# Do-Not-Resuscitate Orders and Medical Futility

A Report by the National Ethics Committee of the Veterans Health Administration

December 2000



National Center for Ethics Veterans Health Administration Department of Veterans Affairs Founded in 1986, the National Ethics Committee (NEC) of the Veterans Health Administration (VHA) is an interdisciplinary group authorized by the Under Secretary for Health through the National Center for Ethics. The NEC produces reports on timely topics that are of significant concern to practicing health care professionals. Each report describes an ethical issue, summarizes its historical context, discusses its relevance to VHA, reviews current controversies, and outlines practical recommendations. Previous reports have been useful to VHA professionals as resources for educational programs, guides for patient care practices, and catalysts for health policy reform. Scholarly yet practical, these reports are intended to heighten awareness of ethical issues and to improve the quality of health care, both within and beyond VHA.

# **Executive Summary**

This report addresses the difficult situation in which a patient or surrogate decision-maker wishes that cardiopulmonary resuscitation (CPR) be attempted even though the physician believes that resuscitation efforts would be futile. In this situation, is it ever ethically permissible for a physician to write a "do-not-resuscitate" (DNR) order?

In 1995 the Veterans Health Administration National Ethics Committee (NEC) issued a report entitled Futility Guidelines: A Resource for Decisions about Withholding and Withdrawing Treatment. This report did not, however, comment specifically on how futility might apply to DNR orders. The current report extends and updates the previous report by presenting an overview of current controversies surrounding the issue of DNR and medical futility, discussing the complex medical, legal and ethical considerations involved, then offering recommendations as a guide to clinicians and Ethics Advisory Committees in resolving these difficult situations. This report is advisory only, and in no way changes or transcends current national Veterans Health Administration policy on DNR.

Although a clear consensus on this issue has yet to emerge, there has been a distinct trend in recent years away from attempts to define medical futility and toward resolving conflicts through a "procedural" approach. A wide range of health care institutions, professional organizations, and at least one state legislature has endorsed this sort of approach.

The NEC agrees that conflicts over DNR orders and medical futility should not be resolved through a policy that attempts to define futility in the abstract, but rather through a predefined and fair process that addresses specific cases. To protect patients and assure that physicians do not misuse their professional prerogatives, the process should include multiple safeguards, as outlined in this report. Entering a DNR order over the objection of a patient or surrogate should be reserved for exceptionally rare and extreme circumstances after thorough attempts to resolve disagreements have failed.

Current national VA policy constrains physicians from entering a DNR order over the objection of a patient or surrogate even if the physician believes CPR to be futile. The NEC recommends that national policy be changed to reflect the opinions expressed in this report.

#### Introduction

Patients in the United States have a well established right to determine the goals of their medical care and to accept or decline any medical intervention that is recommended to them by their treating physician. But do patients also have a right to receive interventions that are not recommended by the physician? This question takes on added significance for one intervention in particular – cardiopulmonary resuscitation (CPR) – because forgoing CPR is almost always associated with the patient's death. Cardiopulmonary resuscitation is also unique among medical interventions in that it is routinely administered in the absence of patient or surrogate consent. Current Veterans Affairs (VA) policy requires that CPR be attempted on every patient who suffers cardiopulmonary arrest unless a doctor writes a "do-not-resuscitate" (DNR) order in advance. Yet success rates from CPR in certain patient populations, such as patients with acute stroke or sepsis, are exceedingly low. In certain cases, the likelihood of benefit may be so low that some physicians would consider CPR to be futile on medical grounds.

The purpose of this report is to consider the difficult situation in which a physician proposes to write a DNR order on the basis of medical futility even though the patient or surrogate decisionmaker wishes that CPR be attempted. Although these cases are relatively rare, <sup>2,3</sup> they are a very common source of ethics consultation<sup>4,5</sup> and are difficult for clinicians, patients, and families alike. In its 1995 report, Futility Guidelines: A Resource for Decisions about Withholding and Withdrawing Treatment, 6,7 the VA National Ethics Committee (NEC) addressed the general topic of futility. In that report the NEC determined that futility was essentially impossible to define, and recommended an orderly procedure for approaching futility-related disputes. The report did not, however, comment specifically on the question of how futility might apply to DNR orders.

In the five years since the Futility Guidelines report was issued, ethical and legal standards on this issue have evolved. The current report extends and updates the previous report, reflecting growing support for procedural approaches to cases involving DNR and futility. The NEC offers this report as a guide to clinicians and Ethics Advisory Committees in resolving these difficult situations. This report's recommendations in no way change or transcend current national VA policy on DNR.

#### **Definitions**

CPR refers to the emergency medical protocol used in an attempt to restart circulation and breathing in a patient who suffers cardiopulmonary arrest. As explained in a guide written for patients and families, "CPR may involve simple efforts such as mouth-to-mouth resuscitation and external chest compression. Advanced CPR may involve electric shock, insertion of a tube to open the patient's airway, injection of medication into the heart, and in extreme cases, open chest heart massage."8

Although the definition of CPR seems straightforward, the precise meaning of DNR orders is subject to interpretation and varies from institution to institution. Some facilities, for example, require separate orders for different elements of CPR. Clinicians sometimes interpret a DNR order as permission to withhold or withdraw other treatments, and studies reveal that patients with DNR orders are less likely to receive other types of life-sustaining care. 9,10 Patients and families may worry that DNR implies abandonment of the patient or acceptance of death when in fact nearly half of all hospitalized patients with DNR orders survive to discharge. <sup>11</sup> Local VA Medical Center (VAMC) policies use a variety of terms, including "DNR," "Do Not Attempt Resuscitation (DNAR)," "No Emergency CPR," and "No Code." Consistent with national VA policy, this report uses the term "DNR."

# The Difficulty of Defining Futility

It is extremely difficult to define the concept of "futility" in a medical context. 12 The term "medical futility" refers to a physician's determination that a therapy will be of no benefit to a patient, and therefore should not be prescribed. But physicians use a variety of methods to make these determinations and may not arrive at the same conclusions.

The "qualitative" approach to futility is based on an assumption that physicians should not be required to provide treatments to achieve objectives that are not worthwhile medical goals. For example, a physician may argue that it is futile to attempt resuscitation on a patient in a permanent vegetative state. This school of thought is most open to criticism from advocates of patient autonomy since it substitutes the view of the physician for that of the patient.<sup>13</sup>

According to a "quantitative" approach to futility, a treatment is considered futile when there is a low (e.g., less than 1%) likelihood that the treatment will achieve its physiologic objective. <sup>14</sup> For example, advocates of this approach have proposed that a treatment should be regarded as futile if it has been useless the last 100 times it was tried. Opponents attack the quantitative approach because it erroneously presumes that physicians can reliably estimate the probability of a treatment success, and also because patients might reasonably choose a very small chance of leaving the hospital alive – even one in one million – over a certain death. Though quantitative determinations of futility may seem objective, they are in fact value judgments. Whether or not doctors should be permitted to make such judgments unilaterally is subject to debate.

#### **Medical Considerations**

The likelihood of success of CPR depends on the cause of the arrest, as well as on the health status of the patient. Only a minority of hospitalized patients who receive CPR survive to discharge, and patients with certain diagnoses such as sepsis or acute stroke are much less likely to survive CPR. 15,16,17

Clinicians and patients frequently have misconceptions about how well CPR works. Studies demonstrate that clinicians have a difficult time discussing CPR success rates with patients, and that they are not very accurate at estimating survival. 18,19 Patients may overestimate the probability of success of CPR, may not understand what CPR entails, and may be influenced by television programs that depict unrealistic success rates for CPR. 20,21 The lack of understanding by clinicians and patients increases the likelihood of disagreement over whether CPR should be attempted.

## **Legal Considerations**

Case law in the United States does not provide clear guidance on the issue of futility. Two of the most well known cases relating to futility are "Wanglie" and "Baby K." The Wanglie<sup>22</sup> case dealt with an 86-year old woman in a persistent vegetative state who was on a ventilator in an intensive care unit. Her physicians and the hospital went to court to have a guardian appointed, with the ultimate objective of having life support withdrawn. The court declined to address the question of futility and only held that her husband of more than 50 years was the best person to be her guardian. As a result, the impact of this decision on how other courts might rule in futility cases is limited.

The case of  $Baby K^{23}$  involved an infant with an encephaly who was unable to breathe on her own or to interact meaningfully with others. Her mother insisted that Baby K should have all medical treatment necessary to keep the child alive. The hospital went to court to obtain a ruling that it should not be required to provide artificial ventilation and other treatment when the child was sent to the hospital from the nursing home where she lived. The courts used a narrow reading of the Emergency Medical Treatment and Active Labor Act (EMTALA), commonly known as the "anti-dumping statute," to determine that the hospital had an obligation to provide necessary care. But like the *Wanglie* court, the *Baby K* court never directly addressed the question of whether it is justifiable to limit treatment on the basis of futility.

One case that comes close to providing guidance on this issue is *Gilgum v. Massachusetts General Hospital.*<sup>24</sup> In this case, a jury found that the hospital and attending physicians were not liable for discontinuing ventilator support and writing a DNR order on the basis of futility, against the wishes of Mrs. Gilgunn's daughter. However, because this was only a jury verdict and not a formal judicial opinion, it is difficult to clearly determine the nature of the precedent set by this case.<sup>25</sup>

While the courts have provided no clear guidance regarding futility, several state legislatures have addressed the issue more directly. Maryland and Virginia both have statutes that exempt physicians from providing care that is "ineffective" or "inappropriate." But these statutes also require physicians to comply with the wishes of the patient, and if there is disagreement, to seek to transfer the patient to another physician. Most significantly, 1999 Texas and California statutes outline processes whereby a physician may write a DNR order against the wishes of a patient or surrogate. These statutes will be discussed in more detail later in this report.

## **Ethical Considerations**

Respect for patient autonomy is expressed in the obligation of physicians to obtain valid and informed consent to provide treatment except in some emergencies. There are three general requirements for a patient's valid consent or refusal: the patient must be given the information he or she needs in order to make the decision; the patient must have the mental capacity to understand the decision; and the patient must be free from coercion. The information discussed with the patient should cover the treatment alternatives suitable for the patient's problem, including the probabilities of desirable and undesirable outcomes. Once a patient has made a decision to consent to or refuse the treatment under consideration, the provider has an ethical obligation to abide by that decision.

When a patient lacks the capacity to make medical decisions, a surrogate is generally appointed to make decisions on the patient's behalf. To the extent possible, the surrogate should base decisions on "substituted judgment" – knowledge of what the patient would have wanted under the current circumstances. If the patient's preferences are unknown, the surrogate should base decisions on a "best interests" standard – what is in the patient's overall best interests? Several court cases including the well-publicized Supreme Court decision in the *Cruzan* case have affirmed the legal and ethical right of patients and surrogates to refuse or discontinue medical treatment of any sort, including life-sustaining measures.<sup>29</sup>

While autonomy is one of the cornerstones of medical ethics, it is necessarily limited by other competing values. Brody has written that the concept of professional integrity implies that physicians take on certain ethical obligations when they treat patients. He identifies four specific aspects of professional integrity that may justify physicians' decisions to withhold futile treatments. First, the goals of medicine are to heal patients and reduce suffering; to offer treatments that will not achieve these goals subverts the purpose of medicine. Second, physicians are bound to high standards of scientific competence; offering ineffective treatments deviates from professional standards. Third, if physicians offer treatments that are ineffective, they risk becoming "quacks," and losing public confidence. Finally, physicians are justified in risking harm to patients only when there is a reasonable chance of benefit; forcing physicians to inflict harmful procedures on patients makes them "agents of harm, not benefit." Thus, the right of a patient to demand a treatment that is futile is limited by the need for physicians to provide care that meets high ethical, clinical and scientific standards.

Another competing value that places limits on autonomy is that of justice. Providing futile care to one patient may prevent another patient who needs care from obtaining it. To promote justice in

the allocation of health care resources, therefore, society should avoid using resources on treatments that are known to be ineffective.

# The Trend toward a Procedural Approach to DNR and Futility

Given the difficulties in defining futility, as well as the clinical, legal and ethical complexities surrounding the problem, some ethicists have argued in favor of a "procedural" approach to resolving futility questions. According to this approach, conflicts over DNR orders and medical futility are resolved not through a policy that attempts to define futility in the abstract, but rather through a predefined and fair process that addresses specific cases. In the years since the VA Bioethics Committee recommended that facilities consider using a committee to help resolve disputes over futility, a growing number of institutions and professional organizations have formally adopted this approach.

In 1999, the Council on Ethical and Judicial Affairs (CEJA) of the American Medical Association concluded that "objectivity is unattainable" when defining futility, and that the best approach is to implement a "fair process." <sup>30</sup> For CEJA, a fair process includes extensive deliberation and consultation in an attempt to reach resolution, followed by efforts to transfer care to a physician willing to comply with the patient's wishes. If transfer cannot be accomplished, then care can be withheld or withdrawn, even though "the legal ramifications of this course of action are uncertain."<sup>30</sup> The CEJA report draws in large measure on the success of institutional policies such as one published by a group of health care institutions in Houston. 31 Additional organizations and institutions have adopted similar policies within the past few years. 32,33

At least one empirical study has examined the effects of a procedural approach to futility applied to DNR orders. Casarett and Siegler retrospectively reviewed 31 ethics consultations involving cases in which a physician wanted to write a DNR order against the family's wishes. Ethics consultants helped to resolve the disagreement in 17 of those cases, recommended no DNR order in seven cases, and recommended that a DNR order be written despite the family's wishes in seven cases. Of the seven patients for whom a non-consensual DNR order was recommended, two died before the order was written, four died after the order was written, and one was discharged to hospice. The hospital was not sued in any of the cases reviewed. This study offers preliminary evidence that a procedural approach to DNR and futility can assist in reducing conflict.

Two states have recently passed legislation that validates a procedural approach to resolving futility cases. Texas and California enacted statutes in 1999 that permit health care institutions to use futility or "medical ineffectiveness" as a reason for declining to comply with a patient or surrogate's health care instruction. Specifically, the Texas statute: 1) requires review of a physician's decision to withhold life-sustaining treatment on the basis of futility by "an ethics or medical committee;" 2) gives the patient or surrogate the right to attend the committee meeting and to obtain a written explanation of the committee's findings; 3) states that transfer to another physician or facility should be sought if the physician, patient or surrogate disagrees with the committee's findings; 4) stipulates that the patient is liable for any costs incurred in the transfer if it is requested by the patient or surrogate; 5) permits the physician to write orders to withhold or withdraw lifesustaining treatment if a transfer cannot be arranged within ten days; and 6) grants the patient the right to go to court to extend the period of time to arrange for a transfer.<sup>34</sup> The California statute is similar in that it requires the provider or institution to: 1) inform the patient or surrogate of the decision; 2) make efforts to transfer the patient to an institution that will comply with the patient's wishes and 3) provide continuing care until a transfer occurs or until "it appears that a transfer cannot be accomplished."28

# **Current VA Policy**

Current national VA policy on DNR is expressed in a document entitled Do Not Resuscitate (DNR) Protocols within the Department of Veterans Affairs. Section 30.02c of this document states:

In the exercise of the sound judgment of the licensed physician, instruction may appropriately be given not to institute resuscitation of a patient who has been [sic] experienced an arrest. Such cases would involve patients...for whom resuscitative efforts would be futile or useless. Protocols which are adopted under this chapter may permit the withholding of resuscitation in such cases.

However, Section 30.03b(2)(a) of the same document contains the following statement:

If a competent patient requests that a DNR order not be written, or instructs that resuscitative measures should be instituted, no DNR order shall be written.

Similarly, Section 30.03b(2)(b), which pertains to incompetent patients, states:

Should the patient's representative object to entry of a DNR order, no such order will be written.

Although these paragraphs may seem contradictory, the intent of the policy is clear: VA physicians are not permitted to write a DNR order over the objection of the patient or surrogate, but they are permitted to withhold or discontinue CPR based on bedside clinical judgment at the time of cardiopulmonary arrest. Official interpretations at the national level by attorneys in the Office of General Counsel and staff of the National Center for Ethics have confirmed this reading.

VAMCs implement the national VA policy on a local level by adopting DNR policies that are consistent with (but not necessarily identical to) the national policy. A review of policies from 37 VAMCs revealed that most policies use language that closely mirrors the language of the national directive. Other facilities supplement this language by outlining a specific procedure to be followed in case of conflicts about DNR. For example, the policy of the Jerry L. Pettis VAMC in Loma Linda, Calif, states:

In those cases where there may be some doubt concerning the propriety of a DNR order or the accuracy of the patient's diagnosis of prognosis, the patient's case will be presented to the Medical Center's Ethics Advisory Committee to resolve the conflict.<sup>35</sup>

Some VAMCs have gone even further by creating a detailed process for resolving DNR disputes. The policy of the VA Roseburg Healthcare System in Roseburg, Ore, allows that when there is a disagreement about DNR, patients and clinicians have access to a multi-step process that permits any involved party to:

- 1) Pursue discussions with all involved members of the healthcare team (possibly including inpatient and outpatient health care providers) and with the patient or the patient's surrogate or family.
- 2) Consult with the procedural approach to patient or surrogate requests for withholding life-sustaining treatment procedures as outlined in Attachment A [a table describing how to approach DNR requests].
- 3) If the issue cannot be resolved due to confusion or lack of knowledge, a consultation may be obtained from an appropriate source (e.g., medical specialist, clinical nurse specialist, social worker, chaplain, psychologist, or family member).
- 4) If the issue cannot be resolved due to conflict, a second opinion may be sought from a like party (e.g., another physician if the primary physician is in conflict with the patient).
- 5) If a conflict exists and a life-threatening event occurs before its resolution, health care providers should continue to provide treatment.
- 6) Convene a conference of all involved parties in the case.
- 7) Consult the VA Roseburg Healthcare System Ethics Committee.
- 8) Request the Chief of Staff to help resolve a confusing or contentious issue. This option can be used in lieu of an Ethics Committee consultation if the need for a decision is urgent or if confusion or conflict about a course of action continues to exist after Ethics Committee consultation.<sup>36</sup>

The policies of several other VAMCs describe similar procedural approaches to futility. These policies tend to emphasize the importance of communication between all involved parties, access to consultation from medical experts, involvement of the local Ethics Advisory Committee, and the option of transferring care to another clinician or facility if agreement cannot be reached between patient or surrogate and the care team. Procedural approaches recognize that when a preestablished, fair process is applied in cases of disagreement, consensus often results. Despite the variations in language, all VAMC policies reviewed appear to be consistent with the current official interpretation of national VHA policy that physicians may not write a DNR order over the objection of a patient and/or family.

#### Recommendations

The NEC affirms the value of a procedural approach to resolving disputes over DNR orders based on medical futility, and recommends the following:

- 1) Situations in which the physician believes that resuscitation is futile should be handled on a case by case basis through a predefined process that includes multiple safeguards to assure that patients' rights are fully protected, as detailed below.
- 2) Through a discussion with the patient or appropriate surrogate decision-maker, the physician should ascertain (to the extent possible) the patient's expressed or inferred wishes, focusing on the goals of care from the patient's perspective. For example, a patient who is imminently dying may want to be resuscitated in order to survive to see a relative arrive from out of town. Any determination that CPR is futile must be based on the physician's medical judgment that CPR cannot be reasonably expected to achieve the patient's goals.
- 3) The physician must thoroughly explain to the patient or surrogate the reasons for the medical futility determination and document this discussion in the medical record.
- 4) If the patient or surrogate disagrees with the DNR order, the physician must convene a meeting involving members of the health care team and the patient or surrogate. At this meeting the reason for the disagreement must be thoroughly explored and discussed with the purpose of resolving the dispute. This discussion must be carefully documented in the medical record.
- 5) If the physician wishes to enter a DNR order despite the objection of the patient or surrogate, the physician must initiate and participate in a formal review process. If the patient suffers cardiopulmonary arrest before this process is completed, resuscitation must be attempted.
- 6) At a minimum, the review process should include the following steps:
  - a) To assure that the medical futility determination is sound, a second physician must concur with the primary physician's medical futility determination and document the concurrence in the medical record.
  - b) An individual or group designated by the facility (such as an Ethics Advisory Committee) must (1) discuss the situation with the involved parties in an attempt to reach a resolution and (2) make a formal recommendation on the case.
  - c) The patient or surrogate must be informed of the plan to enter the DNR order and the physician must offer to assist in the process of having the patient transferred to another

physician or clinical site. Patients or their surrogates should have a reasonable time to seek transfer or court intervention before the order is written.

- d) Entering a DNR order over the objection of a patient or surrogate should be reserved for exceptionally rare and extreme circumstances after thorough attempts to settle or successfully appeal disagreements have been tried and failed. In all such cases, the Chief of Staff or a designee must authorize action on behalf of the institution.
- e) Legal Counsel should be informed of and involved in all cases in which conflicts over DNR orders cannot be resolved.

The NEC also recommends that national policy be changed to reflect the opinions expressed in this report.

#### Conclusion

A growing number of national organizations and healthcare institutions have endorsed procedural approaches to futility conflicts. The NEC agrees that conflicts over DNR orders and medical futility should be resolved through a defined process that addresses specific cases rather than through a policy that attempts to define futility in the abstract. The dispute resolution process should include multiple safeguards to make certain that physicians do not misuse their professional prerogatives. Specifically, the process should affirm the right of the patient or surrogate to determine the goals of care; promote ongoing discussion; include medical input from other clinicians and advice from an Ethics Advisory Committee or other facility-designated consultant; and provide opportunities for the patient or surrogate to seek court intervention or transfer to another facility. Only after such a process is complete would it ever be permissible to write a DNR order despite patient or surrogate dissent. Current national VA policy does not permit physicians to enter DNR orders over the objections of patients or surrogates, even when a physician believes that CPR is futile. This report's recommendations in no way change or transcend current national VA policy on DNR. The NEC does, however, recommend that national policy be changed to reflect the opinions expressed in this report.

#### References

- 1. Veterans Health Administration. VA Policy Manual, M-2, Part I, Chapter 30, June 21, 1994.
- 2. Halevy A, Neal RC, Brody BA. The low frequency of futility in an adult intensive care unit setting. Arch Intern Med. 1996;156:100-104.
- 3. Casarett D, Siegler M. Unilateral do-not-attempt-resuscitation orders and ethics consultation: a case series. Crit Care Med. 1999;27:1116-1120.
- 4. Hoffman DE. Does legislating hospital ethics committees make a difference? A study of hospital ethics committees in Maryland, the District of Columbia and Virginia. Law Med Healthc. 1991;19:105-119.
- 5. Lappetito J, Thompson P. Today's ethics committees face varied issues. Health Prog. 1993;25:34-39.
- 6. Veterans Health Administration Central Office Bioethics Committee, Subcommittee on Futility. Futility guidelines: A resource for decisions about withholding and withdrawing treatment. Washington, DC: National Center for Clinical Ethics; 1994.
- 7. Gregory DR. VA network futility guidelines: a resource for decisions about withholding and withdrawing treatment [news]. Camb O Healthc Ethics. 1995;4:546-548.
- 8. New York State Department of Health. Your Rights as a Hospital Patient in New York State. 1997. Available at: http://www.health.state.ny.us/nysdoh/hospital/english3.htm#planning. Accessed February 29, 2000.
- 9. La Puma J, Silverstein MD, Stocking CB, Roland D, Siegler M. Life-sustaining treatment: a prospective study of patients with DNR orders in a teaching hospital. Arch Intern Med. 1988;148:2193-2198.
- 10. Stolman CJ, Gregory JJ, Dunn D, Ripley B. Evaluation of the do not resuscitate orders at a community hospital. Arch Intern Med 1989;149(8):1851-6.
- 11. Phillips RS, Wenger NS, Teno J, et al. Choices of seriously ill patients about cardiopulmonary resuscitation: correlates and outcomes. Am J Med. 1996;100:128-137.
- 12. Brody H. Medical futility. A useful concept? In: Zucker MB, Zucker HD, eds. Medical Futility and the Evaluation of Life-Sustaining Treatment. Cambridge, MA: Cambridge Press; 1997:1-14.
- 13. Brody BA, Halevy A. Is futility a futile concept? *J Med Phil.* 1995;20:123-144.
- 14. Schneiderman LJ, Jecker NS, Jonsen AR. Medical futility: its meaning and ethical implications. Ann Intern Med. 1990;112:949-954.
- 15. Marik PE, Craft M. An outcomes analysis of in-hospital cardiopulmonary resuscitation: the futility rationale for do not resuscitate orders. J Crit Care Med. 1997;12:142-146.

- 16. Bialecki L, Woodward RS. Predicting death after CPR: experience at a nonteaching community hospital with a full-time critical care staff. *Chest.* 1995;108:1009-1017.
- 17. Saklayen M, Liss H, Markert R. In-hospital cardiopulmonary resuscitation: survival in one hospital and literature review. *Medicine (Baltimore)*. 1995;74:163-175.
- 18. Tulsky JA, Chesney MA, Lo B. How do medical residents discuss resuscitation with patients? *J Gen Intern Med.* 1995;10:436-442.
- 19. Curtis JR, Park DR, Krone MR, Pearlman RA. Use of the medical futility rationale in do-not-attempt-resuscitation orders. *JAMA*. 1995;273:124-128.
- 20. Diem SJ, Lantos JD, Tulsky, JA. Cardiopulmonary resuscitation on television. N Engl J Med. 1991;334:1578-1582.
- 21. Schonwetter RS, Walker RM, Kramer DR, Robinson BE. Resuscitation decision making in the elderly: the value of outcome data. *J Gen Intern Med* 1993;8(6):295-300.
- 22. In re Conservatorship of Wanglie: findings of fact, conclusions of law and order. Minnesota District Court, Probate Court Division, Fourth Judicial District, Hennepin County. 1991 June 28 (date of order). File No. PX-91-283.
- 23. In the matter of Baby K, 16F3d 590(4th Cir. 1994).
- 24. Gilgunn v Massachusetts General Hospital, Mass Super Ct (1995). No 92-4820, verdict 21.
- 25. Capron AM. Abandoning a waning life. Hastings Cent Rep. July-August 1995;25:24-26.
- 26. Daar JF. Medical futility and implications for physician autonomy. *Am J Law Med.* 1995;21:221-40.
- 27. Tex. Health & Safety Code §166.
- 28. CAL. PROB. CODE §4736 (West 2000).
- 29. Meisel A. The legal consensus about forgoing life-sustaining treatment: its status and its prospects. *Kennedy Inst Ethics J.* 1992;2:309-345.
- 30. Council on Ethical and Judicial Affairs, American Medical Association. Medical futility in end-of-life care. *JAMA*. 1999;281:937-941.
- 31. Halevy A, Brody BA. A multi-institution collaborative policy on medical futility. *JAMA*. 1996;276:571-574.

- 32. University of Toronto Joint Centre for Bioethics. Model policy on appropriate use of lifesustaining treatment. Available at: <a href="http://www.utoronto.ca/jcb/ccm">http://www.utoronto.ca/jcb/ccm</a> policy.htm. Accessed February 29, 2000.
- 33. The Ethics Committee of the Society of Critical Care Medicine. Consensus statement of the Society of Critical Care Medicine's Ethics Committee regarding futile and other possibly inadvisable treatments. Crit Care Med. 1997;25:887-891.
- 34. Tex. Health & Safety Code \$166.046.
- 35. Jerry L. Pettis Memorial Veterans Medical Center, Loma Linda, Calif. Do not resuscitate orders (DNR). Medical Center Memorandum 11-24, April 2, 1998. Section II.C.
- 36. VA Roseburg Healthcare System, Roseburg, Oreg. Do Not Resuscitate Policy. Memorandum 1109, July 10, 1998. Section 4.d.

Report Authors: Michael D. Cantor, MD, JD; Clarence Braddock III, MD, MPH; Arthur R. Derse, MD, JD; Denise Murray Edwards, RNCS, ARNP, MA, MEd, MTS; Gerald L. Logue, MD; William Nelson, PhD; Angela M. Prudhomme, JD; Robert A. Pearlman, MD, MPH; James E. Reagan, PhD; Ginger Schafer Wlody, RN, EdD; and Ellen Fox, MD.

Committee Members: Arthur R. Derse, MD, JD (Chair); John Booss, MD; Clarence H. Braddock III, MD, MPH; James F. Burris, MD; Michael D. Cantor, MD, JD; LuAnn M. Eidsness, MD; Robert T. Frame, DMD, MS, CHE; Linda K. Ganzini, MD; Ginny Miller Hamm, JD; Joanne D. Joyner, DNSc, RN, CS; William Nelson, PhD; Angela M. Prudhomme, JD; James A. Tulsky, MD; Ladislav Volicer, MD, PhD; Ginger Schafer Wlody, RN, EdD.

Consultants to the Committee: William E. Brew, JD; Jo Ann Krukar Webb, RN, MHA.

Steering Committee Members: Patricia A. Crosetti; Joan E. Cummings, MD; Thomas V. Holohan, MD.

Director, National Center for Ethics: Ellen Fox, MD.

Acknowledgments: The Committee would like to thank Kathleen C. Babb, MSW, for her contributions to the development of this paper.