



Do Not Attempt Resuscitation (DNAR) Decisions in the Perioperative Period

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1. Recommendations

1. Management of patients with DNAR decisions in the perioperative period should focus on what resuscitative measures **will be** embarked on rather than on what **will not be** done.
2. It is essential that patients who may require surgical procedures with DNAR decisions in place are referred as early as possible to the anaesthetic and surgical teams.
3. A review of the DNAR decision by the anaesthetist and surgeon with the patient, proxy decision maker, other doctor in charge of the patient's care, and relatives or carers, if indicated, is essential before proceeding with surgery and anaesthesia.
4. There are three options for managing the DNAR decision:
Option one: the DNAR decision is to be discontinued. Surgery and anaesthesia are to proceed with cardiopulmonary resuscitation (CPR) to be used if cardiopulmonary arrest occurs.
Option two: the DNAR decision is to be modified to permit the use of drugs and techniques commensurate with the provision of anaesthesia.
Option three: no changes are to be made to the DNAR decision. Under most circumstances this option is not compatible with the provision of general anaesthesia for any type of surgical intervention.
5. The agreed DNAR management option should be documented in the patient's notes.
6. The DNAR management option should be communicated to all the healthcare staff managing the patient in the operating theatre and recovery areas.

7. The law provides a clear hierarchy in terms of legal standing to make DNAR decisions:
 - a. The competent patient's direct instructions.
 - b. The patient's advance decision or proxy decision maker if competence is lacking.
 - c. The senior clinician in charge of the patient's care, acting in the patient's best interests, if there is not a legally valid advance decision or proxy decision maker for a patient lacking competence.
8. If, after discussion, there is no agreement on which DNAR decision option should be adopted, the decision of the person with the legal right or responsibility for making the decision should be accepted.
9. If an anaesthetist or other health care provider cannot agree with the outcome of the review of the DNAR decision, they must ensure that arrangements are made for another suitably qualified colleague to take over the role in accordance with GMC guidelines.
10. If it is unclear who has the right or responsibility to make the decision, or if there is doubt over the legal validity of an advance decision or proxy decision maker, or doubt as to what is in the best interests of the patient, then seek legal advice immediately.
11. In an emergency, the doctor must make decisions that they view to be in the best interests of the patient using whatever information is available.
12. The DNAR management option should, under most circumstances, apply for the period when the patient is in the operating theatre and recovery areas. The DNAR decision should be reinstated when the patient returns to the ward, unless in exceptional circumstances.

2. Introduction

In the past, decisions about treatment and resuscitation status were often made by doctors with little discussion with the patient. This paternalistic approach is being replaced with one based on the concept of autonomy, in which the rights of an individual to have control over their own body and to be allowed to make decisions about their medical treatment are paramount. In this approach, decisions result from a partnership between the patient and the clinical team and may now involve proxy decision makers.

DNAR decisions pose a conundrum where patients are scheduled to undergo anaesthesia because techniques routinely undertaken in the course of anaesthesia would ordinarily be classified as resuscitation. Yet it is increasingly common for patients to be scheduled for anaesthesia and surgery with a pre-existing DNAR decision in place. While this often applies to older patients, it may also apply to younger patients or children. **These guidelines apply only to adult patients.**

Medical conditions that may require anaesthesia for operative interventions in a patient with a DNAR decision include:

- provision of a support device (e.g. a feeding tube),
- urgent surgery for a condition unrelated to the underlying chronic problem (e.g. acute appendicitis),
- urgent surgery for a condition related to the underlying chronic problem but not believed to be a terminal event (e.g. bowel obstruction),
- procedure to decrease pains (e.g. repair of fractured neck of femur),
- procedure to provide vascular access.

Guidelines from the American Society of Anesthesiologists (ASA) have existed to assist in the management of this ethical and clinical dilemma since 1993 [1] and Canada since 2002 [2], but

none have been published in the UK to date.

Revised guidelines providing a framework to support decisions relating to CPR were published in a joint statement from the British Medical Association, the Resuscitation Council (UK) and the Royal College of Nursing in 2007 [3]. This document is hereafter referred to as the Joint Statement. The Joint Statement recommends that a DNAR decision is reviewed before surgery and anaesthesia, but detailed guidance on how the decision should be managed is not provided.

McBrien and Heyburn have outlined the dilemmas posed by the need for anaesthesia and surgery in patients with an existing DNAR decision in place [4]. Although it has been a common presumption that DNAR decisions should be fully withdrawn during the perioperative period, this may not be in the patient's best interests. A review of the basic legal and ethical principles involved is needed in order to decide how individual anaesthetists and anaesthetic departments should manage this situation.

The AAGBI Council has therefore decided to provide these guidelines on the management of DNAR decisions in the perioperative period. This guidance is intended for all clinicians and healthcare workers involved with adult patients during the perioperative period, and should be used in conjunction with the Joint Statement [3].

Decisions regarding DNAR decisions in the perioperative period form part of the consent process for anaesthesia and should be viewed as such. The principles outlined in the AAGBI document 'Consent for Anaesthesia' [5], and the GMC document 'Consent: patients and doctors making decisions together' [6] and Section E 'Confidentiality and Consent' in the Irish Medical Council's Guide to Ethical Conduct and Behaviour [7] should also be used in conjunction with these guidelines.

3. Definitions

Do not attempt resuscitation (DNAR) decision

DNAR decisions are implemented on the assumption that cardiopulmonary arrest will be a spontaneous event that is the culmination of the dying process in a patient who has a terminal illness or a poor quality of life. These decisions arose out of the realisation that resuscitation, including cardiopulmonary resuscitation, is inappropriate in such cases, as it has a poor outcome and is against the wishes of patients and families.

The Joint Statement provides a framework for the decision making process in the formation, consequences and implications of a DNAR decision [3].

In the implementation of a DNAR decision the patient, proxy decision maker or senior clinician in charge of the patient are indicating that it is in the patient's best interests to die naturally without resuscitative interventions that would be considered unnecessary and undignified.

Following implementation of the DNAR decision, the patient is not to be resuscitated with chest compressions, defibrillation of the heart, artificial respiration or large doses of vasoactive drugs. **However, the highest standards of medical and nursing care are still to be provided at all times.**

Location sensitive DNAR decisions

This is a DNAR decision that is intended to apply in a specific named location only.

Cardiopulmonary resuscitation (CPR)

CPR is undertaken in an attempt to restore breathing and spontaneous circulation in a patient in cardiac and/or respiratory arrest. CPR usually includes chest compressions, attempted defibrillation, large doses of vasoactive drugs and ventilation of the lungs.

Proxy decision makers

Within these guidelines, this term refers to those who an adult with capacity has appointed to make decisions about medical treatment for them once that capacity has been lost. In England and Wales the legal requirements surrounding the appointment of a proxy decision maker, known as a Lasting Power of Attorney (LPA), are covered in the Mental Capacity Act 2005 [8]. In Scotland the proxy decision maker, known as the welfare attorney, is legislated for in the Adults with Incapacity Act 2000 [9]. In both Northern Ireland and the Republic of Ireland there are currently no statutory provisions for proxy decision makers in relation to healthcare decisions.

Competent/incompetent adults

Adults are considered legally unable to make decisions for themselves if they are unable to:

1. understand the information *relevant to the decisions*,
2. retain that information,
3. use or weigh that information as part of the process of making the decisions,
4. communicate the decisions (by talking, sign language, visual aids or by other means).

Independent Mental Capacity Advocate (IMCA)

The Mental Capacity Act 2005 [8] in England and Wales includes the provision of a statutory right to advocacy for people who lack the capacity to make their own decisions about serious medical treatment or significant changes in their care arrangements and have no family or friends to support them. This advocate is called the Independent Mental Capacity Advocate and is appointed by the local authority or health board. The role of the IMCA is to indicate to decision makers the patient's wishes, feelings, beliefs and values.

4. Ethical framework

Advance decisions, such as DNAR decisions, have arisen from the need for greater respect for patients' autonomy. Autonomy forms one of the four principles of biomedical ethics proposed by Beauchamp and Childress [10], and refers to respect for the decision making capacities of individuals enabling them to make informed choices about their healthcare. The other three principles are beneficence (overall benefit to the patient), non-maleficence (avoiding the causation of harm) and justice (fair distribution of benefits to all patients). Unfortunately, when applied to an ethical dilemma, the four principles often conflict with each other and so they only provide a framework for discussion. The paternalistic primary ethical principle of the past, namely the doctor's view of the immediate benefit to the patient, is now in competition with other conflicting principles.

The GMC provides guidance on withholding and withdrawing life-prolonging treatments [11]. The guiding principle is that doctors should have respect for human life and make their patients' best interests their first concern.

5. Legal framework

United Kingdom

The process of devolution within the UK has resulted in differences in the legal framework between the devolved nations. However, policies relating to DNAR decisions must comply with the Human Rights Act 1998 [10] in every legal setting as this Act applies throughout the UK. A review of the legal issues surrounding DNAR decisions has been necessary as a result of changes in society's expectations which are reflected in current legislation. The Joint Statement highlights the articles in the Human Rights Act 1998 that are of particular importance when considering DNAR decisions [3]. The spirit of the Act, which aims to promote human dignity and transparent decision making, is reflected in the recommendations found in the Joint Statement. A wider review of the implications of the Human Rights Act in anaesthesia and intensive care was published by White and Baldwin in 2002 [13], but this did not address the issue of DNAR decisions in the perioperative period.

The Mental Capacity Act 2005 [8] provides a protective statutory framework for decision making on behalf of adults who lack competency in England and Wales. White and Baldwin have also reviewed the implications of the Mental Capacity Act in the practice of anaesthesia and intensive care [14]. The Adults with Incapacity (Scotland) Act 2000 [9] provides a similar statutory framework for residents in that country. Northern Ireland currently has no formal legislation covering adults who lack competency and relies on the common law position that has developed in this area.

Republic of Ireland

There is currently no specific legislation in relation to advance decisions in the Republic of Ireland. The Irish Council for Bioethics has taken the opportunity to examine the ethical and legal issues surrounding advance directives in the Republic of Ireland and has published their findings [15].

As in the UK, this publication highlights the fact that treatment carried out without the consent of a competent patient in the Republic of Ireland is considered both trespass and battery. In addition, the publication explains that there is currently no provision for an individual in the Republic of Ireland to make a legally binding advance decision, or for the appointment of proxy decision makers to make decisions on matters of healthcare if and when a patient lacks competence. The Law Reform Commission in the Republic of Ireland has suggested that it should be possible for advance decisions to be made legally binding. They are also considering an amendment to the existing Powers of Attorney Act 1996 to enable appointed attorneys to make decisions on minor and routine medical treatment, in addition to managing the property and affairs of the person who appointed them, as is the case at present. Until this becomes law, there is no provision for proxy decision making for incompetent individuals and the final authority to make decisions on medical treatment for them rests with the High Court in Ireland.

Not surprisingly, the lack of clarity in the legal status of advance decisions such as DNAR decisions in the Republic of Ireland has led some to express their dissatisfaction with the process there [16]. The authors of this paper have requested that national guidance on DNAR decisions is provided in the Republic of Ireland.

Who can implement a DNAR decision?

A DNAR decision may arise:

1. Following the direct instructions of a **competent patient**.
2. Following a properly executed **advance decision** by a patient who now lacks capacity. England and Wales have different legislation to the rest of the UK concerning advance decisions:

England and Wales

Advance decisions are covered by the Mental Capacity Act 2005 [8]. To be effective they must:

- Be applicable in the circumstances that have arisen and include recognition that the patient gives these instructions 'even if life is at risk'.
- Be in writing, signed and witnessed.

If an advance decision does not meet these criteria but appears to set out a clear indication of the patient's wishes, it will not be legally binding but should be taken into consideration in determining the patient's best interests.

Scotland and Northern Ireland

Advance decisions are not covered by statute but it is likely that they are binding under common law.

An advance refusal of CPR is likely to be legally binding in Scotland and Northern Ireland if:

- The patient was an adult at the time the decision was made (16 years old in Scotland and 18 in Northern Ireland).
- The circumstances that have arisen are those that were envisaged by the patient.

If an advance decision does not meet these criteria but appears to set out a clear indication of the patient's wishes, it will not be legally binding but should be taken into consideration in determining the patient's best interests.

Republic of Ireland

There is no specific legislation in relation to advance decisions.

3. If a patient lacks capacity and no advance decision exists. Different legislation regarding **proxy decision makers** applies between England and Wales, Scotland, Northern Ireland and the Republic of Ireland:

England and Wales

If the patient lacks capacity, a decision to implement a DNAR decision may be made by the person appointed by the patient's Lasting Power of Attorney (LPA) as appointed under the Mental Capacity Act 2005 [8]. Written permission must have been given to the LPA by the patient, when competent, to make decisions relating to life-prolonging treatment.

Under the Mental Capacity Act 2005 [8], a proxy decision maker must have been instructed in relation to life sustaining treatment if DNAR is under discussion.

Scotland

If the patient lacks capacity, a decision to implement a DNAR decision may be made by the patient's welfare guardian as appointed under the Adults with Incapacity (Scotland) Act 2000 [9].

Northern Ireland and the Republic of Ireland

There is no provision for anybody close to the patient, whether relatives or close friends, to make decisions for the

patient if they lack capacity. However, relatives and close friends should be consulted to determine what the wishes of the patient would be if they were able to competently express them.

4. If the patient lacks capacity and there is no advance decision and no legally empowered proxy decision maker, a DNAR decision may be implemented by the **senior clinician in charge of the patient's care**. Consultation with relatives or carers may clearly assist in discovering any wishes formerly expressed by the patient. In England and Wales, the Mental Capacity Act 2005 requires an Independent Mental Capacity Advocate (IMCA) to be consulted if the patient lacks capacity and has no one (family, friends or carers) to represent their wishes regarding 'serious medical treatment' [8]. The Joint Statement says that 'where there is genuine doubt about whether or not CPR would have a realistic chance of success, or if a DNAR decision is being considered on the balance of benefits and burdens, in order to comply with the law an IMCA must be involved in every case' [3]. Local guidance should clearly identify how an IMCA can be contacted. The role of the IMCA, as with relatives or carers, is to reflect what the patient's wishes would have been if they were able to express them. A relative, carer or IMCA (unless they have been appointed proxy decision maker) cannot make a decision about CPR; the decision is that of the treating clinician.

It must be remembered that patients, relatives, carers and proxy decision makers cannot demand treatment which is judged in medical opinion to be against the patient's interests.

6. Why is it necessary to review a DNAR decision before surgery and anaesthesia?

Surgery and anaesthesia constitute a change in the medical status of a patient with a pre-existing DNAR decision because of changes in physiology which can add additional risks to the patient. However, survival rates following cardiac arrest in the operating theatre are significantly greater than in the general ward or residential setting where the DNAR decision was originally intended to apply. Survival rates following anaesthetic related cardiopulmonary arrest can be as high as 92% [17]. This compares with survival rates of 15-20% after other in-hospital cardiopulmonary arrests [18]. This therefore alters the likelihood that CPR in the perioperative period will be successful and so can impact the original presumptions on which the DNAR decision was made.

When anaesthesia is considered for a patient with a current DNAR decision in place the patient and the anaesthetist face two additional dilemmas. Firstly, anaesthesia itself, whether regional or general, will promote cardiopulmonary instability that will require support.

Secondly, many of the routine interventions used in giving an anaesthetic may be classified as resuscitative measures used in CPR in another setting. These include the insertion of an intravenous cannula, administration of intravenous fluids, insertion of an artificial airway, delivery of oxygen, provision of respiratory assistance, cardiac monitoring and administration of vasopressor and other resuscitative drugs. The surgical procedure itself may also require resuscitative measures to be implemented.

If the anaesthetist was to proceed and strictly obey the general understanding of a DNAR decision, which excludes cardiovascular and respiratory support, their actions could be construed as an act of euthanasia or assisted suicide as they would be initiating cardiopulmonary compromise and yet be unable to treat this once it had occurred.

However, if the anaesthetist insists that the DNAR decision is suspended in order for surgery and anaesthesia to take place, the patient may be denied their rights to certain Articles of the Human Rights Act including:

- The right to life (Article 2),
- To be free from inhuman or degrading treatment (Article 3),
- To be free from discriminatory practices, such as ageism, in respect of these rights (Article 14) [10].

In addition, if an anaesthetist were to treat a patient against their wishes, for example by implementing CPR when it was clear that the patient had stated they did not wish this to take place, this would constitute assault under both the criminal and civil law. It would also violate the guidance given by the GMC [6].

The Mental Capacity Act 2005 states that an advance decision must be applicable to the circumstances that subsequently arise if it is to remain valid [8]. In the case of a DNAR decision that exists as a result of an advance statement, it is likely that the circumstance of anaesthesia for an operative procedure that is considered appropriate will not have been specifically considered when the advance decision was originally made.

For these reasons, all DNAR decisions must be reviewed before patients undergo anaesthesia and surgery. The complexity of these situations makes it essential that decisions regarding modification of DNAR decisions in the perioperative period are made by senior staff and, if necessary, with reference to the hospital's legal team.

7. How to review a DNAR decision

It is important that patients who may require surgical procedures with DNAR decisions in place are referred as early as possible to the anaesthetist and surgical team. Time is required to enable sensitive and effective communication with all the relevant individuals and to formulate a plan that is acceptable to all involved with the patients' care and most importantly the patients themselves. However, this should be done with sufficient urgency to avoid delay to surgery in this vulnerable group of patients.

At the end of the decision making process patients, proxy decision makers, relatives, carers, friends and IMCAs (if indicated) should feel that they have received adequate information in a form they can understand and that the decisions taken truly reflect the wishes of the patient. If patients or others feel they have not had the chance to have a proper discussion with the healthcare team, or are not happy with the discussions they have had, they should be given the option of a consultation with other designated individuals within each hospital.

Emergency situation

In emergency situations it may not be possible to review a DNAR decision, or any other advance decision, prior to anaesthesia, surgery or resuscitation as there is insufficient time. However, attempts must still be made to clarify any advance decisions that are made known to the doctors involved by discussion with relatives, proxy decision makers or even the patient if this is possible.

If an advance decision cannot be discussed with these individuals, doctors must decide what they view to be in the best interests of the patient using whatever information is available.

Preoperative phase

Provision must be made for confidential discussion to take place between the relevant individuals involved in the case: patient, proxy decision makers, family and carers if appropriate, anaesthetist, surgeon, physician and nursing staff. The following points act as guidance to the preliminary assessment of the patient and enable a treatment plan to be formulated:

- a. The patient's medical condition, including their mental competence,
- b. The surgical intervention required,
- c. The history of the DNAR decision including:
 - the duration of the decision,
 - who was responsible for implementing the decision,
 - whether the decision was intended to be 'location sensitive',
 - the presumptions on which the decision was based.

The first decision required is whether anaesthesia and surgery are appropriate, taking into consideration the views of the patient, relatives, proxy decision makers, surgeons and anaesthetists. If surgery is deemed appropriate, measures must be taken to ensure the patient is medically optimised. A decision must then be taken as to what resuscitative measures are acceptable in the perioperative period with open, detailed and frequent communication with the patient, relatives and proxy decision makers.

Once the plan for the DNAR decision has been agreed, it should be recorded in the patient's notes, signed by the relevant parties and dated. Surgery should proceed as soon as practical after the decision is made and the medical condition of the patient has been optimised.

We recommend that one of the following three options is adopted following review of the DNAR decision, and with agreement from all the relevant decision makers involved:

Option one: The DNAR decision is to be discontinued during anaesthesia and surgery and fully reinstated once discharged from the recovery room.

Surgery and anaesthesia are to proceed with CPR to be used if cardiopulmonary arrest occurs.

Option two: The DNAR decision is to be modified to permit the use of drugs and techniques commensurate with the provision of anaesthesia.

In most circumstances, this would include:

1. Monitoring of ECG, blood pressure, oxygenation and any intraoperative monitors which are considered essential for a good outcome.
2. Temporary manipulation of the airway and breathing with intubation and ventilation, when needed; and with understanding that the patient will be breathing spontaneously at the end of the procedure.
3. Use of vasopressor or antiarrhythmic drugs to correct cardiovascular stability related to the provision of anaesthesia and surgery.

The use of electrical cardioversion or defibrillation to correct arrhythmias should be considered and discussed with the patient or proxy decision makers in advance. Attempts of electrical cardioversion or defibrillation may be considered and agreed to treat arrhythmias if indicated.

A decision must also be taken about the potential use of chest compressions. These may be deemed unacceptable in view of the possible complications involved.

Option three: No changes are to be made to the DNAR decision.

Under most circumstances this option is not compatible with the provision of general anaesthesia for any type of surgical intervention.

The patient may wish to undergo a minor surgical procedure while their DNAR decision remains in place. The anaesthetist should reach agreement, if possible, with the patient or proxy decision makers as to exactly what, if any, interventions are permitted, such as intravenous cannulation, intravenous fluid administration, sedation, analgesia, monitoring, vasopressor medication, antiarrhythmic medication, administration of oxygen or other interventions.

The Joint Statement makes it clear that 'If a clinician believes that the procedure or treatment would not be successful with the DNAR decision still in place, it would be reasonable not to proceed.' [3]

Appendix 1 provides an example of a proforma adapted from the options on page 18. The working party recommends the adoption of a formal document such as this describing the procedures the patient has consented to undergo during the perioperative period. However, it must be remembered that completing the proforma should not take priority over the discussion. The purpose of the proforma is to record for clarity and certainty the decisions that have been made, and the parties to it. The quality of the medical advice, the exploration of alternatives and adherence to the patient's wishes are the essence of the process.

8. Conflict resolution

When dealing with a situation involving the modification of a pre-existing DNAR decision, the medical team may be faced with different wishes from the patient, family members and friends. In attempting to resolve such conflict, the law provides a clear hierarchy in terms of who can legally make decisions about the treatment a patient receives:

a) The competent patient's direct instructions

A competent patient's direct instructions are always paramount.

b) The patient's advance decision or proxy decision maker

If the patient has made an advance decision *and* has appointed a proxy decision maker, and they are both applicable to exactly the same situation, then which ever action was taken later (i.e. most recently) takes priority.

It is likely that the situation of anaesthesia and surgery will not have been considered when making an advance decision DNAR order which will then invalidate its application in these circumstances.

The decision will then need to be taken by the proxy decision maker, if one exists, or the senior clinician in charge of the patient's care, as to what management option should be pursued.

c) The senior clinician in charge of the patient's care

If the patient is not competent to make their own decisions, and has not appointed a proxy decision maker or made an advance decision, then the senior clinician in charge of the patient's care must make the decision, *based on the patient's best interests*.

Again, consultation with relatives or carers may clearly assist in discovering any wishes formerly expressed by the patient. In England and Wales an Independent Mental Capacity Advocate (IMCA) may be consulted to reflect the patient's wishes if there is no relative, friend or carer to represent the patient. However, the power to make the decision resides with the treating clinician, not with the relatives, friend, carers or IMCA.

If, after reasonable effort, agreement or compromise cannot be reached through dialogue, the decision of the person with the right or responsibility for making the decision should be accepted. If there is doubt as to the validity of the appointment of a proxy decision maker or an advance decision, or what is in the best interests of the patient, then the Trust legal team should be contacted immediately for advice. An application may very quickly be made to court to seek a declaration as to whether a particular course of action is lawful.

If an anaesthetist or other healthcare provider cannot agree with the outcome of the review of the DNAR decision, they must ensure that arrangements are made for another suitably qualified colleague to take over the role in accordance with GMC guidelines [19].

9. Duration of the DNAR management option

Intraoperative phase

The DNAR management option should apply for the duration of the patient's stay in the theatre environment. If premedication is prescribed it must be used with extreme caution to avoid alterations in the patient's physiological status before transfer to theatre.

All theatre staff should be made aware of the DNAR management option of the patient throughout their time in the theatre suite and recovery area. The anaesthetist and surgeon involved in preoperative consultation should be present in theatre throughout the procedure to enable shared responsibility of resuscitation decisions. In some circumstances this may not be possible; good communication of decisions from the preoperative consultation is therefore essential.

Postoperative phase

The DNAR management option should be communicated to the recovery staff on transfer to the recovery area. This option will continue until the patient is discharged from the recovery area. The prior DNAR decision should be reinstated on handover of the patient to the nursing staff from the ward. In exceptional circumstances, arrangements may be made to prolong the DNAR management option following transfer to the ward postoperatively: for example, if a patient-controlled analgesia device or epidural infusion is to be used in the postoperative period. A postoperative review of the patient should be carried out with communication to the patient, relatives or proxy decision makers about the perioperative management if necessary.

There should be regular audits of the management of patients with DNAR decisions scheduled for surgery.

10. Summary for patients, proxy decision makers and relatives

This section summarises the guidance given in this document regarding the implications of a DNAR decision, and how the presumptions on which the DNAR decision was implemented are altered by the proposed surgery and anaesthesia. This summary is not intended to be used directly as patient guidance, but might be useful for lay persons. It is suggested that Trusts should consider producing appropriate patient guidance on this matter.

These guidelines apply only to adult patients.

The purpose of reviewing the DNAR decision is to provide an opportunity for agreement over what treatment will be provided during surgery and anaesthesia. The three DNAR management options provide a range of alternatives that should be considered. The legal hierarchy of the competent patient, their advance decision or their proxy decision maker, then the senior clinician in charge of the patient's care exists to determine who decides the DNAR management option to be followed.

Although relatives should be involved in decisions about proposed treatment, they have no legal authority in determining the DNAR management option. Their inclusion in discussions for patients who lack capacity is to reflect what the wishes of the patient would have been if they were able to express them.

It must also be remembered that neither patients nor proxy decision makers can demand treatment, which is judged in medical opinion to be against the patient's interests. Patients may however refuse treatment, as can proxy decision makers, so long as they have legal authority to do so. Advance decisions refusing treatment must be relevant to the situation of the proposed surgery and anaesthesia.

At the end of the decision making process patients, proxy decision makers, relatives, carers, friends and IMCAs (if indicated) should feel that they have received adequate information in a form they can understand and that the decisions taken truly reflect the wishes of the patient.

Further information on decisions relating to CPR has been published by the British Medical Association [20], but the issue of DNAR decisions in the perioperative period is not considered. If patients feel they have not had the chance to have a proper discussion with the healthcare team, or are not happy with the discussions they have had, they should be given the option of a consultation with other designated individuals within each hospital.

11. References

1. American Society of Anaesthetists Committee on Ethics, 2001. Ethical guidelines for the anesthesia care of patients with do-not-resuscitate orders or other directives that limit treatment. www.asahq.org/publicationsAndServices/standards/09.html (accessed 01/08/08).
2. Canadian Anesthesiologists' Society Committee on Ethics, 2002. Peri-operative status of 'do not resuscitate' (DNR) orders and other directives regarding treatment. www.cas.ca/members/sign_in/guidelines/do_not_resuscitate/ (accessed 01/08/08).
3. Resuscitation Council, Decisions Relating to Cardiopulmonary Resuscitation. A Joint Statement from the British Medical Association, the Resuscitation Council (UK) and the Royal College of Nursing, London: 2007. www.resus.org.uk/pages/DNAR.htm (accessed 18/11/08).
4. McBrien ME and Heyburn G. *Anaesthesia* 2006; **61**: 625–7.
5. Consent for Anaesthesia, 2nd edition 2006. London, The Association of Anaesthetists of Great Britain and Ireland. www.aagbi.org/publications/guidelines/docs/consent06.pdf (accessed 01/08/08).
6. General Medical Council. Consent: patients and doctors making decisions together, 2008. www.gmc-uk.org/news/articles/Consent_guidance.pdf (accessed 01/08/08).
7. Medical Council of Ireland. A Guide to Ethical Conduct and Behaviour, Sixth Edition, 2004. www.medicalcouncil.ie/professional/ethics.asp (accessed 18/11/08).
8. Mental Capacity Act 2005. http://www.opsi.gov.uk/ACTS/acts2005/ukpga_20050009_en_1 (accessed 29.1.09).
9. Adults with Incapacity (Scotland) Act 2000. http://www.opsi.gov.uk/legislation/scotland/acts2000/asp_20000004_en_1 (accessed 29.1.09).

10. Human Rights Act 1998. http://www.opsi.gov.uk/ACTS/acts1998/ukpga_19980042_en_1 (accessed 29.1.09).
11. Beauchamp TL, Childress JF. Principles of Biomedical Ethics, 5th edn. Oxford: Oxford University Press, 2001.
12. General Medical Council. Withholding and withdrawing life prolonging treatments: Good practice in decision-making, 2002. www.gmc-uk.org/guidance/current/library/withholding_lifeprolonging_guidance.asp#67 (accessed 18/09/08).
13. White SM, Baldwin TJ. The Human Rights Act, 1998: implications for anaesthesia and intensive care. *Anaesthesia* 2002; **57**: 882–8.
14. White SM, Baldwin TJ. The Mental Capacity Act 2005 – implications for anaesthesia and critical care. *Anaesthesia* 2006; **61**: 381-9.
15. Irish Council for Bioethics. Is it time for advance healthcare directives? Opinion, 2007. www.bioethics.ie/uploads/docs/AdvanceDirectiveReport.pdf (accessed 18/11/08).
16. Butler MW, Saaidin N, Sheikh AA, Fennell JS. Dissatisfaction with do not attempt resuscitation orders: A nationwide study of Irish consultant physician practices. *Irish Medical Journal* 2006; **99**: 208-210.
17. Olsson GL, Hallen B. Cardiac arrest during anaesthesia. A computer-aided study in 250,543 anaesthetics. *Acta Anaesthesiologica Scandinavica* 1988; **32(8)**: 653–64.
18. Sandroni C, Nolan J, Cavallaro F, Antonelli M. In-hospital cardiac arrest: incidence, prognosis and possible measures to improve survival. *Intensive Care Medicine* 2007; **33**: 237-45.
19. General Medical Council. Good medical practice, 2006. www.gmc-uk.org/guidance/good_medical_practice/index.asp (accessed 01/08/08).

20. British Medical Association. Cardiopulmonary resuscitation model patient information leaflet, 2008. www.bma.org.uk/health_promotion_ethics/cardiopulmonary_resuscitation/CPRpatientinformation.jsp (accessed 18/09/08).

Appendix 1

DNAR management consent form

This patient has been scheduled for surgery and anaesthesia. A DNAR decision is already in place. In order for surgery and anaesthesia to take place, one of the following three options has been agreed upon.

Option one: The DNAR decision is to be discontinued during anaesthesia and surgery and fully reinstated once discharged from the recovery room.

Option two: The DNAR decision is to be modified to permit the use of drugs and techniques commensurate with the provision of anaesthesia.

This will include:

1. Monitoring of ECG, blood pressure, oxygenation and any in traoperative monitors which are considered essential for a good outcome.

Agreed/ Not agreed

2. Temporary manipulation of the airway and breathing with intubation and ventilation, when needed; and with understanding that the patient will be breathing spontaneously at the end of the procedure.

Agreed/ Not agreed

3. Use of vasopressor or antiarrhythmic drugs to correct cardiovascular stability related to the provision of anaesthesia and surgery.

Agreed/ Not agreed

4. The use of electrical cardioversion or defibrillation to correct arrhythmias.

Agreed/ Not agreed

5. The use of chest compressions.

Agreed / Not agreed

Option three: No changes are to be made to the DNAR decision. Under most circumstances this option is not compatible with the provision of anaesthesia for any type of surgical intervention.

The anaesthetist should reach agreement, if possible, with the patient or proxy decision maker as to exactly what, if any, interventions are permitted.

Interventions permitted

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DNAR management option agreed: Option 1
Option 2
Option 3

The DNAR management option will apply while the patient is in the operating theatre environment. The DNAR decision is to be reinstated on discharge from the recovery area unless in exceptional circumstances.

Signatures

signature of patient with capacity
date.....

OR, if patient does not have capacity

signature of proxy decision maker
instructed in life sustaining treatment
date.....

OR

signature of relative, carer, friend or IMCA
consulted to reflect patient's wishes
date.....

AND

signature of clinician in
charge of patient's care

date.....

AND/OR

signature of the anaesthetist
who has had the discussion.....

date.....

AND/OR

signature of surgeon, if different to
clinician in charge of patient's care.....

date.....



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