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POLICY PERSPECTIVES

Should Residents Be Allowed to Enter DNR Orders?

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The National Center for Ethics is currently undertaking a comprehensive review and revision of VHA's national policy on Do Not Resuscitate (DNR) orders.[1] Among the elements of the current DNR policy that are being scrutinized is the interpretation that only attending physicians (and not residents) are authorized to enter DNR orders.

Three arguments support this restriction: (1) residents' prognostic skills may not be sufficient to accurately predict the patient's prognosis with or without cardiopulmonary resuscitation; (2) residents may lack the requisite communication skills to discuss this sensitive topic with patients; and (3) because this is a potentially life-or-death decision, the attending physician should be personally involved. How compelling is each of these arguments?

Prognostic skills

Physicians' prognostic skills are critical to the DNR process because prognosis heavily influences patients' decisions about resuscitation. Unfortunately, evidence shows that physicians' prognostic skills are often lacking.[2-4] For example, Christakis and Lamont[4] found that in a study of 343 physicians who predicted the prognoses of 468 terminally ill patients, only 20% (92/468) of prognoses were "accurate," when an accurate prediction was defined as between 67% and 133% of the patient's actual survival time. Even when the definition of "accurate" was widened to include between 50% and 200% of the patient's actual survival time, only 34% (159/468) of prognoses fell within the "accurate" range.

Given that physicians are often not very good at prognostication, how do residents' prognostic skills compare with those of attending physicians? In the few, small studies in which prognostic skills of residents and attending physicians have been compared directly, residents' prognostic skills were found to be slightly worse. [2,3] Further evidence indicates that prognostic accuracy continues to increase with years of experience, even after residency training.[4] These data confirm that prognostication is a learned skill, and that prognostic accuracy increases with training and experience.

Communication skills

In addition to prognostic skills, the DNR process also requires effective communication skills. Just as physicians are not always good at predicting prognosis, neither are they always good at communicating with patients about their preferences for end-of-life care.[5,6] How do attending physicians compare

with residents in terms of their ability to discuss resuscitation with patients and families? Although there are no studies that directly compare residents and attending physicians, studies that focus solely on residents do suggest that the quality of residents' discussions of resuscitation is generally poor.[6,7] One study, for example, found that residents often fail to provide the information patients need to make informed choices (e.g., by neglecting to mention the likelihood of survival after resuscitation) and sometimes unwittingly discourage patients from raising concerns and fully discussing treatment preferences (e.g., by dominating the discussion).[7]

Although residents may *in theory* understand how to discuss DNR orders, they may *in practice* lack the skills required.[8] Inadequate physician-patient communication about end-of-life treatment can be partially attributed to training programs that do not emphasize the development of communication skills.[9, 10] In one study, a third of residents had never been observed or critiqued on their ability to discuss CPR and 71% had been observed only once or twice.[8]

Personal involvement of attending physicians

VHA policy on resident supervision[9] is consistent with the Accreditation Council for Graduate Medical Education (ACGME) requirement that "residents must be supervised by teaching staff in such a way that the residents assume progressively increasing responsibility according to the level of their education, ability, and experience."[9] It is "the personal responsibility of the staff practitioner" to determine which activities a particular resident is permitted to perform. In making this determination "the overriding consideration must be the safe and effective care of the patient."[11]

Certainly, residents must be given the opportunity to develop the prognostic and communication skills that are essential to the DNR process. However, like other procedures that require a high level of expertise in their performance, the DNR process should be completed only by individuals who demonstrate the required knowledge, skill, and judgment and under the proper level of supervision. Because inaccurate prognoses and ineffective DNR discussions may result in unwanted attempts at resuscitation or even death due to failure to attempt resuscitation, close supervision of residents is essential.[8]

Policy alternatives

While the current policy that prohibits residents from entering DNR orders is well intentioned, it is not without problems. For instance, because attending physicians are not always present in the hospital 24 hours per day, 7 days per week, residents may be the only physicians available to enter DNR orders on nights and weekends, and it is difficult to justify requiring an attending to come in from home for the sole purpose of entering a DNR order. Therefore, as a practical matter, the current policy may have the unintended result of delaying the entry of DNR orders for several hours or perhaps even a day. Such a delay

could become ethically problematic if, for example, a patient who does not wish to be resuscitated has an arrest before a DNR order is entered.

What policy would best balance the need to assure that the DNR process is performed only by (or under the supervision of) physicians with appropriate knowledge and skill against the need to assure that DNR orders can be entered in a timely fashion? Neither permitting residents to complete the DNR process without any supervision nor prohibiting them from participating in the DNR process altogether seems satisfactory. One possible solution would be to allow residents to enter DNR orders if and only if they have been evaluated on their ability to complete the DNR process and have demonstrated the necessary skills. This evaluation could be performed, for example, on an *ad hoc* basis by the responsible attending physician, or on a more systematic basis as a formal requirement of the residency training program. A second possibility would be to permit residents to enter DNR orders, but only after discussion with, and with the specific concurrence of, the responsible attending. Concurrence by the attending could, for example, be given by telephone and witnessed by a member of the nursing staff, or entered from a home computer. A third alternative would be to allow residents to enter non-renewable *time-limited* DNR orders that automatically expire after a specific time unless reentered by the attending physician.

These and other potential solutions will be considered in the coming months as VHA's DNR policy is reviewed and revised. If you wish to submit comments on any aspect of the current DNR policy, please send them via e-mail to vhaethics@med.va.gov.

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