Evaluation of a "do not resuscitate" policy in intensive care

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The decision to withhold cardiopulmonary resuscitation from a patient within an intensive care unit (ICU) may be a difficult but appropriate one for which there are few guidelines. We describe the formulation of a Do Not Resuscitate (DNR) policy in our multidisciplinary ICU. To evaluate the effect of implementation of the DNR policy on physician practice and on communication among physicians, nurses, patients and their families, we interviewed physicians and nurses caring for patients designated DNR before (n = 8) and after (n = 17) implementation of the DNR policy. We found that DNR orders in the ICU were not infrequent (2–3 per week). All patients designated DNR were either irreversibly ill or not responsive to maximal therapy, and 22 of 25 were not competent. The DNR order was not *accompanied by withdrawal of other therapy in 50% of cases and one patient recovered and was discharged from hospital. The implementation of the DNR policy encouraged greater physician consultation with other physicians, patients and their families. Although there were differences in perception of communication between physicians and nurses, we believe that the DNR policy influenced physician practice and enhanced overall communication in the ICU.*

La décision de s'abstenir à faire une réanimation cardiopulmonaire d'un patient aux soins intensifs (ICU) peut être difficile mais appropriée pour laquelle des rares directives sont actuellement disponibles. On décrit la formulation d'une politique de non-réanimation (DNR) dans notre unité multidisciplinaire de soins intensifs. Afin d'évaluer les effets de l'instauration de cette politique DNR sur la pratique médicale et sur la communication entre les médecins, les infirmières, les patients et leur famille, on a interviewé des médecins et des infirmières soignant ces patients avant (n = 8) et après (n = 17) application de cette politique. On a noté que les ordres de DNR dans les soins intensifs n'étaient pas rares (2 à 3 par semaine). Tous les patients de ce groupe étaient soit malades d'une façon irréversible soit ne répondant pas à la thérapie maximale et 22 sur 25 étaient incompétents. L'ordre de DNR n'était pas accompagné d'un retrait des autres thérapies dans 50% des cas et un patient a récupéré et fut congédié de l'hôpital. La mise en place cette politique de DNR a encouragé une plus grande consultation entre les médecins, les patients et leur famille. Même s'il y avait une différence de perception dans la communication entre les médecins et les infirmières, on croit que cette politique a influencé la pratique médicale et a amélioré en général la communication aux soins intensifs.

Key words
ETHICS: resuscitation;
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The decision to withhold cardiopulmonary resuscitative measures from patients within an intensive care unit (ICU) is an important limitation of therapy. A recent study[1] suggests that "Do-not-resuscitate (DNR) orders were almost always written before the withholding or withdrawal of life support, and 98 per cent of the patients for whom such orders were written died or were discharged from ICU within 48 hr." The DNR order may thus be a crucial therapeutic decision point in the care of the critically ill.

Although general guidelines exist for withholding resuscitative measures for the terminally ill,[2] and general principles have been established,[3] the development and institution of DNR policies for intensive care units have not been well described. The purpose of this report is to present a policy concerning the initiation of resuscitation for the terminally ill that was developed and is still used in a Canadian hospital and to evaluate the process of implementation used by our multidisciplinary Critical Care Ethics Committee. We describe the effect of this policy on physician practice, and on communication among members of the health care team, the patient, and family members. The evaluation of our protocol revealed successful elements and some otherwise unrecognized problems concerning the implementation and use of DNR orders in a multidisciplinary ICU.

Methods

Policy Development

In small group meetings with the clinical ethicist, ICU nursing personnel identified the inconsistency of decision-making regarding the DNR order among medical staff as a major problem for bedside nurses. This inconsistency included both the timing of DNR decisions regarding individual patients and differences in individual physician practice. This prompted the Critical Care Ethics Committee (CCEC) which is composed of nursing unit managers and physician directors as well as pharmacy, respiratory therapy, and physiotherapy representatives to develop a specific DNR policy.

The CCEC used the Joint Statement on Terminal Illness[2] issued by the Canadian Nurses' Association, the Canadian Medical Association, and the Canadian Hospital Association in cooperation with the Canadian Bar Association as a prototype in developing a policy for our institution. The Joint Statement[2] was modified to serve the needs of our tertiary care referral centre. A copy of the final policy as approved by the Medical Advisory Committee is included as Appendix 1 (Policy Concerning Initiation of Resuscitation for the Terminally Ill). Before implemenation, this policy was reviewed by the College of Physicians and Surgeons, and by lawyers for the hospital and physicians (Canadian Medical Protective Association). The policy was revised and key additions to the policy included a precise definition of the term "No resuscitation" (Appendix 1 – item 2.1.1), which the CCEC believed was inadequate in the joint statement,[2] and a detailed description of an appropriate and acceptable protocol for documentation and communication of this order. Also the policy outlined the role of surrogate decision-makers for those patients who lacked decision-making capacity.

Assessment of DNR orders

The Policy Concerning Initiation of Resuscitation for the Terminally Ill (Appendix 1) was first implemented in a fourteen-bed, multi-disciplinary ICU in St. Michael's Hospital, a 701-bed, tertiary care, teaching hospital affiliated with the University of Toronto. The ICU has 24-hr resident coverage and is staffed by five critical care physicians from the Department of Anaesthesia. The case-mix within this multi-disciplinary unit includes all critically ill patients with the exception of neurosurgical patients who are cared for in a separate critical care unit. The average annual number of ICU admissions is approximately 1000/yr.

Assessment of the DNR policy occurred in two phases. In the first phase (pre-implementation), a 20-day period before the formal approval and institution of the DNR policy, all patients designated DNR were identified. These cases were reviewed by one of the authors who was not involved in the decision-making process. The purpose of the pre-implementation phase was to collect information concerning the process of decision-making *before* formal implementation of the guidelines and to provide a baseline for comparison. In the second phase (post-implementation) we evaluated similar situations (designated DNR) *after* formal implementation of the policy in the ICU over a six-week period. The same interview format and interviewer were used for both phases to ensure objectivity of data collection for statistical comparison.

The interviewer was notified whenever a DNR order was written by a staff physician. Within 24 hr, this interviewer met both the physician who wrote the order and the nurse who was at the bedside when the order was written. The interview instrument was an open-ended questionnaire (Appendix 2) inviting specific comments from nurses and physicians regarding problems associated with the writing of the DNR order. The majority of participants offered more information than requested in the actual interview process. Confidentiality was assured for all interviews.

The physician interview addressed five aspects related to the resuscitation policy: patient prognosis, the patient's decision-making capacity (competency), consultations regarding the decision, physician communication with nurses and finally, any specific difficulties associated with writing the DNR order (Appendix 2).

The nurse interview focused on communication between physicians and nurses concerning the DNR order. Nurses were asked if they were included in the decision-making process at the outset of discussions or at the writing of the DNR order. Nurses were also asked directly if, in their opinion, the formal introduction of procedural guidelines for resuscitation had changed the decision-making process.

The hospital chart of each patient in both phases of the study was later reviewed by a physician who noted the primary diagnosis relating to the DNR order, the patient's age, where death occurred (if patient died in hospital), the total duration of ICU stay, and the length of time the patient remained in ICU after the DNR order was written. Also, the reviewer noted whether the DNR order was accompanied by any further orders limiting therapy.

Results from pre- and post-implementation were collated and trends were compared. Where possible, statistical analysis was used to compare questionnaire results before and after implementation using a chi-square test and Fisher's exact test.

TABLE I Pre-implementation

Patient no.	Diagnosis	Age (yr.)	Death in ICU	Time in ICU (days)	Time after DNR in ICU (days)	Withdrawal of other support
1	Cardiac arrest	71	yes	15	<1	ventilation
2	Cardiac arrest	58	yes	22	7	no
3	Cardiac arrest	76	yes	4	<1	inotropes
4	Cardiac arrest	53	yes	31	2	no
5	Renal failure/sepsis	74	yes	19	<1	no
6	Renal failure/sepsis	60	yes	16	1	inotropes
7	Pneumonia/renal failure	77	ward	7	3	ventilation
8	COPD	59	yes	7	5	no

TABLE II Post-implementation

Patient no.	Diagnosis	Age (yr.)	Death in ICU	Time in ICU (days)	Time after DNR in ICU (days)	Withdrawal of other support
1	COPD	59	yes	7	5	no
2	Cardiac arrest	47	yes	3	<1	no
3	MOSF	62	yes	20	<1	ventilation
4	Sepsis/MOSF	79	ward	71	9	ventilation
5	Sepsis	77	yes	4	<1	no
6	Haemorrhage/sepsis	73	yes	23	1	no
7	Congestive heart failure	41	yes	5	<1	no
8	Leukaemia/renal failure	41	yes	12	3	no
9	Hepatic encephalopathy/renal failure	48	yes	5	<1	inotropes
10	Infected aortic prosthesis/septic shock	67	no (discharged home)	36	25	no
11	Ruptured aorta	61	yes	3	<1	inotropes
12	Ischaemic bowel/renal failure	69	yes	63	1	no
13	Sepsis	75	yes	10	<1	inotropes
14	Variceal blood	43	yes	12	<1	inotropes
15	Mediastinitis	71	yes	30	1	inotropes
16	Ruptured aorta/renal failure	80	yes	25	1	inotropes
17	Multiple trauma	15	yes	1	<1	inotropes

Results

Patient characteristics

During the pre-implementation phase (20 days), all eight patients for whom DNR orders were written were studied. Table I outlines the diagnosis most responsible for the physician's decision to write the DNR order. Four patients were post-cardiac arrest, three patients suffered renal failure associated with sepsis or pneumonia and one patient had severe end-stage chronic obstructive lung disease (COPD). All patients died in hospital and only one died outside the ICU (after transfer to the ward). The total time that these patients spent in ICU averaged 18.0 ± 17.7 days; however, the average time in ICU after the DNR order was written was 3.0 ± 5.1 days (Tables I, II). No difference between groups was noted.

In the post-implementation phase of the study, 17 DNR orders were written. Table II outlines the patient diagnosis in this period. Only one patient was admitted to the ICU following a cardiac arrest ($P < 0.05$), compared with pre-implementation. Most patients died in the ICU shortly after the DNR order was written. However, one patient was transferred to a ward where he died nine days after the order was written and one patient was discharged home under home-care. This patient (#10) had been in septic shock with an infected abdominal aortic graft. At the time that the DNR order was written, the patient was not competent and the family agreed with the DNR order. When the patient recovered, the family and the patient agreed that the DNR order should be rescinded. As in the pre-implementation phase, it should be noted that withdrawal of inotropic support and ventilation often accompanied the DNR order (Tables I and II).

Interview results

Interviews were obtained from physicians and nurses

TABLE III Physician interviews

	Pre-implementation	*Post-implementation*
(i) *Prognosis*		
Assessed by physician		
– Irreversible disease	6/8	15/17
– Potentially reversible disease	2/8	2/17
(ii) *Patient competency*		
(Assessed by ICU physician)		
– Fully competent	2/8	1/17
– Not competent	6/8	16/17
Involvement of competent patients in DNR decision	1/2	0/1
(iii) *Physician consultation*		
(a) With physicians		
– Re DNR order	7/8	17/17
– Re assessment of competency	2/8*	16/17*
(b) With family	5/8	14/17
No family available	2/8	2/17
(iv) *Family involvement*		
Agreed with DNR	5/8	9/17
No family	2/8	2/17
Ambivalence	0/8	3/17
Informed after	1/8	—
Not informed	—	3/17
Disagreed with DNR	0/8	0/17

*$P < 0.05$ between pre- and post-implementation data using Fisher exact test.

regarding eight patients designated DNR before implementation and 17 patients after implementation of DNR policy. The physician responses to the five major indicators that formed the substance of the physician interview (Appendix 2) are summarized in Table III.

PATIENT PROGNOSIS

In the situations studied, over 80% of patients were classified by the attending staff physicians as having "irreversible disease" (Table III). The remaining patients were classified as having potentially reversible disease not responsive to therapy. In practice, this latter category might be considered as irreversible disease. This was true both before and after implementation of the policy.

PATIENT COMPETENCY

There were three patients in the study deemed to be competent. In the pre-implementation phase, two of the eight patients were competent (Table III). One of these competent patients in the pre-implementation phase was involved in the DNR decision. This patient agreed with the DNR order and expressed an unwillingness to be resuscitated in the event of a cardiac arrest. The other patient in the pre-implementation phase was deemed competent but was not consulted. In this case, the physician indicated that the patient was quite heavily sedated for pain but was "potentially" capable of communicating regarding the DNR decision. The physician also expressed concern about the amount of information that should be disclosed to the patient concerning the DNR decision. In one case following implementation, the attending physician indicated that the patient and spouse had previously discussed this matter and had communicated the patient's wishes concerning the DNR order.

CONSULTATION: PHYSICIANS AND FAMILIES

Physician practice concerning consultations during the study period are noted in Table III. There was no significant difference between the pre- and post-implementation periods (7/8 vs 17/17) in physician consultations about the DNR order. In this unit, critical care physicians generally consulted other physicians extensively before writing the DNR order. However, before implementation, few physicians (2/8) consulted colleagues regarding the patient's decision-making capacity. After implementation, consultation concerning the patient's decision-making capacity occurred in 16 of 17 cases (Table III). In almost every case where there were identifiable family members, they were consulted regarding both the patient's prognosis and the consideration that was being given to the DNR order (Table III). The implementation of this policy (Appendix 1) did not alter

TABLE IV Nursing involvement in DNR decision-making process: physician and nurse perception from questionnaire

	Pre-implementation		*Post-implementation*	
	Physician perception (n = 8 interviews)	*Nurse perception (n = 8 interviews)*	*Physician perception (n = 17 interviews)*	*Nurse perception (n = 15 interviews)*
Nurse involvement:				
1 At initial discussion	3	4	12	5
2 At DNR decision	5	3	6	5
3 At both stages	2	2	15	3
4 No discussion	0	0	0	4*

*Denotes a statistically significant difference between physician and nurse responses (Fisher exact test).

this consultation with families. Although the majority of families agreed with the DNR decision, in 3/17 cases after implementation (Table III), the family members expressed ambivalence about their role in such decisions. Families sometimes felt that they were being placed unfairly in the role of deciding when a loved one "lives or dies." Furthermore, families often experienced considerable stress and guilt when presented with various options for a loved one and it was not unusual for family members to disagree about what ought to be done regarding treatment and care.

PHYSICIANS AND NURSES: PERCEPTUAL DIFFERENCES

The interview results (Table IV) show a difference in perception between nurses and physicians concerning the timing of the DNR order and communication in general. Physicians indicated that nursing staff were consulted in all decisions at one stage or another, whereas nearly 30% of nurses interviewed indicated that there was no discussion with physicians regarding the DNR order.

From the nurses' perspective, the DNR order sometimes was not considered "until it was too late" – that is, until the patient was seen no longer to be competent. From the physician's perspective, the decision both to consider and to write a "no CPR" order was based almost exclusively on the patient's prognosis. The physician responses to the questionnaire strongly suggested that prognostic uncertainty in the critical care setting was the single most important factor that would delay the decision to write a DNR order.

DNR VS WITHDRAWAL OF TREATMENT

During the implementation of the DNR policy in the ICU, several nurses indicated that they could not understand why patients with a DNR order on their chart continued to be treated aggressively in every other respect. Eight of seventeen patients in this group continued receiving all previous therapy after the DNR order was written (Table II). This was similar to the pre-implementation period (Table I).

Discussion

This study has confirmed other investigations[4-6] that the decision to consider and write a DNR order does not appear to be an isolated or rare occurrence in a multidisciplinary ICU. During the study period, orders not to initiate cardiopulmonary resuscitation were written approximately once every two to three days. The frequency with which these orders are written relates clearly to patient diagnosis, severity of illness and prognosis. The fact that two or three such orders are written each week in the critical care unit is not a measure of physician "ease" in writing the order. This was borne out by the nature and extent of consultation with other clinicians during the process of writing a DNR order on a particular patient (Table III).

In our analysis of the impementation process, the following conclusions emerge:

A All patients deemed unsuitable for cardiopulmonary resuscitation were irreversibly ill or unresponsive to maximal treatment and 22/25 lacked decision-making capacity. Families were almost always consulted (19/25) regarding the DNR decision. This finding is not new nor surprising but may reflect both previous experience and the ongoing development of guidelines in the unit. In our experience, it would appear that physicians, patients and families were able to discuss these issues in an open and frank manner.

B Communication difficulties between and among nurses and physicians while not a new concern,[7] were identified as a problem during the implementation process. The problem of communication between nurses and physicians, especially differing perceptions of involvement in the decision-making process, was highlighted. These differences can be specifically addressed and the challenge of improving communica-

tion between nurses and physicians continues. There is now a greater awareness of this issue in the ICU and further study of perceptual differences between physicians and nurses is warranted. This discrepancy between nurses and physicians may be due, in part, to the fact that only the nurse caring for the patient at the time the DNR order was written was interviewed. This emphasizes not only the importance of communication among professional groups but also within each group concerning patient treatment plans.

C The implementation of the resuscitation guidelines encouraged wider consultation on the part of physicians, particular regarding the patient's decision-making capacity. This included consultation with patients, family members and other health professionals. The acknowledged perceptual differences[7] concerning involvement in the decision-making process, the physicians and nurses interviewed suggested that having the policy improved overall communication in the ICU.

D The review of the implementation period did reveal aspects of the decision-making process that had not previously been analyzed. The extent to which physicians and nurses equated the DNR order with limiting treatment generally was unexpected. The view that the DNR order is a distinct order and that withdrawal of other therapy is a separate matter represents the best policy option at this time. This does not imply that withdrawal of treatment should never be considered when a DNR order is written. Rather, such a separation will help to ensure that decisions to limit treatment generally will be considered fully in their own right. Continuity between the DNR order and issues related to the withdrawal or withholding of treatment may be both necessary and inevitable in practice. Policies governing the writing of DNR orders must acknowledge this particular difficulty and ensure that staff guided by the policy appreciate the complexity of this particular question. This point is illustrated by the patient who was treated for 25 days in ICU after the DNR order was written and recovered to return home. In our view, the DNR order was appropriate at the time as the patient was in septic shock in spite of maximal therapy. The decision to forego CPR and defibrillation was based on the belief that these interventions would be therapeutically useless if a cardiac arrest had occurred. In fact these interventions were never required and the patient recovered.

The small number of patients studied limits the extent to which we can generalize about specific conclusions. However, changes in the practice of physician consultation (Table III) denote a considerable and clinically important difference between the pre- and post-implementation periods. One possible explanation for this shift in practice may be an increased awareness, on the part of physicians, concerning the role of patients in treatment decisions. Another factor that may have contributed to heightened physician awareness of patient competency is medical/legal considerations. This latter point, however, while important to physicians, never seemed to be the main factor influencing patient care decisions. Legal concerns were raised frequently in discussions in the ICU, but in almost every case staff physicians re-directed the focus of discussion to ethical questions associated with a particular patient situation.

Differences in diagnosis between pre- and post-implementation also warrant consideration. It is possible that the increase in physician consultation regarding competency (Table III) was due to the shift in patient population from predominantly post-cardiac arrest patients to patients with multiorgan system failure whose competency (or lack thereof) was less apparent. Alternately, the implementation of the DNR policy may have changed physician practice to consider a wider variety of patients for whom DNR orders were appropriate.

Several factors may account for the high percentage of so-called "non-competent" patients in our study (Table III). By definition, patients in the ICU are critically ill and many require sedative medications, which render them unable to participate in decisions related to treatment and care.[4–6,8] One other factor may account for the high percentage of patients deemed to be non-competent when the DNR order was considered. Several nurses expressed the view that consideration of the DNR order had been delayed and could have been discussed with patients earlier when their mental status was not as seriously compromised. Physicians indicated that they may not initiate discussions regarding a DNR order either because of familial ambivalence or prognostic uncertainty. Nurses could interpret this apparent lack of a decision as a central factor contributing to the prolonged suffering of a patient in their care. Furthermore, the attending physician may communicate primarily with other physicians to clarify prognosis (Table III), or with family members when nurses are not present. The lack of direct conversation and discussion with the bedside nurse may result in a very different interpretation of events on the part of both professionals.

One other factor that may contribute to differences in perception is patient contact. In this unit, patients received one-on-one nursing care. Typically, nurses work 12-hr shifts and spend a large proportion of this time at the bedside. This intense and prolonged patient contact allows nurses to develop close working relationships with patients and their families. Nurses have continued physical contact with individual patients and, over time, are exposed to both the suffering and the emotional toll on

family relationships. This prolonged contact with patients on the part of nurses may have contributed to the perceptual differences that have been identified between physicians and nurses with regard to specific questions of treatment and care.

In view of the continuing difficulties in recruiting and retaining ICU nursing staff,[9] these issues are important to recognize both for physicians and nurses involved in critical care. The way in which the two professions view such things as patient involvement in decisions, the concept of a "team" approach and the role of families in treatment decisions may contribute to a different view regarding patient care decisions. If nurses start with the premise that they work as "patient advocates," while physicians view treatment decisions as "clinical" or "medical" judgements,[10,11] it is easy to see how incomplete communication between the professions can engender the kind of differences noted (Table IV).

Physicians observed that familial ambivalence seemed to be minimized when time was taken to discuss the nature of the patient's diagnosis and prognosis with the family. While physicians identified family ambivalence as a frequent problem, many of the physicians themselves expressed concerns about the "proper" role of families in decisions such as the DNR order or withdrawal of treatment. The question of the role of families or third parties has been addressed in our policy (Appendix 1). Uncertainty regarding the appropriate role of families in such decisions may be minimized with guidelines. However, given the prevailing legal uncertainty about third party involvement in treatment decisions, physician concern persists.

The policy presented (Appendix 1) continues to be used in this hospital. One problem encountered in instituting the policy throughout the hospital has been the focus on the terminally ill. There are circumstances where a DNR order is appropriate, when death is not imminent.[12] This policy (Appendix 1) may need to be revised to address these situations.

The distinction between not initiating cardiopulmonary resuscitation (i.e., DNR) and withdrawing other active therapy is important. Bedell and Pelle[4] noted that there was a broad range of meaning associated with DNR orders. Although they suggested discussing withdrawal of other therapy at the time the DNR order was written, they concluded that "it is important to ensure that patients designated no CPR are given optimal and intensive medical care where it is appropriate." Both the Canadian Joint Statement on Terminal Illness[2] and the U.S. President's Commission Report[12] (Deciding to Forego Life-Sustaining Treatment) distinguish between DNR orders and withdrawal of therapy. The DNR order should *not* always be equated with a medically hopeless prognosis. Patients who are designated DNR may survive with appropriate therapy (patient #10). In this small sample of patients, either inotropic support or mechanical ventilation was withdrawn simultaneously with the DNR order in 12 of 25 cases (Table I, II). The DNR policy did not appear to influence these decisions. In all cases supportive care of such patients must always be maintained. Our policy reflects these views.

The implementation of our DNR policy encouraged greater physician consultation with other physicians, patients and their families. Although we found differences in perception of communication between physicians and nurses, we believe that the DNR policy influenced physician practice and enhanced over-all communication in the ICU. Further studies are required to corroborate our positive experience.

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APPENDIX 1

A Policy Concerning Initiation of Resuscitation for the Terminally Ill

Under conditions where, in the opinion of the attending physician, the relevant facts (see section 1.2) are such that the patient's condition is irreversible and death is imminent the following procedures should be carried out. This is intended as a basic guideline for use by those involved in the care of the terminally ill in critical care units. *In such cases, palliative measures to alleviate the mental and physical discomfort of patients should be provided at all times.*

Advances in medical technology are providing health care workers with increasingly sophisticated methods of resuscitation. Although interventions with these devices are often lifesaving, health care professionals may feel uncertain when deciding to resuscitate a patient for whom such an intervention would not appear to be beneficial, in that it would prolong the dying process rather than extend life.

It is recognized that there are conditions of ill health and inevitable death for which an instruction on the order sheet signed by the attending physician that there should be "no resuscitation" is appropriate and ethically acceptable. It is also recognized that it is the patient's right to accept or refuse any treatment that the physician may deem appropriate.

Therefore, in the process of caring for a dying or critically ill patient these issues should be discussed and when considering whether to resuscitate this patient the following protocol should be implemented.

1 *Clinical criteria*
- 1.1 When the patient's condition is such that a decision should be made as to whether a "no resuscitation" order should be written, that condition should be assessed according to certain clinical criteria.
- 1.2 Those criteria are the best reasonable estimates made by the responsible physician, and a second staff physician where appropriate about the following:
  - 1.2.1 the severity and irreversibility of the patient's condition and the irreparability of the damage done;
  - 1.2.2 the length of time that it can be expected that the patient will live with or without resuscitation.
  - 1.2.3 the consequence of the "no resuscitation" order, i.e., that it may lead to the death of the patient before the time the physician has estimated.

2 *Procedural guidelines*

When clinical assessment justifies the writing of a "no resuscitation" order, the following procedural guidelines are recommended:
- 2.1 *Decision* – the competent patient is the primary decision-maker regarding specific treatment and care.
  - 2.1.1 No resuscitation – for the purposes of this document – refers only to the following orders: (a) no CPR; (b) no defibrillation. Any further limitation of therapy should be clearly outlined on the order sheet.
  - 2.1.2 The attending physician should assess the patient's competency; unless incompetency is obvious, a second opinion about competency should be sought.

    This assessment seeks to promote and to protect the competent person's involvement and understanding of treatment decisions and to protect the truly incompetent from the potentially harmful effects of their own decisions.

    Competent patients have the right to make decisions about their treatment. If the patient so wishes, family members may also be consulted.

    When the patient is incompetent, the appropriate member(s) of the patient's family should normally be closely involved in the decision making process to:
  - 2.1.2 (a) reconstruct the patient's wishes or intentions regarding treatment and
    (b) promote the best interests of the patient.
  - 2.1.3 The opinion of nursing staff and other health professionals caring for the patient should be sought. A multidisciplinary conference may be desirable in some difficult cases.

2.1.4 If the attending physician has doubts about "no resuscitation" decision, a second opinion should be obtained from another physician. (There may be circumstances in which a lack of time or unavailability of another physician precludes obtaining a second opinion.)

2.1.5 A "no resuscitation" order should be duly recorded as a physician's order on the doctor's order sheet.

2.2 *Implementation*

2.2.1 The outcome of discussions with the patient, family and with hospital staff should be recorded in the chart along with their views. The physician consultants should record their opinion as a consultant's note.

2.2.2 The health care personnel involved in the care of the patient should be informed of the decision taken and of the rationale for that decision. This may include a multidisciplinary meeting to clarify and outline the goals of treatment.

2.2.3 The attending physician and the nursing staff should review a "no resuscitation" order at appopriate intervals.

2.2.4 A request by the patient to rescind a "no resuscitation" order must be implemented immediately.

2.2.5 If there are unexpected changes in the patient's condition, a nurse or another physician may rescind a "no resuscitation" order until the patient's condition can be reassessed by the attending physician.

APPENDIX 2

Decision-Making Regarding Initiation of Resuscitation for the Terminally Ill

PHYSICIAN INTERVIEW

Patient identification number_____

Date of interview_____(day, month, year)

Introduction

I would like to obtain a better understanding of the decision-making process regarding a DNR order. I am interested in your initial consideration and discussion of the order, the actual decision and the documentation of it.

Thinking back to the time when DNR was first considered and discussed. ...

1 What was your opinion about the patient's prognosis?

(i) IRREVERSIBLE DISEASE

(ii) REVERSIBLE DISEASE → (A) RESPONSIVE TO RX
(B) UNRESPONSIVE TO RX

(iii) OTHER (DETAILS_____
_____
_____
_____)

2 Did you consider the patient to be competent at the time of decision?

YES

2a Was the patient consulted in the decision-making process?

____ YES (Go to 2b)
↓
____ NO
Why not?
_____
_____
(Go to 2e)

NO

2A Did you obtain another opinion regarding the patient's mental competency?

____ NO (go to 2B)
↓
____ YES
From whom?
____ PSYCHIATRIST
____ OTHER MEDICAL STAFF
(Specify_____
_____)

2b What did you perceive about the patient's willingness to be resuscitated?

1 WILLING

2 UNWILLING

Comment:_____

_____

2B Who was consulted in the decision process?

_____ OTHER MEDICAL STAFF

_____ OTHER HEALTH CARE TEAM MEMBERS

_____

_____ FAMILY

2c Did the patient agree with the DNR recommendation?

_____ YES (Go to 2d)

↓

_____ NO

Why not?

_____

_____

2C What were the family's views?

2d What were the patient's views?

_____

_____

_____

_____

2e Who (else) was consulted in the decision?

_____ OTHER MEDICAL STAFF

_____

_____ OTHER MEDICAL CARE TEAM MEMBERS

_____

_____ FAMILY

3 If we think of the decision process in 3 stages – initial discussion, decision, writing of the order – at what stage were the nursing staff involved in the process?

1 INITIAL DISCUSSION
2 DECISION
3 WRITING ORDER

Comment:_____

4 Referring again to these stages, how much time elapsed between these stages?

1 INITIAL DISCUSSION → DECISION _____ HR OR _____ DAYS
2 DECISION → DOCUMENTATION _____ HR OR _____ DAYS

5 What specific difficulties or circumstances were encountered in the "no CPR" decision in relation to the following:

(A) THE PATIENT/FAMILY_____

_____

_____

(B) INSTITUTIONAL (current hospital practice procedure i.e., "how things are done in this hospital")

(C) TEAM SUPPORT

(D) PERSONAL BELIEFS/VALUES

6 If "no CPR" order not documented, explore reasons.

Decision-Making Regarding Initiation of Resuscitation for the Terminally Ill

SURVEY OF NURSES

1 Patient identification number

2 Date of interview (day, month, year)

Introduction

I would like to obtain a better understanding of the decision-making process regarding the "no CPR" order.

3 If we think of the decision process in 3 stages – initial discussion, decision, writing of the order – at what stage did the physician discuss the "no CPR" order with you?
1 INITIAL DISCUSSION
2 DECISION
3 WRITING ORDER

4 Did you discuss the patient's condition with the attending physician prior to the order being written?
1 YES
2 NO
Comment:

5 I would like your opinion on:
(a) the communication with the attending physician (e.g., in relation to the adequacy of time spent in discussion about the decision, suggestions for improvement in communication, etc.);
(b) the decision process and your level of involvement in it;
(c) nurses' perception of whether the decision process has changed after the introduction of the guidelines.

6 Nurse's sex: 1 FEMALE
2 MALE

7 Number of years of nursing experience:

8 Length of time working in the RICU:

9 Length of time working in other critical care settings.