

## Let's get real: It's not DNR, it's DNAR

by  
Scott Sattler, MD  
June 18, 2010

For decades our profession has used Do Not Resuscitate (DNR) as the definitive order in the management of patients for whom aggressive end-of-life medical intervention is deemed inappropriate. Let's get real. The use of this phrase is delusional. The alternative to 'Do Not Resuscitate' is to 'Resuscitate'. Resuscitate comes from the Latin *resuscitare*- to 'raise again'. It means to revive someone from unconsciousness or apparent death and make them active and vigorous once again. It means to revivify, to revitalize. Who wouldn't want their moribund relative or patient to revive and become vigorous once again if they were dying? And who among us could refuse their own resuscitation if presented with the choice between "If things go badly, do you want revived or don't you?" Put that way we would all say, "I know I could die during this operation.... during this chemotherapy.... during this stretch on the ventilator.... but if I do, resuscitate me! And be sure you put that order in my chart, doctor."

But the truth is that we haven't the faintest idea whether or not, in any given instance, we can resuscitate anyone. We simply can never know whether our resuscitative efforts will be successful. Yet we continue to offer the option of accomplished resuscitation or rejection of same to our most fragile patients, promulgating the illusion that restoration to active life is a given, if they but choose to let us ply our trade. "Would you like to be resuscitated, Mr. Jones, if your heart or lungs stop working after we do your pneumonectomy?" How specious.

The question we need to be asking patients, their families and ourselves is whether or not we should attempt to perform resuscitative efforts should vital functions give way. The nursing staff's question is not, in essence, "Do you wish to institute resuscitation, doctor, if your patient is found pulseless and apneic, or is this a DNR?" Their real question is "Do you wish us to attempt resuscitation, doctor, if your patient becomes moribund, or are we to pursue comfort care instead?"

So let's do it. Let us begin replacing the phrase DNR with the more accurate phrase DNAR across the board. This will be especially helpful when discussing end-of-life care with patients and their families, for as you have probably noticed, the use of the DNR phrase is a major

conversation killer. When resuscitation is held out as the dominant option, few choose to delve into the deeper questions that beg discussion. When one can simply opt for resuscitation vs. non-resuscitation it makes it altogether too easy to defer confronting those uncomfortable, haunting questions regarding the inevitable morbidity and mortality of aging. The use of the DNAR phrase however, opens the conversational door widely, simply by bringing the reality of the "attempt" into focus. It begs the response from the patient of "What do you mean, attempt? CPR works, doesn't it? Everything I see on TV seems to say so." And this opens the door to clear up these misconceptions and to provide much needed information to the patient.

A while back, Scott Sageman MD presented a local grand rounds dealing with the use of CPR in adult inpatients. It was an eye-opener. In case you missed it, here are some of the highlights of his presentation:

### **Historical Background**

CPR was developed as an emergency medical procedure to be used in the resuscitation of basically healthy victims of drowning (especially cold water drowning), electrical shock, blunt chest trauma, anesthesia complications and other potentially readily reversible conditions. It was not intended for use in persons dying from advanced heart disease, pneumonia, renal failure or other chronic systemic disease, let alone for use in all cardiac arrests. The presence of multiple organ system dysfunction reduces Code survival to no more than 1-2%. There is general agreement by medical ethicists that CPR is inappropriate when survival is not expected.

A 1960 NEJM article summarized the 1950's literature on the subject. All patients in the study had undergone either cardiac or pulmonary arrest either in the OR or in the ICU. Survival from CPR was defined as getting back a pulse. By the late 1960's studies reported that 15% of hospital patients undergoing CPR survived. 5-10% of study patients were able to leave the hospital. This included those going to long-term neurological care facilities.

By 1998 the survival rate was still 15% and the likelihood of leaving the hospital alive regardless of level of consciousness remained at 5-10%.

### **Epidemiology**

50% of DNR orders are written within 2 days of death.

## **TV Series Resuscitation Rates**

In 1996 the NEJM reported a study of the CPR survival rates of three TV series: ER, Chicago Hope and Rescue 911. The study showed an average CPR success rate of over 77% with 57% of those successfully resuscitated leaving the hospital.

## **Survival Rates for subpopulations receiving CPR, by primary diagnosis (recall that survival of CPR is defined simply as getting a pulse back):**

Metastatic CA	0%
AIDS	0%
GI Bleed	0%
COPD	0%
Pneumonia	0%
Acute CVA with deficit	0%
Class IV CHF	0%
All resuscitations >15 minutes	0%
Septic Shock	0.9%
Pre-existing renal failure	0-1%
Nursing home residents (In-hospital CPR)	0-2%

## **1995 VA Hospital Study of 340 codes over a 2-year period:**

0% of the survivors living over 30 days returned to full function

## **Final thoughts:**

We need to stop using the term DNR when discussing Code status and writing orders. Its use is both dysfunctional and misleading. Use DNAR instead.

Be prepared to discuss the realities of CPR efficacy and appropriateness. Patients need to be informed as to the potential risks and benefits of CPR. For many patients, there are fates worse than death.

Remember that a Code, just like all surgical and diagnostic procedures, has established indications and contraindications. CPR was never intended to be an option extended to every patient in all circumstances. Medical ethicists and hospital system legal counsel both agree that as a profession we are not obligated to acquiesce to a patient's request for CPR, but rather to implement only those requests that are reasonable, appropriate and medically sound.