5.4 Orders Not to Attempt Resuscitation (DNAR)

The ethical obligation to respect patient autonomy and self-determination requires that the physician respect decisions to refuse care, even when such decisions will result in the patient's death. Whether a patient declines or accepts medically appropriate resuscitative interventions, physicians should not permit their personal value judgments to obstruct implementation of the patient's decision.

Orders not to attempt resuscitation (DNAR orders) direct the health care team to withhold resuscitative measures in accord with a patient's wishes. DNAR orders can be appropriate for any patient medically at risk of cardiopulmonary arrest, regardless of the patient's age or whether or not the patient is terminally ill. DNAR orders apply in any care setting, in or out of hospital, within the constraints of applicable law.

In the event a patient suffers a cardiopulmonary arrest when there is no DNAR order in the medical record, resuscitation should be attempted if it is medically appropriate. If it is found after the code is initiated that the patient would not have wanted resuscitation, the attending physician should order that resuscitative efforts be stopped.

Physicians should address the potential need for resuscitation early in the patient's course of care, while the patient has decision-making capacity, and should encourage the patient to include his or her chosen surrogate in the conversation. Before entering a DNAR order in the medical record, the physician should:

(a) Candidly describe the procedures involved in resuscitation, the likelihood of medical benefit in the patient's clinical circumstances, and the likelihood of achieving the patient's desired goals for care or quality of life to address any misconceptions the patient may have about probable outcomes of resuscitation.

(b) Ascertain the patient's wishes with respect to resuscitation—directly from the patient when the individual has decision-making capacity, or from the surrogate when the patient lacks capacity. If the patient has an advance directive, the physician should review the directive with the patient and confirm that the preferences set out in the directive about resuscitation are current and valid. The DNAR order should be tailored to reflect the particular patient's preferences and clinical circumstances.

(c) Reinforce with the patient, loved ones, and the health care team that DNAR orders apply only to resuscitative interventions as they relate to the patient's goals for care. Other medically appropriate interventions, such as antibiotics, dialysis, or appropriate symptom management will be provided or withheld in accordance with the patient's wishes.

(d) Revisit and revise decisions about resuscitation—with appropriate documentation in the medical record—as the patient's clinical circumstances change. Confirm whether the patient wants the DNAR order to remain in effect when obtaining consent for surgical or other interventions that carry a known risk for cardiopulmonary arrest and adhere to those wishes.

(e) Document in the medical record the patient's clinical status, prognosis, current decision-making capacity, and preferences with respect to resuscitation, as well as the physician's medical judgment about the appropriateness of resuscitation.

When the patient cannot express preferences regarding resuscitation or does not have decision-making capacity and has not previously indicated his or her preferences, the physician has an ethical responsibility to:

(f) Candidly and compassionately discuss these issues with the patient's authorized surrogate and document the surrogate's decision in the medical record.

(g) Revisit with the surrogate decisions about resuscitation as the patient's clinical circumstances change, revising the decision as needed and updating the medical record accordingly.

(h) Seek consultation with an ethics committee or other appropriate institutional resource if disagreement about a DNAR order that cannot be resolved at the bedside.

When the patient's preferences cannot be determined and the individual has no surrogate, the physician should consult with an ethics committee or other appropriate institutional resource before entering an order not to attempt resuscitation.

AMA Principles of Medical Ethics: I,IV,VIII

Background report(s):

CEJA Report 3-A-16 Modernized *Code of Medical Ethics*

CEJA Report 6-A-05 Universal out-of-hospital DNR orders

CEJA Report D-I-90 Guidelines for the appropriate use of do-not-resuscitate orders

5.4 Orders Not to Attempt Resuscitation (DNAR)

The ethical obligation to respect patient autonomy and self-determination requires that the physician respect decisions to refuse care, even when such decisions will result in the patient's death. Whether a patient declines or accepts medically appropriate resuscitative interventions, physicians should not permit their personal value judgments to obstruct implementation of the patient's decision. *[New content sets out key ethical values and concerns explicitly.]*

Orders not to attempt resuscitation (DNAR orders) direct the health care team to withhold resuscitative measures in accord with a patient's wishes. DNAR orders can be appropriate for any patient medically at risk of cardiopulmonary arrest, regardless of the patient's age or whether or not the patient is terminally ill. DNAR orders apply in any care setting, in or out of hospital, within the constraints of applicable law.

In the event a patient suffers a cardiopulmonary arrest when there is no DNAR order in the medical record, resuscitation should be attempted if it is medically appropriate. *If it is found after the code is initiated that the patient would not have wanted resuscitation, the attending physician should order that resuscitative efforts be stopped. [New content incorporated consistent with 5.3.]*

Physicians should address the potential need for resuscitation early in the patient's course of care, while the patient has decision-making capacity, and should encourage the patient to include his or her chosen surrogate in the conversation. Before entering a DNAR order in the medical record, the physician should: [New content consistent with 5.1.]

(a) Candidly describe the procedures involved in resuscitation, the likelihood of medical benefit in the patient's clinical circumstances, and the likelihood of achieving the patient's desired goals for care or quality of life to address any misconceptions the patient may have about probable outcomes of resuscitation.

(b) Ascertain the patient's wishes with respect to resuscitation—directly from the patient when the individual has decision-making capacity, or from the surrogate when the patient lacks capacity. If the patient has an advance directive, the physician should review the directive with the patient and confirm that the preferences set out in the directive about resuscitation are current and valid. The DNAR order should be tailored to reflect the particular patient's preferences and clinical circumstances.

(c) Reinforce with the patient, loved ones, and the health care team that DNAR orders apply only to resuscitative interventions as they relate to the patient's goals for care. Other medically appropriate interventions, such as antibiotics, dialysis, or appropriate symptom management will be provided or withheld in accordance with the patient's wishes. [New guidance consistent with 5.2.]

(d) Revisit and revise decisions about resuscitation—with appropriate documentation in the medical record—as the patient's clinical circumstances change. Confirm whether the patient wants the DNAR order to remain in effect when obtaining consent for surgical or other interventions that carry a known risk for cardiopulmonary arrest and adhere to those wishes.

(e) Document in the medical record the patient's clinical status, prognosis, current decision-making capacity, and preferences with respect to resuscitation, as well as the physician's medical judgment about the appropriateness of resuscitation.

When the patient cannot express preferences regarding resuscitation or does not have decision-making capacity and has not previously indicated his or her preferences, the physician has an ethical responsibility to: *[New content clarifies context of guidance.]*

(f) Candidly and compassionately discuss these issues with the patient's authorized surrogate and document the surrogate's decision in the medical record. [New content addresses gap in current guidance.]

(g) Revisit with the surrogate decisions about resuscitation as the patient's clinical circumstances change, revising the decision as needed and updating the medical record accordingly. [New content addresses gap in current guidance.]

(h) Seek consultation with an ethics committee or other appropriate institutional resource if disagreement about a DNAR order that cannot be resolved at the bedside.

When the patient's preferences cannot be determined and the individual has no surrogate, the physician should consult with an ethics committee or other appropriate institutional resource before entering an order not to attempt resuscitation.

AMA Principles of Medical Ethics: I,IV,VIII

REPORT OF THE COUNCIL ON ETHICAL AND JUDICIAL AFFAIRS[*]

CEJA Report 6 - A-05

Subject: Universal Out-of-Hospital DNR Systems
(Resolution 5, A-04)

Presented by: Michael S. Goldrich, MD, Chair

Referred to: Reference Committee on Amendments to Constitution and Bylaws
(Art L. Klawitter, MD, Chair)

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1 At the 2004 Annual Meeting, the Medical Student Section introduced Resolution 5, "Universal
2 Out-Of-Hospital DNR Systems," which directed the AMA to investigate and support the
3 development of a standardized nationwide out-of-hospital Do Not Resuscitate (DNR) system. This
4 resolution was referred to the Board of Trustees and assigned to the Council on Ethical and Judicial
5 Affairs for report back to the House of Delegates.
6
7 OVERVIEW
8
9 Cardiopulmonary resuscitation (CPR) is an emergency lifesaving treatment that is capable of
10 restoring function following cardiopulmonary arrest. In cases of arrest, the standard procedure is to
11 initiate CPR. In certain instances, however, CPR may be contrary to patient preferences.
12
13 It is well established that patients have the right to refuse medical treatment, even if the refusal
14 results in death. Opinion E-2.20, "Withholding or Withdrawing Life-Sustaining Medical
15 Treatment," (AMA Policy Database) states that "[a] competent, adult patient may, in advance,
16 formulate and provide a valid consent to the withholding or withdrawal of life-support
17 mechanisms…." This Opinion also establishes the ethical responsibility of a physician to respect
18 the patient's preference by stating that "[t]he principle of patient autonomy requires that physicians
19 respect the decision to forego life-sustaining treatment of a patient who possesses decision-making
20 capacity."[1] Understanding a patient's preferences regarding resuscitation is especially important
21 when the patient has a progressive illness or if it is unlikely that resuscitation could restore cardiac
22 or respiratory function.[2]
23
24 Prior to cardiopulmonary arrest, there are two mechanisms by which patients may document their
25 preferences to withhold the use of life-sustaining treatment: a DNR order and an advance directive
26 (AD). A DNR order to authorize the withholding of resuscitative treatment may be written by a
27 physician to communicate the patient's wishes to others. Alternatively, an AD is an instruction
28 developed by a patient that is intended to inform health care professionals and others of the
29 patient's treatment preferences, which may include withholding emergency resuscitative efforts.
30 Both a DNR order and an AD not to resuscitate (AD-DNR) involve similar ethical issues, and
31 where appropriate, they are referred to collectively as "CPR refusals" in this report.

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[*] Reports of the Council on Ethical and Judicial Affairs are assigned to the reference committee on Constitution and Bylaws. They may be adopted, not adopted, or referred. A report may not be amended, except to clarify the meaning of the report and only with the concurrence of the Council.

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If there is not a documented CPR refusal and if the patient is incapable of making a decision regarding resuscitation, this decision may be made by an authorized surrogate decision maker. Unilateral decisions from physicians to withhold resuscitation have become rare, because it is now customary for physicians to discuss the likely benefits and limitations of resuscitative efforts with patients or their surrogates. Nevertheless, in rare cases physicians may judge CPR to be clinically inappropriate.

HOSPITAL AND OUT-OF-HOSPITAL SETTINGS

The federal Patient Self-Determination Act of 1991 requires all health care agencies (hospitals, long-term care facilities, and home health agencies) receiving Medicare and Medicaid reimbursement to recognize the living will and durable power of attorney for health care as ADs.[3] Similar requirements exist in the accreditation standards of the Joint Commission on Accreditation of Healthcare Organizations.[4] These institutions must ask patients whether they have ADs and must provide patients with educational materials about their rights under state law. If there is an AD, it is entered into the patient's medical record at that institution.

However, the patient's medical record is not readily available in out-of-hospital settings, including the patient's home, where 80 percent of cases of sudden death from cardiac causes occur.[5] In some states, the DNR order is not valid in out-of-hospital settings. North Carolina is the only state thus far to have established a statewide repository for ADs that is accessible over the internet (*See* Appendix C). Additionally, there are private registries that maintain DNR orders and ADs; however, it is unclear whether these registries are or could be consulted in an emergency situation.

Thus, in out-of-hospital settings, where medical records are not readily accessible, there is a significant possibility that a patient's preference regarding resuscitation will not be known and thus not honored.[6, 7, 8] This particularly affects patients with documented CPR refusals who are outside a hospital, because ambulance or rescue personnel generally have a legal obligation to institute life support measures if an existing AD is not readily available or is in a form that differs from that required by law.

An additional concern is presented by the widespread availability, outside of hospitals, of trained first responders and equipment such as automated external defibrillators, which can be used by health care providers or untrained individuals. There is, however, little if any guidance for citizens or emergency responders regarding the use of resuscitative measures relative to the existence, availability, and enforceability of documented CPR refusals.

Legislative solutions

Most states have enacted legislation to address patients' out-of-hospital preferences regarding resuscitation. However, these laws vary in their terminology, medical prerequisites, authorization requirements, methods of identification, and reciprocity with other states.[9] The lack of reciprocity among states is particularly problematic for many patients with documented CPR refusals because the patient's wishes may not be respected upon traveling outside the state.

The differences between state protocols regarding CPR refusals also have a significant impact on the potential liability imposed on persons present during the event triggering the need for resuscitative efforts. Many statutes confer immunity from liability due to the withholding of CPR in response to a CPR refusal. However, the statutes vary as to who is protected and under what

circumstances protection is conferred.[9] Additionally, some states provide immunity to persons who attempt resuscitation in good faith or when unaware of a CPR refusal. Unfortunately, data on the utilization of and compliance with CPR refusals are minimal. Among the states that collect data, most track only the number of CPR refusals or cards sent out, rather than the ones that are respected at the time of an emergency.[9]

RELEVANT AMA POLICY

Issues surrounding CPR refusals are well addressed in current AMA policy. AMA policy H-140.972, "Guidelines for the Appropriate Use of Do-Not-Resuscitate Orders," states: "The AMA will disseminate model state legislation which protects the rights of terminally and chronically ill patients to have their do-not-resuscitate wishes honored by emergency personnel in all out-of-hospital settings." Model legislation was created in 1998. The model legislation includes provisions for interstate reciprocity and immunity.

Opinion E-2.22, "Do-Not-Resuscitate Orders," states that patients "should be encouraged to express in advance their preferences regarding the use of CPR, and this should be documented in the patient's medical record." The Opinion further states, "The physician has an ethical obligation to honor the resuscitation preferences of the patient or the patient's surrogate." Opinion E-2.225, "Optimal Use of Orders Not-to-Intervene and Advance Directives," expresses a need for better availability and tracking of ADs in general, and for more uniform documents that can be honored in all states. Section (4) of Opinion E-2.225 specifically states that "central repositories should be established so that completed advisory documents, state statutory documents, identification of a proxy, and identification of the primary care physician, can be obtained efficiently in emergency and urgent circumstances as well as routinely."

ETHICAL CONSIDERATIONS

Just as a CPR refusal is considered binding in the hospital setting, a patient's preferences should also be honored when the patient is located outside of the hospital. A patient's right to self-determination is undermined when the location determines whether the patient's preference is respected.

Moreover, if physicians are unaware of their states' laws regarding CPR refusals, the appropriate directive might not be prepared and patients might not be provided this means of indicating their preferences regarding resuscitation.

A study in New York found that eight years after the enactment of non-hospital DNR legislation, a large minority of primary care physicians still did not use non-hospital DNRs for their patients. Less than half of the respondents who did use non-hospital DNR orders chose to utilize the official state form. This might explain the additional finding that a quarter of these respondents reported that their non-hospital DNR order had been ignored.[10] Similarly, a Washington state study found that sixty percent of the surveyed physicians did not know that there was a state law regarding out-of-hospital DNR orders.[11]

In the absence of uniform protocols across the states, much is at risk in medical crises that occur out-of-state. If emergency medical system (EMS) personnel perform resuscitation due to a failure to honor a CPR refusal, both patient and family suffer needless trauma, pain, and indignity.

The implementation of a uniform state law would create standard identification of CPR refusal. Also, a central repository would ensure portability across and reciprocity between jurisdictions. Most importantly, it could result in patient preferences being honored more frequently than they are currently.

Physician and Patient Responsibilities

It is critical that physicians discuss advance planning that includes potential CPR refusals when patients have a condition that significantly decreases the likelihood of a successful resuscitation or have a terminal condition. As part of such discussions with patients and their families, physicians should inform decision-makers of any limitations regarding out-of-hospital scenarios. Foremost, helping patients to understand state protocols requires that physicians be well informed about laws that govern CPR refusals. For example, physicians should explain the role of EMS personnel regarding CPR refusals in the course of responding to emergency calls. Patients and family members also should understand that an appropriate surrogate decision-maker has the authority to refuse resuscitative treatments when a patient lacks the capacity to make such health-care decisions. To protect the right of patients to refuse resuscitative treatments, physicians should advocate for a more systematic approach to honor patient preferences regardless of the setting in which the order or directive is invoked.

It is essential that physicians discuss preferences regarding resuscitation with patients or their surrogates. They should also educate patients who have CPR refusals regarding the implications and potential limitations of their preferences under their state's law. Patients may need to take measures, such as wearing or carrying a bracelet or other form of identification that make their preferences available at all times.

CONCLUSION

The AMA has policies that accomplish the goals of Resolution 5, A-04, "Universal Out-of-Hospital DNR Systems," including model legislation that can help create uniform laws nationwide. Through proper dissemination of this model legislation, for example, through the National Conference of Commissioners on Uniform State Laws, the AMA can help to standardize out-of-hospital DNR orders, and establish reciprocity in their implementation across the states.

In the process of reviewing this matter, the Council on Ethical and Judicial Affairs has reconsidered E-2.22 and offers changes to improve its content to better reflect the above considerations.

RECOMMENDATION

The Council on Ethical and Judicial Affairs recommends that the following recommendations be adopted in lieu of Resolution 5 (A-04) and that the remainder of this report be filed:

1. That Policy H-140.972 be rescinded, because sections 1-7 of the policy are duplicates of the ethical opinion to which changes are now being proposed, and sections 8-9 are being replaced by recommendation 3, below. (Rescind Policy)

1 2. That the Council on Ethical and Judicial Affairs' proposed replacement of Opinion E-2.22,
2 "Do Not Resuscitate Orders," be filed at the 2005 Interim Meeting. (Directive to Take
3 Action)
4
5 3. That the American Medical Association seek greater standardization and reciprocity
6 among states of DNR and AD-DNR legislation, and that the AMA model legislation "An
7 Act Concerning Out-of-Hospital Do-Not-Resuscitate Orders," be widely disseminated and
8 submitted to the National Conference of Commissioners on Uniform State Laws.
9 (Directive to Take Action)

Fiscal Note: Staff cost estimated at less than $500 to implement.

APPENDIX A

E-2.22 Do-Not-Resuscitate Orders – tracked version

When a patient suffers cardiac or respiratory arrest, attempts ~~Efforts~~ should be made to resuscitate the patients~~,~~ ~~who suffer cardiac or respiratory arrest~~ except when ~~circumstances indicate that~~ cardiopulmonary resuscitation (CPR) ~~would be inappropriate or~~ is not in accord with ~~the desires or best interests of~~ the patient's expressed desires or is clinically inappropriate.

All ~~P~~patients ~~at risk of cardiac or respiratory failure~~ should be encouraged to express in advance their preferences regarding the extent of treatment after cardiopulmonary arrest, especially patients at substantial risk of such an event.~~use of CPR, and this should be documented in the patient's medical record. These~~ During discussions regarding patients' preferences, physicians should include a description of the procedures encompassed by CPR. ~~and, when possible, should occur in an outpatient setting when general treatment preferences are discussed or as early as possible during hospitalization.~~ Patients' preferences should be documented as early as possible and sould be revisited and revised as appropriate.

~~The physician has an ethical obligation to~~ An advance directive stating a patient's refusal of CPR should be honored independently of whether the patient is in or out of a hospital. ~~the resuscitation preferences expressed by the patient.~~ When patients refuse CPR, ~~P~~physicians should not permit their personal value judgments ~~about quality of life~~ to obstruct ~~the~~ implementation of the refusals. ~~a patient's preferences regarding the use of CPR.~~

If a patient ~~is incapable of rendering~~ lacks the ability or cannot communicate a decision regarding the use of CPR, a surrogate decision maker may make a decision ~~may be made by a surrogate decision maker,~~ based upon the previously expressed preferences of the patient. ~~or, i~~If such preferences are unknown, decisions should be made in accordance with the patient's best interests. If no surrogate decision maker is available, an attending physician contemplating a "Do Not Resuscitate" order (DNR) should consult another physician or a hospital ethics committee, if one is available. (See Opinion 8.081, "Surrogate Decision Making.")

~~If, in the judgment of the attending physician, it would be inappropriate to pursue CPR, the attending physician may enter a do-not-resuscitate (DNR) order into the patient's record. Resuscitative efforts should be considered inappropriate by the attending physician only if they cannot be expected either to restore cardiac or respiratory function to the patient or to meet established ethical criteria, as defined in the Principles of Medical Ethics and Opinions 2.03, "Allocation of Limited Medical Resources," and 2.095, "The Provision of Adequate Health Care." When there is adequate time to do so, the physician must first inform the patient, or the incompetent patient's surrogate, of the content of the DNR order, as well as the basis for its implementation. The physician also should be prepared to discuss appropriate alternatives, such as obtaining a second opinion (eg, consulting a bioethics committee) or arranging for transfer of care to another physician.~~If a patient (either directly or through an advance directive) or the patient's surrogate request resuscitation that the physician determines would not be medically effective, the physician should seek to resolve the conflict through a fair decision-making process, when time permits. (See Opinion 2.037, "Medical Futility in End-of-Life Care.") In hospitals and other health care organizations, medical staffs or, in their absence, medical directors should adopt and

disseminate policies regarding the form and function of DNR orders and a process for resolving conflicts.

DNR orders, as well as the basis for their implementation, should be entered by the attending physician in the patient's medical record.

DNR orders and a patient's advance refusal of CPR ~~only~~ preclude only resuscitative efforts ~~in the event of~~ after cardiopulmonary arrest and should not influence other medically appropriate interventions, such as pharmacologic circulatory support and antibiotics, unless they also are specifically refused.~~therapeutic interventions that may be appropriate for the patient.~~ (See Opinion 2.225, "Optimal Use of Orders-Not-to-Intervene and Advance Directives.") (I, IV, VIII)

Issued March 1992 based on the report "Guidelines for the Appropriate Use of Do-Not-Resuscitate Orders," adopted December 1990 (*JAMA*. 1991; 265: 1868-1871). Updated June 1994 and June 2005.

E-2.22 Do-Not-Resuscitate Orders – clean version

1 When a patient suffers cardiac or respiratory arrest, attempts should be made to resuscitate the
2 patient, except when cardiopulmonary resuscitation (CPR) is not in accord with the patient's
3 expressed desires or is clinically inappropriate.

4 All patients should be encouraged to express in advance their preferences regarding the extent of
5 treatment after cardiopulmonary arrest, especially patients at substantial risk of such an event.
6 During discussions regarding patients' preferences, physicians should include a description of the
7 procedures encompassed by CPR. Patients' preferences should be documented as early as possible
8 and should be revisited and revised as appropriate.

9 An advance directive stating a patient's refusal of CPR should be honored independently of
10 whether the patient is in or out of a hospital. When patients refuse CPR, physicians should not
11 permit their personal value judgments to obstruct implementation of the refusals.

12 If a patient lacks the ability to make or cannot communicate a decision regarding the use of CPR, a
13 surrogate decision maker may make a decision based upon the previously expressed preferences of
14 the patient. If such preferences are unknown, decisions should be made in accordance with the
15 patient's best interests. If no surrogate decision maker is available, an attending physician
16 contemplating a "Do Not Resuscitate" order (DNR) should consult another physician or a hospital
17 ethics committee, if one is available. (See Opinion 8.081, "Surrogate Decision Making.")

18 If a patient (either directly or through an advance directive) or the patient's surrogate requests
19 resuscitation that the physician determines would not be medically effective, the physician should
20 seek to resolve the conflict through a fair decision-making process, when time permits. (See
21 Opinion 2.037, "Medical Futility in End-of-Life Care.") In hospitals and other health care
22 organizations, medical staffs or, in their absence, medical directors should adopt and disseminate
23 policies regarding the form and function of DNR orders and a process for resolving conflicts.

24 DNR orders and a patient's advance refusal of CPR preclude only resuscitative efforts after
25 cardiopulmonary arrest and should not influence other medically appropriate interventions, such as
26 pharmacologic circulatory support and antibiotics, unless they also are specifically refused. (See
27 Opinion 2.225, "Optimal Use of Orders-Not-to-Intervene and Advance Directives.") (I, IV, VIII)

28 Issued March 1992 based on the report "Guidelines for the Appropriate Use of Do-Not-Resuscitate
29 Orders," adopted December 1990 (*JAMA*. 1991; 265: 1868-1871). Updated June 1994 and June
30 2005.

APPENDIX B

H-140.972 Guidelines for the Appropriate Use of Do-Not-Resuscitate Orders

In order to provide assistance to physicians in managing the care of patients for whom CPR may not be appropriate, the AMA has updated its resuscitation guidelines, as follows: (1) Efforts should be made to resuscitate patients who suffer cardiac or respiratory arrest except when circumstances indicate that CPR would be futile or not in accord with the desires or best interests of the patient.

(2) Physicians should discuss with appropriate patients the possibility of cardiopulmonary arrest. Patients at risk of cardiac or respiratory failure should be encouraged to express in advance their preferences regarding the use of CPR. These discussions should include a description of the procedures encompassed by CPR and, when possible, should occur in an outpatient setting when general treatment preferences are discussed, or as early as possible during hospitalization, when the patient is likely to be mentally alert. Early discussions that occur on a nonemergent basis help to assure the patient's active participation in the decision-making process. In addition, subsequent discussions are desirable, on a periodic basis, to allow for changes in the patient's circumstances or in available treatment alternatives that may alter the patient's preferences.

(3) If a patient is incapable of rendering a decision regarding the use of CPR, a decision may be made by a surrogate decision-maker, based upon the previously expressed preferences of the patient or, if such preferences are unknown, in accordance with the patient's best interests.

(4) The physician has an ethical obligation to honor the resuscitation preferences expressed by the patient or the patient's surrogate. Physicians should not permit their personal value judgments about quality of life to obstruct the implementation of a patient's or surrogate's preferences regarding the use of CPR. However, if, in the judgment of the treating physician, CPR would be futile, the treating physician may enter a do-not-resuscitate order into the patient's record. When there is adequate time to do so, the physician must first inform the patient, or the incompetent patient's surrogate, of the content of the DNR order, as well as the basis for its implementation. The physician also should be prepared to discuss appropriate alternatives, such as obtaining a second opinion or arranging for transfer of care to another physician.

(5) Resuscitative efforts should be considered futile if they cannot be expected either to restore cardiac or respiratory function to the patient or to achieve the expressed goals of the informed patient.

(6) DNR orders, as well as the basis for their implementation, should be entered by the attending physician in the patient's medical record.

(7) DNR orders only preclude resuscitative efforts in the event of cardiopulmonary arrest and should not influence other therapeutic interventions that may be appropriate for the patient.

(8) Hospital medical staffs should periodically review their experience with DNR orders, revise their DNR policies as appropriate, and educate physicians regarding their proper role in the decision-making process for DNR orders.

(9) The AMA will disseminate model state legislation which protects the rights of terminally and chronically ill patients to have their do-not-resuscitate wishes honored by emergency personnel in all out-of-hospital settings. (CEJA Rep. D, I-90; Res. 231, A-97; Reaffirmed: Res. 203, A-01)

APPENDIX C

	Authorization	
State	*Citation or Reference*	*Terminology*
AMA Model	*Available from AMA's Advocacy Resource Center*	Out-of-Hospital Do-Not-Resuscitate Orders
Alabama	Ala. Admin. Code rr. 420-2-1-.19, 420-2-1.28	Do Not Attempt to Resuscitate Order
Alaska	Alaska Stat. § 18.12.035 and 18.12.010-.100; Alaska Admin. Code 7 § 16.010 and 16.020	Comfort One Bracelet
Arizona	Ariz. Rev. Stat. § 36-3251	Prehospital Medical Care Directive
Arkansas	Ark. Code Ann. §§ 20-13-901 to -908; www.emsarkansas.com/dnr_regs.pdf	EMS-DNR Order
California	Cal. Prob. Code §§ 4780-4786; Calif. Code Regs. Tit. 22, § 87924; www.emsa.ca.gov/aboutemsa/dnr.asp	Pre-hospital DNR
Colorado	Colo. Rev. Stat. §§ 15-18.6-101 to -108; www.cdphe.state.co.us/op/regs/healthpromotion/101502.pdf	CPR Directive
Connecticut	Conn. Agencies Regs. §§ 19a-xxx-1 to -9	DNR Transfer Form/Bracelet
Delaware	Del. Code Ann. Tit. 16, § 9706(h)	Prehospital Advanced Care Directive
D.C.	48 D.C. Reg. 27	Comfort Care Order
Florida	Fla. Admin. Code Ann. R. 64E-2.031; Fla. Stat. Ann. § 401.45	Do Not Resuscitate Order
Georgia	Ga. Code Ann. §§ 31-39-1 to -9	DNR Order
Hawaii	Haw. Rev. Stat. § 321-229.5	Comfort Care Only DNR
Idaho	Idaho Code §§ 56-1021 to -1035; Idaho Admin. Code r. 16.02.03.400	Comfort One DNR Order
Illinois	755 Ill. Comp. Stat. § 40/65; Ill. Admin. Code tit. 77, § 515.380	DNR Order
Indiana	Ind. Code Ann. §§ 16-36-5-1 to -28	Out of Hospital DNR Declaration and Order
Iowa	Iowa Code §§ 144A.7A to .11	Out of Hospital DNR Order
Kansas	Kan. Stat. Ann. §§ 65-4941 to 4949; Kan. Admin. Regs. §109-14-1	DNR Directive (or Order)
Kentucky	Ky. Rev. Stat. Ann. § 311.623; Ky. Rev. Stat. Ann. § 311.625	EMS DNR Order
Louisiana	La. Rev. Stat. Ann. §§ 40:1299.58.1 to .10	DNR Identification Bracelet
Maine	http://www.state.me.us/dps/ems/docs/MEMS%20protocols%20(7-1-2002).PDF	EMS Comfort Care/DNR Order
Maryland	http://www.miemss.org/Protocol2004Update.pdf	EMS-DNR Order
Massachusetts	http://www.mass.gov/dph/oems/comfort/ccprot2a.htm	Comfort Care DNR Order
Michigan	Mich. Comp. Laws. Ann. §§ 333.1051 to .1067	DNR Order
Minnesota	NONE	
Mississippi	NONE	
Missouri	Mo. Code Regs. Ann. Tit. 19, §§ 30-40.303	Out of Hospital DNR Request
Montana	Mont. Code Ann. §§ 50-10-101 to -107; Mont. Admin. R. §§ 37.10.101, 37.10.104	Comfort One Form
Nebraska	NONE	
Nevada	Nev. Rev. Stat. §§ 450B.410 to .590; Nev. Admin. Code §§ 450B.950, 450B.955, 450B.960	DNR Identification
New Hampshire	N.H. Rev. Stat. Ann. § 153-A:5; N.H. Rev. Stat. Ann. § 137-H:1	DNR Form or Bracelet
New Jersey	N.J. Stat. Ann. § 26:2H-68; N.J. Admin. Code tit. 10, § 10.8-2.2	Out-of-Hospital DNR Order
New Mexico	N.M. Admin. Code tit. 7, § 27.6.8	EMS-DNR Order
New York	N.Y. Pub. Health Law §§ 2960-2977	Non-hospital DNR Order
North Carolina	N.C. Gen. Stat. § 90-21.17; N.C. Gen. Stat. § 130A-465	DNR Form
North Dakota	NONE	
Ohio	Ohio Rev. Code Ann. §§ 2133.21 to .26; Ohio Admin. Code § 3701-62-01 to -14	DNR Order
Oklahoma	Okla. Stat. tit. 63 §§ 3131.1 to .14	DNR Consent Form
Oregon	Or. Admin. R. 847-035-0030	POLST Form
Pennsylvania	Pa. Cons. Stat. Ann. Tit. 20, §§ 54A01-54A13; 28 Pa. Code §§ 1051.1 and .101	Out-of-hospital nonresuscitation
Rhode Island	R.I. Gen. Laws. §§ 23-4.11-14	Comfort One Order
South Carolina	S.C. Code Ann. §§ 44-78-10 to -65	EMS-DNR Order
South Dakota	NONE	
Tennessee	Tenn. Code Ann. §§ 68-140-601 to -604	EMS-DNR Form
Texas	Tex. Health & Safety Code Ann. §§ 166.081 to .101; 25 Tex. Admin. Code § 157.25	Out-of-hospital DNR Order
Utah	Utah Code Ann. § 75-2-1105.5	EMS-DNR Directive
Vermont	NONE	
Virginia	Va. Code Ann. § 54.1-2987.1, -2988, -2989, -2982; 12 Va. Admin. Code §§ 5-66-10 to -80	Durable DNR Order
Washington	Wash. Rev. Code Ann. § 43.70.480	EMS-No CPR Directive
West Virginia	W. Va. Code §§ 16-30C-1 to -16	Do Not Resuscitate Card
Wisconsin	Wis. Stat. Ann. §§ 154.17 to .29	DNR Order
Wyoming	Wyo. Stat. §§ 35-22-201 to -208	CPR Directive/Comfort One

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CEJA Report D – I-90
Guidelines for the Appropriate Use of Do-Not-Resuscitate Orders

OVERVIEW

Cardiopulmonary resuscitation (CPR) is routinely performed on hospitalized patients who suffer cardiac or respiratory arrest. Consent to CPR is presumed since the patient is incapable at the moment of arrest of communicating his or her treatment preference and failure to act immediately is certain to result in the patient's death. Two exceptions to the presumption favoring CPR have been recognized, however. First, a patient may express in advance his or her preference that CPR be withheld. If the patient is incapable of expressing a preference, the decision to forgo resuscitation may be made by the patient's family or other surrogate decision maker. Second, CPR may be withheld if, in the judgment of the treating physician, an attempt to resuscitate the patient would be futile.

In December 1987, the American Medical Association's Council on Ethical and Judicial Affairs issued a series of guidelines to assist hospital medical staffs in formulating appropriate resuscitation policies. The Council's position on the appropriate use of CPR and DNR orders is updated in this report.

BACKGROUND

Closed-chest cardiac massage was first described in 1960 as a means of restoring circulation in victims of cardiac arrest.[1] Kouwenhoven and his colleagues successfully used external chest compressions, both alone and in conjunction with artificial ventilation, to resuscitate 20 patients in whom cardiac arrest had occurred. In the years immediately following the development of this life-sustaining technique, CPR was administered primarily to otherwise healthy individuals who experienced cardiac or respiratory arrest during surgery or as a result of near-drowning.[2] Today, however, it is widely recognized that CPR can be attempted on any individual who experiences a cessation of cardiac or respiratory function. Since such events are inevitable as part of the dying process, CPR potentially can be used on every individual prior to death.

In health care settings, CPR is viewed as an emergency procedure that is routinely administered to patients who experience cardiopulmonary arrest. Most health care institutions employ specialized teams of trained personnel to promptly administer CPR when an arrest is detected in a patient. As with other emergency procedures, consent to CPR is presumed since the patient is incapable at the moment of arrest of communicating his or her treatment preference and failure to render immediate care is certain to result in the patient's death.

The frequent performance of CPR on patients who are terminally ill or who have little chance of surviving for more than a brief period of time has prompted concern that resuscitation efforts may be employed too broadly.

INCIDENCE AND SUCCESS RATES FOR CPR

Studies suggest that cardiopulmonary resuscitation is attempted in approximately one-third of the 2 million patient deaths that occur in U.S. hospitals each year.[3] The proportion of these attempts that are considered successful ultimately depends upon the perceived objectives of CPR. For example, success rates will vary significantly depending upon whether the goal of CPR is viewed as the restoration of cardiopulmonary function or, alternatively, as discharge of the patient from the hospital.

Of the patients who receive CPR, one-third survive the resuscitation effort, and one-third of these individuals, in turn, survive until discharge from the hospital.[3] A review of 13,266 cases reported in the

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medical literature between 1960 and 1980 revealed that 39% of hospitalized patients who received CPR initially survived the procedure, and 17% survived until they were discharged from the hospital.[4] A similar review, conducted for 12,961 cases in which CPR was attempted, found that 38.5% of the patients survived at least 24 hours and 14.6% of the patients survived until discharge.[5] Longer periods of survival have not been evaluated as extensively. However, one study found that, of patients who survived until discharge from the hospital, 80% were still alive six months later.[6]

The outcome of CPR is dependent upon the nature and severity of the patient's underlying illness prior to cardiopulmonary arrest. In a study of 294 patients resuscitated in a Boston hospital, none of the patients with metastatic cancer or pneumonia survived until discharge from the hospital.[7] Among patients with renal failure, only 2% survived until discharge. A study of 329 veterans who received CPR produced similar results.[8] Of the 63 patients with metastatic cancer, 37% survived initial resuscitation; none survived until discharge. In addition, of 73 patients with a diagnosis of sepsis, 45% survived the initial resuscitation effort, but only one of the 73 patients survived until discharge from the hospital.

Patients who survive initial resuscitation but die before discharge from the hospital almost always spend the days or weeks immediately preceding their death in an intensive care unit, generally as the recipients of invasive therapies and monitoring techniques.[9] One study found that 78% of the patients admitted to an ICU after cardiac arrest received invasive interventions.[9] In addition, at least one study has suggested that approximately 11 % of patients who survive initial resuscitation will undergo CPR at least one other time during their hospital stay.[4]

However, the recipients of CPR who survive past the time of discharge generally do so without severe impairment. One study found that 93% of such patients were alert and oriented upon leaving the hospital.[7] Gross impairment of mental status was reported in only one of 41 survivors. All of the patients in the study, however, reported a decrease in functional status following CPR. For most, this change in activity was due to fear of another cardiac arrest, rather than underlying pathology.

Despite the widespread use of CPR on hospitalized patients, two exceptions to the presumption favoring CPR have been recognized. First, patient preferences regarding the use of CPR may be expressed in advance of cardiopulmonary arrest. Second, resuscitation should not be attempted if, in the judgment of the treating physician, the procedure would be futile.

PATIENT PREFERENCES AS A BASIS FOR WITHHOLDING CPR

It is widely acknowledged that patients have the right to refuse medical treatment, even when such a refusal is likely to result in serious injury or death. A patient, therefore, may express in advance his or her preference that CPR be withheld in the event of cardiac arrest. Such a refusal may serve as the basis for a do-not-resuscitate order. A decision to withhold CPR from an incompetent patient can be made by a surrogate decision maker, based upon the previously expressed preferences of the patient or, if such preferences are unknown, in accordance with the patient's best interests.

DNR orders, at least in theory, facilitate autonomous action by permitting patients to express their preferences regarding the use of life-prolonging treatment at a time when they are capable of making informed decisions. Physicians and others generally agree that patients should participate in decisions regarding the use of resuscitation. One study found that 93% of the 151 physicians surveyed believed that patients should be involved in making decisions about CPR.[6] However, only 10% of these physicians actually discussed resuscitation preferences with their patients prior to cardiac arrest.[6] These findings are not inconsistent with data obtained from similar studies. Research consistently has shown that only 20% of hospitalized patients with do-not-resuscitate orders discussed their resuscitation preferences with a physician prior to implementation of the order.[6,10-11]

These data are cause for concern, given the frequent use of DNR orders. A study of 244 inpatient deaths at a community teaching hospital revealed that 68% of the patients who died had a do-not-resuscitate order at the time of their death.[12] Similar studies have found that up to 70% of patients who die in a hospital have a DNR order recorded on their chart,[13-15] and that 3% to 4% of all inpatients have such an order at some point in time during their hospital stay.[13,16-17]

In practice, physicians and patients alike may find it difficult to engage in discussions about the possibility of patient death, particularly in the early stages of hospitalization. As the need for such a discussion becomes evident, the patient no longer may be capable of participating in the decision making process. This dilemma is illustrated by the results of a study of 389 patients who were the recipients of do-not-resuscitate orders. The study found that 76% of the 389 patients were mentally impaired at the time the DNR order was discussed, and therefore were incapable of indicating a treatment preference. However, only 11% of these patients were mentally impaired at the time of admission to the hospital.[10]

Even when patients are capable of making resuscitation decisions, studies have shown that they may not be actively involved in discussions about DNR orders. One such study found, for example, that 13 of 72 decisions not to employ resuscitation were discussed with the family, rather than the patient, despite the physician's perception that the patient was capable of making informed decisions.[18] Similar studies have produced conflicting evidence, however, suggesting that resuscitation decisions are discussed with members of the patient's family in as few as 33% or as many as 86% of cases, depending upon the study.[6,10-11]

Despite these findings, evidence suggests that most patients wish to discuss their preferences about resuscitation with their physician. Sixty-eight percent of the respondents in one survey indicated a desire to discuss the use of life-sustaining treatment with their physician, but only 6% had been afforded an opportunity to do so.[19] In a similar study, 16% of the 200 patients interviewed had discussed the use of life-prolonging medical treatment with their physicians. An additional 47% wished to participate in such discussions, but had not actually done so.[20] Interestingly, 37% of the 200 patients who participated in this survey did not wish to discuss with physicians the use of life prolonging measures. Clearly, patients as well as physicians may be reluctant to engage in discussions about the possibility of death or the likelihood of achieving a poor medical outcome.

The lack of patient participation in decisions about DNR orders is disturbing. An absence of patient involvement may result in mistaken impressions about the medical procedures employed during resuscitation efforts and the probable outcome of CPR, or may result in the implementation of decisions that are not in accord with the patient's values and preferences. Studies suggest that decisions made by families and physicians often fail to correspond with the choices that would have been made by the patient. One such study attempted to compare the resuscitation preferences of 25 patients who survived CPR with the decisions that their physicians thought they were most likely to make. Eight of these patients would have refused the use of resuscitation and did not wish to undergo CPR in the future. However, only 1 of 16 physicians accurately perceived their patients' wishes.[6] A similar study found that physicians are no more accurate in predicting the resuscitation preferences of patients than would be expected by chance alone.[21] In addition, evidence suggests that physicians may tend to perceive a patient's quality of life more negatively than does the patient.[22]

FUTILITY AS A BASIS FOR WITHHOLDING CPR

The second exception to the presumption favoring CPR is applicable to cases in which an attempt to resuscitate the patient would be futile in the judgment of the treating physician. A physician is not ethically obligated to make a specific diagnostic or therapeutic procedure available to a patient, even upon

specific request, if the use of such a procedure would be futile.[23-25] However, judgments of futility are subject to a wide variety of interpretations. The potential impact of this variability is profound, given recent evidence that perhaps as many as 88% of all DNR orders are based in part upon the physician's judgment that resuscitation of the patient would be futile.[26]

Evidence suggests that terms such as "futility", when used by physicians to express the probability of achieving a specified outcome, have a variety of potential meanings that are understood differently by different physicians. The extent of such variability has been demonstrated by studies that examine how health care professionals, in comparison to colleagues and lay- people, quantify verbal modifiers used to express probabilities or frequencies {e.g., rare, atypical, common, infrequent, etc.). In one of these studies, 22 terms were converted by study participants into numerical percentages. For example, participants described a "rare" event as one that is likely to occur in less than 10% of cases. The findings from the study revealed that the interpretations attached to 17 of the 22 expressions varied too widely among individuals to assure that the intended meaning was effectively communicated.[27]

Like these verbal expressions of frequency, the term "futility" does not express a discrete and identifiable quantity, but rather encompasses a range of probabilities and is likely to be interpreted in different ways by different physicians.[29(p.1282)] It has been noted, for example, that some physicians describe a medical treatment as futile only if the possibility of success approaches 0%, whereas others associate futility with success rates as high as 13%.[25] The meaning intended by the term "futility" therefore may vary among physicians when the expression is used to indicate the probability that a specified outcome will occur.

Determinations of futility also may vary from one physician to another based upon the perceived objectives of medical treatment and the criteria that are used to evaluate outcome. For example, in a purely physiological sense, the objective of CPR is to restore cardiac and respiratory function to patients who experience cardiopulmonary arrest.[28] CPR, under such a scenario, is considered a success if the patient survives the initial resuscitation effort. Conversely, an attempt to resuscitate the patient is considered futile in the absence of a reasonable potential of restoring these vital functions.

The successful application of CPR also has been gauged by criteria that relate to the length of patient survival. Such criteria include, for example, survival for at least 24 hours following initial resuscitation, survival until discharge from the hospital, and survival for some other timeframe (typically one month to a year after cardiac arrest).[9] Using this definition of successful treatment, a judgment of futility is warranted if CPR is unlikely to prolong the life of the patient for the period of time set forth in the criteria. The presumption is that survival for a shorter time would not be of value to the patient.

This approach to defining futility replaces a medical assessment (i.e., whether a reasonable potential exists for restoring cardiopulmonary function to the patient) with a non-medical value judgment that is made by the treating physician (i.e., whether one day, one week, or one month of survival - perhaps in a severely debilitated state - is of value to the patient). This interpretation of futility is inconsistent with the principle of patient autonomy, which requires that patients be permitted to choose from among available treatment alternatives that are appropriate for their condition, particularly when such choices are likely to be influenced by personal values and priorities. Similar obstacles to patient autonomy are encountered when the success of CPR is judged by its ability to benefit the patient in a manner that is viewed as appropriate by the treating physician or by others. Judgments of futility, in such circumstances, are rendered if the specific benefits desired for the patient are not likely to be achieved. Examples of some benefits that have been described as appropriate indications for CPR are a "meaningful existence" after resuscitation or an acceptable quality of life for the patient. These determinations, which attempt to define the types of treatment and the qualities of existence that constitute a benefit for the patient, undermine patient autonomy because they are based on the value judgments of someone other than the patient.

These judgments of futility are appropriate only if the patient is the one to determine what is or is not of benefit, in keeping with his or her personal values and priorities. Patients, therefore, should be encouraged to discuss with their physicians the expected benefits and objectives of medical treatment and to engage in an ongoing dialogue regarding the potential for achieving these goals. Once the objectives of the patient have been clearly expressed, the physician can determine and convey to the patient whether cardiopulmonary resuscitation or other medical treatments are likely to be effective in helping to achieve those goals. Resuscitative efforts, under such circumstances, would be considered futile if they could not be expected to achieve the goals expressed by the informed patient. This definition of futility not only respects the autonomy and value judgments of individual patients, but also allows for the professional judgment and guidance of physicians who render care to the patient.

These various interpretations of futility have important implications for the use of do-not-resuscitate orders. In the unusual circumstance when efforts to resuscitate a patient are judged by the treating physician to be futile, even if previously requested by the patient, CPR may be withheld. In such circumstances, when there is adequate time to do so, the physician should inform the patient, or the incompetent patient's surrogate, of the content of .the DNR order, as well as the basis for its implementation, prior to entering a DNR order into the record.[30(p.1296)] The physician also should be prepared to discuss appropriate alternatives, such as obtaining a second opinion or arranging for transfer of care to another physician.

GUIDELINES FOR THE APPROPRIATE USE OF DNR ORDERS

In order to provide assistance to physicians in managing the care of patients for whom CPR may not be appropriate, the Council on Ethical and Judicial Affairs has updated its resuscitation guidelines, as follows:

> Efforts should be made to resuscitate patients who suffer cardiac or respiratory arrest except when circumstances indicate that CPR would be futile or not in accord with the desires or best interests of the patient.
>
> Physicians should discuss with appropriate patients the possibility of cariopulmonary arrest. Patients at risk of cardiac or respiratory failure should be encouraged to express in advance their preferences regarding the use of CPR. These discussions should include a description of the procedures encompassed by CPR and, when possible, should occur in an outpatient setting when general treatment preferences are discussed, or as early as possible during hospitalization, when the patient is likely to be mentally alert. Early discussions that occur on a nonemergent basis help to assure the patient's active participation in the decision making process. In addition, subsequent discussions are desirable, on a periodic basis, to allow for changes in the patient's circumstances or in available treatment alternatives that may alter the patient's preferences.
>
> If a patient is incapable of rendering a decision regarding the use of CPR, a decision may be made by a surrogate decision maker, based upon the previously expressed preferences of the patient or, if such preferences are unknown, in accordance with the patient's best interests.
>
> The physician has an ethical obligation to honor the resuscitation preferences expressed by the patient or the patient's surrogate. Physicians should not permit their personal value judgments about quality of life to obstruct the implementation of a patient's or surrogate's preferences regarding the use of CPR. However, if, in the judgment of the treating physician, such intervention CPR would be futile, the treating physician may enter a do-not-resuscitate order into the patient's record. When there is adequate time to do so, the physician must first inform the patient, or the incompetent patient's surrogate, of the content of the DNR order, as well as the basis for its implementation. The physician

also should be prepared to discuss appropriate alternatives, such as obtaining a second opinion or al-ranging for transfer of care to another physician.

Resuscitative efforts should be considered futile if they cannot be expected either to restore cardiac or respiratory function to the patient or to achieve the expressed goals of the informed patient.

Do-not-resuscitate orders, as well as the basis for their implementation, should be entered by the attending physician in the patient's medical record.

DNR orders only preclude resuscitative efforts in the event of cardiopulmonary arrest and should not influence other therapeutic interventions that may be appropriate for the patient.

Hospital medical staffs should periodically review their experience with do-not-resuscitate orders, revise their DNR policies as appropriate, and educate physicians regarding their proper role in the decision making process for DNR orders.

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