

Appropriate use of DNR orders: A practical approach

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ABSTRACT

Too often, physicians, patients, and families make end-of-life care decisions despite poor physician-patient communication and misunderstanding by the patient and family about the effectiveness of cardiopulmonary resuscitation. We describe an approach to resolving conflict and reaching consensus on end-of-life care. This approach supports physician judgment to withhold futile treatment within the constraints of law and patient autonomy.

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DECISIONS ABOUT END-OF-LIFE care too often are made amid conflict and misunderstanding. The burden of informing patients about the benefits and drawbacks of life-supporting therapy usually falls on the physician, but unfortunately, physician-patient communication about do-not-resuscitate (DNR) issues is generally poor. Most patients and families are not well prepared to make informed decisions. This brief article outlines a procedure and rationale for resolving conflict and reaching consensus in these situations.

SURVIVAL AFTER CPR IS LOWER THAN PATIENTS THINK

In general, patients and their surrogates overestimate the odds of surviving cardiopulmonary resuscitation (CPR), and they make

decisions about DNR preference on the basis of this false optimism.

In reality, the prognosis is rather dismal. In one series of 340 patients who underwent CPR in the hospital,¹ only 30% survived 24 hours, 13% survived 1 month, and 6% survived 6 months. The longer the duration of CPR, the lower the chance of survival. No patient survived longer than 6 weeks when the duration of CPR exceeded 15 minutes. In contrast, the mean duration of CPR in those who survived longer than 1 year was 8 minutes. Patients over age 70 and those with comorbid conditions were less likely to survive to discharge after CPR compared with their counterparts who were younger or had no comorbid conditions. Patients with multiple comorbid conditions in whom CPR was attempted had only a 5% chance of surviving to discharge.

When patients know the facts, they are less likely to want CPR. In one study,² 41% of patients with acute illness and 11% with chronic illness initially said they wanted CPR, but after learning the probability of survival, only 22% of acutely ill and 5% of chronically ill patients continued to indicate this preference. In the Study to Understand Prognoses and Preferences for Outcomes/Risks of Treatment (SUPPORT),³ nearly half of hospitalized patients surveyed indicated they would not want CPR if their probability of survival at 2 months was 25% or less.

PHYSICIANS, PATIENTS DO NOT COMMUNICATE WELL ABOUT DNR

Physicians and their patients do not communicate well about DNR options and wishes. In the SUPPORT study,³ nearly one third of seriously ill hospitalized patients said they would

refuse CPR, but only 47% of their physicians were aware of these preferences. Of 1,150 patients who died during their index hospitalization, 79% died with a DNR order, but nearly half (46%) of the DNR orders were written within 2 days of death, while the median length of stay in the intensive care unit was 8 days. Even with a specially trained nurse on hand to facilitate communication between the patient, family, and physician about DNR orders, communication did not improve between the physician and patient and neither did physician knowledge of patient preferences.

■ WIDE VARIATIONS IN WITHHOLDING FUTILE THERAPY

In practice, physicians often withhold life support and CPR if these measures would be futile, but how often they do so varies widely from hospital to hospital. In a national survey of 6,303 deaths in 131 intensive care units,⁴ CPR was performed in only 26% of cases, but the percentage ranged from 4% to 79% at different hospitals. Life support was withheld in 14% of cases and withdrawn in 36%.

The wide variation observed in this survey points to a lack of recognized standards of practice for making decisions about end-of-life care. Disturbingly, only 3% to 4% of patients were able to participate in decisions about their end-of-life care because most DNR orders were written at the end of life, with a surrogate making the final decision.⁴

These data underscore the need to give patients accurate information about the likelihood of surviving CPR in light of their underlying disease state, and also the need to communicate better about DNR orders.

■ A PROCEDURAL APPROACH TO DNR ORDERS

Delays in discussing CPR are understandable if CPR is approached as a strictly medical decision to be made *in its own terms*. We think, however, that CPR should be discussed as part of a complete treatment plan in light of the patient's or family's goals or outcome expectations. In this context, disclosure of risks and benefits associated with CPR and other inter-

ventions can occur in a more natural fashion without triggering abandonment anxiety. Structuring the discussion in terms of the treatment plan that best comports with patient values and preferences can provide a more neutral way to address CPR. Whenever the discussion of CPR is uncoupled from patient values or outcomes, it is infused with far more mystery than the data actually suggest.

Discussion of a DNR order is sometimes delayed, because it is seen as a marker for terminating life support. The presumed logic is that if the patient codes with a DNR in place, then the more difficult issue of withdrawing life support need not be faced. The thinking seems to be that while the patient is still under active treatment, there is no need to consider a DNR order.

While we understand this thinking, we argue that DNR orders are appropriate for any patient who does not stand to benefit from CPR. Some of these patients are appropriate candidates for other aggressive measures, so that withdrawal of these effective life-supportive interventions is not appropriate. Whenever it is clear that the occurrence of a cardiac or respiratory arrest would result in an outcome that is not acceptable, the question of DNR should be addressed. Decisions about CPR should reflect the published literature on CPR outcome.

What does 'do everything' mean?

How should one proceed if, despite disclosure about the risks and benefits of CPR, the patient or, more typically, the family insists that "everything should be done"?

First, a statement such as "do everything" should not be taken literally. "Do everything" is inherently ambiguous and its meaning must be specified through careful communication with the patient or family. Requests that everything should be done stand in need of clarification. The statement "do everything" can mean:

- "I am afraid. Don't abandon me, doctor."
- "There is no limit to our commitment to the patient."
- "We want the best care possible."

Such requests are often the expression of hope for a good outcome, but the expression of

**A DNR decision
is a cooperative
effort to be
undertaken as
early as
possible**



hope is not a justified demand for a futile intervention. The request to do everything can also be a request that the physician do whatever is reasonable and in accord with professional judgment. Sometimes, the request, articulated as a demand to “DO EVERYTHING,” reflects family frustration or anger with care providers. Other times, the statement means, “We didn’t understand what you are saying about the patient’s condition and prognosis.”

For these reasons, one must be careful in seeing the request that everything be done as a refusal to consider a reasonable limitation of treatment. Families seldom intend that “do everything” be understood to mean “everything.” They hardly ever intend to authorize you to brutalize the patient, which is what inappropriate CPR involves. The physician should assess whether the request to “do everything” is a sign that the family is having difficulty in grasping the full implications of the patient’s condition.

When is treatment futile?

When it is clear that CPR would not achieve its clinical objective, it is futile. There is no ethical obligation to provide futile treatment. Judgments of futility, however, are fraught with controversy and should be made cautiously. The American Medical Association DNR guidelines⁵ note that physicians can refuse to provide futile treatment, but these guidelines also counsel that the definition of futility is problematic.

The guidelines further advise against the physician making nonmedical value judgments that are inconsistent with the patient’s own values.⁵ Such advice limits physician discretion. A more severe restriction is provided by the Society for Critical Care Medicine (SCCM), which offers a strict definition of futility: namely, not achieving a physiologic goal.⁶ So defined, futility is seldom to be found, but when it does occur it is typically not disputed.

When disagreements do arise, SCCM guidelines recommend a procedural approach: namely, an approach that would enlarge communication to resolve the conflict. Access to ethics consultation, ethics committees, pastoral care, or social work can assist the physi-

cian to constructively resolve disagreements over code status. Fortunately, the most frequent types of conflict are not fundamentally conflicts of value, but rest on misperception and poor communication. These problems can be effectively addressed if they are identified early.

How to help the family make DNR decisions

One common communication problem that plays into a family’s misperceptions about CPR arises when the family is asked if they want a DNR order written. If families are not first educated about the risks and benefits of CPR in response to an arrest *given the patient’s current clinical condition*, they are prone to make choices based on unrealistic expectations about CPR that reflect their own personal values and beliefs rather than those of the patient. A better approach is to adopt a simple procedure for coming to a decision about DNR.

First, educate the decision-maker about the risks and benefits of CPR for the patient. Such education will involve providing information about the patient’s current medical circumstances and the reasonable benefits of CPR.

Second, make a clear recommendation about CPR and make certain that the health care team understands and supports this recommendation. Too often, a recommendation is not clearly communicated to the family, and they struggle with having to bear the weight of the decision alone. Even when the family experiences no difficulty in making the decision, discord among the health care team can undermine the confidence of an otherwise sound decision.

Third, educate the decision-maker to make decisions based on the patient’s known wishes or the patient’s values and beliefs. Discussing these values can help to ease the burden on the surrogate decision-maker. Because any surrogate decision is not fully the surrogate’s, but rather reflects the patient’s own values and beliefs (if known) and incorporates the physician’s professional assessment of the clinical reality, the burden of decision-making is lessened.

Fourth, use of ethics consultation, pastoral care, or social work helps the decision-

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maker focus on patient wishes while providing needed validation of the decision. Ideally, these services should be provided to support and assist the surrogate decision-maker before a real conflict arises.

■ WHY AREN'T DNR ORDERS WRITTEN?

The data reviewed in this article suggest that in some clinical situations, there should be little or no conflict regarding CPR. If so, why are DNR orders not written more frequently?

Sometimes, DNR orders are written late in the course of critical illness or are not written at all, because of physician or patient/family commitment to aggressive life-saving interventions without consideration of outcome. Such commitments have been involved in many of the classic cases of end-of-life decision-making reaching the courts. Patient and family commitment to aggressive treatment that is based on religious commitments requires sensitive accommodation, but in our experience such nonnegotiable commitments are rare.

It is understandable that the dynamic character of many clinical circumstances makes timing the discussion of CPR difficult. However, the data suggest that overestimating the benefits of CPR is commonplace unless families are properly educated. Proper education requires time to process cognitively and emotionally the reality of CPR survival. Family resistance to discussing code status is magnified when the decision is placed entirely in the family's hands and when there is a sense of urgency about the need for DNR. As suggested earlier, education about the risks and benefits of CPR should be accompanied by a professional recommendation and the provision of family support services in such a way that the family can process the information.

Since cardiac and respiratory arrest are common pathways to death, the potential need for CPR will be present in a large number of seriously ill patients. For this reason, we urge that early discussion of CPR as outlined above should become a routine component of the care of seriously ill patients. DNR orders, like any medical orders, require a professional judgment about the risks and benefits for the

particular patient. The appropriate use of DNR orders will always require careful attention to the details of the individual case. ■

■ REFERENCES

1. Saklayen M, Liss H, Markert R. In-hospital cardiopulmonary resuscitation: survival in one hospital and literature review. *Medicine* 1995; 74:163-175.
2. Murphy DJ, Burrows D, Santilli S, et al. The influence of the probability of survival on patients' preferences regarding cardiopulmonary resuscitation. *N Engl J Med* 1994; 330:545-549.
3. The SUPPORT principal investigators. A controlled trial to improve care for seriously ill hospitalized patients: the Study to Understand Prognoses and Preferences for Outcomes and Risks of Treatments (SUPPORT). *JAMA* 1995; 274:1591-1598.
4. Prendergast TJ, Claessens MT, Luce JM. A national survey of end-of-life care for critically ill patients. *Am J Respir Crit Care Med* 1998; 158:1163-1167.
5. American Medical Association Council on Ethical and Judicial Affairs. Guidelines for the appropriate use of do-not-resuscitate orders. *JAMA* 1991; 265:1868-1871.
6. Society of Critical Care Medicine Ethics Committee. 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.

■ ADDITIONAL READING

- Casarett D, Siegler M. Unilateral do-not-attempt-resuscitation orders and ethics consultation: a case series. *Crit Care Med* 1999; 27:1116-1120.
- De Vita MA. Bureaucracy and end-of-life decisions: do not resuscitate. *J Intensive Care Med* 1996; 11:343.
- Kyff J, Puri VK, Raheja R, Ireland T. Cardiopulmonary resuscitation in hospitalized patients: continuing problems of decision-making. *Crit Care Med* 1987; 15:41-43.
- Leonard CT, Doyle RL, Raffin TA. Do-not-resuscitate orders in the face of patient and family opposition. *Crit Care Med* 1999; 27:1045-1047.
- 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.
- Smedira NG, Evans BH, Grais LS, et al. Withholding and withdrawal of life support from the critically ill. *N Engl J Med* 1990; 322:309-315.

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