal or sexual abuse are common.
- **Trust** - if a patient or family does not have trust in the medical team, it is impossible to work together to develop a treatment plan.
- **Culture** - differences in culture, religion, socioeconomic status, etc. may all impede decision making.

**Key points in managing conflict**

- **Active listening** - strive to maintain a civil discourse; ensure that your body language is open, conveying concern and empathy, re-state or paraphrase what people are saying to make sure you and others understand.
- **Correct any factual misunderstandings.**
- **Provide an empathic statement** “I can’t imagine how hard this must be.”
- **Keep the focus of the discussion** on the patient’s well-being.
- **Recognize that time may be necessary** - schedule a follow-up meeting;
- **Establish a time-limited trial** of continued life-sustaining treatments - establish clear goals and a time line (e.g. improved cognition, improved LFTs).
- **Recognize that other resources may help the family**: psychologist, spiritual counselor, palliative care team, ethics consultation.
- **State directly that you** (and health care team) will not abandon the patient and family, and will assure the patient remains as comfortable as possible.

**Continued conflict – physician options**

- If you believe the patient or proxy/health care agent are requesting treatments that are medically ineffective – that is, treatments that cannot be expected to prolong quality life or to achieve the expressed goals of the patient, AND
- You have tried all the recommendations to manage conflict suggested above, you still have options:
  - In the state of Maryland and at the VA Medical Center, a physician is not legally or ethically obligated to participate in a medical treatment(s) that they consider futile or unethical; If the situation, despite maximal efforts to resolve conflicts as described above, deteriorates to patient or surrogate/proxy demands for futile or unethical treatments, please refer to CAT 3D: Requests for Medically Ineffective Treatments.

**Withdrawing specific life-sustaining treatments**

An excellent review on the compassionate clinical management for withdrawing life-sustaining treatments is given in (11). Additional guidance can be found in the Fact Facts, found on the End of Life Physician Education Resource Center, available on the Internet (www.eperc.mcw.edu)

Once the decision to withdraw life-sustaining care is made, the timing and sequence of withdrawal should be done in accordance with the patient’s goals (11).

**Control symptoms**

The concern that removal of life-sustaining treatments may lead to increased suffering as death approaches is real; vigorous efforts to control symptoms following removal of life-supporting measures should be made (11). Pain should be controlled by titrated doses of morphine, using a variety of routes (see CAT 2A: Pain Assessment and Management), accompanied by measures such as supportive counseling, relaxation and distraction techniques, or simple touch (11). Use of short-acting benzodiazepines such as lorazepam, alprazolam, and oxazepam will avoid build up of toxic metabolites. Opioids and benzodiazepines, titrated to effect, are also the pharmacologic mainstay for treatment of terminal dyspnea (see CAT 2B: Dyspnea Assessment and Management) which may be apt to occur after ventilator withdrawal. If delirium occurs, neuroleptic drugs such as haloperidol may be helpful (see CAT 2C: Delirium Assessment and Management) (11). Antimicrobial drugs that contribute to patient comfort such as meds for thrush or painful herpes should be continued. High fevers can be treated with antipyretics every 2 hours, alternating acetaminophen with aspirin (11). Measures such as hypothermia blankets, alcohol baths and ice packs often cause more distress than benefit (11).

**Withdrawal of specific treatments – Mechanical Ventilation**

Of all life-sustaining medical treatments, withdrawal of mechanical ventilation is viewed by medical staff as the most problematic (11), and will be given special consideration here. The following recommendations for ventilator withdrawal are taken from Fact Facts #33, 34 and 35 on the EPERC homepage (www.eperc.mcw.edu):

**Fast Fact #33: Protocol for Ventilator Withdrawal (13-15)**

**Options for Ventilator Withdrawal**

Two methods have been described: ‘immediate extubation’ and
‘terminal weaning.’ The clinician’s and patient’s comfort, and the family’s perceptions, should influence the choice. In immediate extubation, the endotracheal tube (ET) is removed after appropriate suctioning. Humidified air or oxygen is given to prevent the airway from drying; comfort medications are administered. This is the preferred approach to relieve discomfort if the patient is conscious, the volume of secretions is low, and the airway is unlikely to be compromised after extubation. In terminal weaning, the ventilator rate, positive end-expiratory pressure (PEEP), and oxygen levels are decreased while the ET tube is left in place. Terminal weaning may be carried out over a period of as little as 30 to 60 minutes (see reference 3 for a protocol). If the patient survives they can be extubated with ongoing symptomatic care. If it is decided to leave the ET tube in place (to, for instance, ensure the patency of the upper airway) a Briggs T-piece can be placed.

Prior to Immediate Ventilator Withdrawal
1. Encourage family to make arrangements for special music or rituals or support during and following the procedure. (See Fast Fact #35).
2. Counsel families on potential outcomes following withdrawal.
4. Ensure that all monitors and alarms are turned off. Ensure that respiratory therapy or nursing staff is assigned to override alarms that cannot be turned off.
5. Remove restraints and unnecessary medical paraphernalia.
6. Turn off blood pressure support and paralytic medications; discontinue other life-sustaining treatments (e.g. artificial nutrition/hydration, antibiotics, dialysis).
7. Maintain intravenous access for administration of sedating medications.
8. Clear a space for family access to the bedside. Invite family into the room. If the patient is an infant or young child, offer to have the parent hold the child.
9. Establish adequate symptom control prior to extubation (See Fast Fact #34).
10. Have a syringe of a additional sedating medication at the bedside (midazolam, morphine, or lorazepam) to use in case distressing tachypnea or other symptoms.

At the time of ventilator withdrawal
1. Once you are sure the patient is comfortable, set the FiO2 to 21% (room air); observe for signs of respiratory distress; adjust medication as needed to relieve distress before proceeding further.
2. If the patient appears comfortable, prepare to remove the ET tube; try a few moments of “no assist” before the ET tube is removed.
3. A nurse or respiratory therapist should be stationed at the opposite side of the bed with a washcloth and oral suction catheter.
4. When ready to proceed, deflate the ET tube cuff. If possible, someone should be assigned to silence, turn off the ventilator, and move it out of the way. Once the cuff is deflated, remove the ET tube under a clean towel which collects most of the secretions and keep the ET tube covered with the towel. If oropharyngeal secretions are excessive, suction them away.
5. The family and the nurse should have tissues for extra secretions, and for tears. The family should be encouraged to hold the patient’s hand and provide assurances to their loved one.
6. Be prepared to spend additional time with the family discussing questions concerns. After death occurs, encourage the family to spend as much time at the bedside as they require; provide acute grief support and follow-up bereavement support.

Fast Fact #34: Symptom Control for Ventilator Withdrawal in the Dying Patient (15-18)
The most common symptoms related to ventilator withdrawal are breathlessness and anxiety. Opioids and benzodiazepines are the primary medications used; concerns about unintended hastened death are exaggerated, particularly if established dosing guidelines are followed (see Fast Fact #8). There is no medical or ethical justification for withholding sedating medication when death following ventilator withdrawal is the expected goal. However, increasing doses beyond the levels needed to achieve comfort/sedation, with the intention of hastening death, is euthanasia and is not acceptable/legal medical practice.

Sedation should be provided to all patients, even those who are comatose. The doses needed to control symptoms depend on the neurological status of the patient and presence of drug tolerance (these same drugs are commonly used in routine ICU care). In all cases, a senior-level physician should remain at the bedside prior to and immediately following extubation until adequate symptom control is assured.

Medication Protocol
1. Discontinue paralytics; do not use paralytic agents for ventilator withdrawal.
2. Administer an IV bolus dose and begin an IV continuous infusion of sedating medication (see below). Do not rely on subcutaneous or enteral drug administration as these take longer to work. For children, obtain dosing advice from a pharmacist or pediatric intensivist.
3. Titrate drugs to control labored respirations and achieve the desired state of sedation prior to extubation. Testing the eyelid reflex is a common method of quickly assessing level of consciousness.
4. Have additional medication drawn up and ready to administer at the bedside if needed.
5. After ventilator withdrawal: If distress ensues immediate symptom control is needed. Use additional sedating medication (e.g. morphine 5-10 mg IV push q 10 min, and/or midazolam, 2-4 mg IV push q 10 min, until distress is relieved). Adjust infusion rates to maintain relief.
6. Specific dosages are less important than the goal of symptom
relief. A goal should be to keep the respiratory rate < 30 and eliminate grimacing and agitation.

NOTE: The following regimens are commonly used; all require a bolus dose followed by a continuous infusion. Dose ranges are approximations and depend in part on patients’ prior exposure to opioids and benzodiazepines. Clinicians should use clinical judgment when deciding on what specific drugs and doses to use. Many institutions have policy and clinical guidelines about the use of opioids and sedatives in these circumstances. Clinicians unfamiliar with the use of these agents in the setting of ventilator withdrawal are urged to consult with an anesthesiologist, critical care specialist, or pain/palliative specialist prior to use.

Regimen A: Morphine plus Midazolam (Adult doses)
- Good for comatose patients or patients with limited consciousness and/or patients with little prior exposure to these drugs (and thus less risk of tolerance).
- Bolus: Morphine 2-10 mg; Midazolam 1-2 mg
- Infusion: Morphine 50% of the bolus dose in mg/hr; Midazolam 1 mg/hr

Regimen B: Pentobarbital (Adult doses)
- Good for the awake patient who can be expected to have respiratory distress following ventilator withdrawal.
- Bolus: 1-2 mg/kg (at rate of 50 mg/min)
- Infusion: 1-2 mg/kg/hr

Regimen C: Propofol (Adult doses)
- Good for the awake patient who can be expected to have demonstrable respiratory distress following ventilator withdrawal.
- Bolus: 20-50 mg
- Infusion: 10-100 mg/hr

Fast Fact #35: Information for Patients and Families About Ventilator Withdrawal

Physician counseling of families is a critical aspect of care for the dying patient who is to be removed from a ventilator. Ideally the family will be involved in the decision to withdraw the ventilator and thus apprised of the goals of care. Before withdrawal, the following issues should be discussed.

Potential outcome of ventilator withdrawal

Assuming all other life-sustaining treatments have been stopped, including artificial hydration and nutrition, there are several potential outcomes: rapid death within minutes (typically patients with sepsis on maximal blood pressure support), death within hours to days, or stable cardiopulmonary function leading to a different set of care plans, including potential hospital discharge. If the latter possibility is realistic, future management plans should be discussed prior to ventilator removal, since some families may desire to resume certain treatments, notably artificial hydration/nutrition. Generally, by the nature of the underlying illness and the established goals, it is fairly easy to predict which category will be operative, but all families should be prepared for some degree of prognostic uncertainty (see Fast Fact #30).

The procedure of ventilator withdrawal

Never make assumptions about what the family understands; describe the procedure in clear, simple terms and answer any questions. Families should be told before-hand the steps of withdrawal and whether or not it is planned/desired to remove the endotracheal tube. In addition, they should be counseled about the use of oxygen and medications for symptom control. Assure them that the patient’s comfort is of primary concern. Explain that labored breathing and signs of breathlessness may occur, but that they can be managed. Confirm that you will have medication available to manage any discomfort. Ensure they know that the patient will likely need to be kept asleep to control their symptoms and that involuntary moving, noisy or irregular breathing, or gasping do not reflect suffering if the patient is properly sedated or in a coma.

Explain how the family, clergy and others can be at the bedside before, during and after withdrawal. If asked, explain that they can show love and support through touch, wiping of the patient’s forehead, holding a hand and talking to him or her.

Support the decision

Even though a family is able to make a definite decision for ventilator withdrawal, such a decision is always emotionally charged. Families may constantly second-guess themselves, especially if the patient appears to linger following ventilator withdrawal. Physician support, guidance and leadership is crucial, as the family will be looking to the physician to ensure them that they are “doing the right thing.” Furthermore, it is common for families to have concerns that their decision constitutes euthanasia or assisted suicide—explicit counseling from a physician will be needed. Finally, support needs to continue following death during the bereavement period (see Fast Fact #22).

Summary

Key Take-Home Points

1. Withdrawal or withholding of treatment is a decision/action that allows the disease to progress on its natural course. It is not a decision or action intended to cause death.
2. In rare circumstances, opioids and other drugs are rapidly titrated to treat physical symptoms following accepted dosing guidelines. They might be perceived to contribute to death; however, provided the intent was genuinely to treat the symptoms, then such use is not euthanasia.
3. Physicians must familiarize themselves with the policies of the institution and pertinent statutes where they practice.
4. Impediments to good care include misconceptions about legal and ethical issues, as well as unfamiliarity with the practical aspects of withholding or withdrawing treatment.
5. Patients may be transferred to an acute care setting where life-sustaining measures are administered because the appropriate treatment plan and physician’s orders have not been completed and placed in the patient’s chart, or physician’s orders may not transfer across settings.
6. If the patient is close to dying, make sure the family knows
that a dry mouth may not improve with intravenous fluids. Relief is much more likely to occur with attention to mouth care and use of oral lubricants.

Pearls
1. Discuss overall goals before discussing specific treatments.
2. Acknowledge emotional components of decisions.
3. Make a partnership with your patient and the family caregiver; draw them into the interdisciplinary team and foster their active participation in the care plan.

Pitfalls
1. Avoid using loaded slogans such as “do everything,” or “starve to death.”
2. Failing to realize that institutional policies may be written in response to the general legal imperative to err on the side of prolonging life in cases of uncertainty or in emergencies.

References
5: Cruzan v Director of Missouri Department of Health 109 SCT 3240 (1990).

Additional References
### OBJECTIVES

#### Patient Care

- **4 3 2 1 n/o** Used a 6-step or similar effective approach for discussing withdrawal of life-sustaining treatments with a patient and/or proxy and family.

- **4 3 2 1 n/o** Effectively managed physical and psychological symptoms that may accompany withdrawal of a life-sustaining treatment, such as ventilator withdrawal.

#### Medical Knowledge

- **4 3 2 1 n/o** Discussed the ethical and legal principles guiding treatment withdrawal.

- **4 3 2 1 n/o** Illustrated situations when it is appropriate to discuss treatment withdrawal.

- **4 3 2 1 n/o** Listed, in legal order, who can make decisions for a non-decisional patient.

#### Interpersonal and Communication Skills

- **4 3 2 1 n/o** Managed conflicts between physician care recommendations and the patient/proxy/family.

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**For competency/skills**

<table>
<thead>
<tr>
<th></th>
<th>4 = Competent to perform independently</th>
<th>3 = Competent to perform with minimal supervision</th>
<th>2 = Competent to perform with close supervision / coaching</th>
<th>1 = Needs further basic instruction</th>
<th>n/o = not observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Care</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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</tr>
<tr>
<td>Medical Knowledge</td>
<td>1</td>
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<tr>
<td>Interpersonal and Communication Skills</td>
<td>1</td>
<td>2</td>
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**For knowledge and attitudes (e.g. Medical Knowledge)**

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<thead>
<tr>
<th></th>
<th>4 = Superior</th>
<th>3 = Satisfactory</th>
<th>2 = Below average</th>
<th>1 = Insufficient – needs further learning</th>
<th>n/o = not observed</th>
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**Professionalism**

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<tr>
<td>Partnered effectively and efficiently with allied health professionals when planning a discussion of treatment withdrawal.</td>
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**Overall Performance:**

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<th>1 to 3 Unsatisfactory</th>
<th>4 to 6 Satisfactory</th>
<th>7 to 9 Superior</th>
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</thead>
<tbody>
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<td>1</td>
<td>2</td>
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</tbody>
</table>

**Resident/Fellow strengths:**

**Resident/Fellow areas for improvement:**

**Overall impression:** Did the Resident/Fellow demonstrate competency in a manner so as to do no harm?

<table>
<thead>
<tr>
<th></th>
<th>Cannot Evaluate</th>
<th>1 to 3 Unsatisfactory</th>
<th>4 to 6 Satisfactory</th>
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**Resident/Fellow self-evaluation of performance:** May comment on any of the above checklist items or other reflections on performance; perceived strengths, and need for improvement and learning.

---

Clinical Faculty Evaluator/Attending

Resident/Fellow

Clinical Faculty Evaluator/Attending – PRINTED NAME/DATE

Resident/Fellow – PRINTED NAME/DATE