Do Not Attempt Cardiopulmonary Resuscitation orders in acute medical settings: a qualitative study

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Summary

Background: Do Not Attempt Cardiopulmonary Resuscitation (DNACPR) orders have been shown to be independently associated with patients receiving fewer treatments, reduced admission to intensive care and worse outcomes even after accounting for known confounders. The mechanisms by which they influence practice have not previously been studied.

Objectives: To present a rich qualitative description of the use of the DNACPR form in a hospital ward setting and explore what influence it has on the everyday care of patients.

Design: Multi-source qualitative study, primarily using direct observation and semi-structured interviews based on two acute wards in a typical middle-sized National Health Service hospital in UK.

Results: The study identified a range of ways in which DNACPR orders influence ward practice, beyond dictating whether or not cardiopulmonary resuscitation should be attempted. Five key themes encapsulate the range of potential impacts emerging from the data: the specific design and primacy of the form, matters relating to clinical decision making, staff reflections on how the form can affect care, staff concern over ‘inappropriate’ resuscitation, and discussions with patients/relatives about DNACPR decisions. Overall, it was found that while the DNACPR form is recognized as serving a useful purpose, its influence negatively permeated many aspects of clinical practice.

Conclusions: DNACPR orders can act as unofficial ‘stop’ signs and can often signify the inappropriate end to clinical decision making and proactive care. Many clinicians were uncomfortable discussing DNACPR orders with patients and families. These findings help understand why patients with DNACPR orders have worse outcomes, as such they may inform improvements in resuscitation policies.

Introduction

Do Not Attempt Cardiopulmonary Resuscitation (DNACPR) orders are common, this is unsurprising, given that the majority of the population dies in hospital. For example, 82% (555 of 674) of those who died at a University Hospital in Sweden and 87% of those who died in a New Zealand hospital had one in place.1,2 They are designed to clearly identify which patients should not have cardiopulmonary resuscitation attempted on them. The order has evolved, even in name, over the last two decades. The acronym has lengthened with attempts to improve the clarity of the instruction: Do Not Resuscitate (DNR) became Do Not

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Attempt Resuscitation (DNAR) to convey the low success rate and now DNACPR to communicate that only this element of resuscitation should be withheld (in this article we will use ‘DNACPR’, except where referring to earlier studies where shorter abbreviations were used).

Before the use of a form, more covert communication existed with symbols of hearts or stars next to the patient’s name or buried in the notes written somewhat cryptically as ‘not for the code’ (referring to the public address system used in many American hospitals) or ‘not for 222’ (referring to the number called for the arrest team in many UK hospitals). In this context, it is easy to see the attraction of a bold instruction in the front of the notes, which could be rapidly accessed and would diminish the possibility of miscommunication. The need for coherent national and local resuscitation policies was emphasized in the 1990s such that National Health Service (NHS) trusts are now required to have a resuscitation policy which includes DNAR orders. Consequently, largely standardized DNACPR forms now exist and their use is ubiquitous in hospital settings; a template for a UK form is available from the Resuscitation Council (UK), with unified DNACPR forms in some UK regions. Anecdotal evidence in support of the benefits of the DNAR order confirms its ability to provide clarity of instruction but is limited to this outcome. The 2012 National Confidential Enquiry into Patient Outcome and Death (NCEPOD) report revealed that problems surrounding resuscitation decisions and documentation persist: in 78% of arrests there was no documentation of cardiopulmonary resuscitation (CPR) status and in many cases Advisors felt a DNACPR decision should have been made: one of their principal recommendations was: ‘CPR status must be considered and recorded for all acute admissions…’.

The joint British Medical Association, Royal College of Nursing and Resuscitation Council (UK) guidelines state: ‘DNAR decisions apply only to CPR and not to any other aspects of treatment’. Thus, DNACPR orders are not intended as a label that palliative care should be initiated, nor that other active treatments should be omitted. Of course there are often situations when active treatments might no longer be appropriate for a patient, but such decisions should not be conflated with the DNACPR order. This is particularly important since, while their presence is common for those who die in hospital, the converse is not true: those who have DNACPR orders are not necessarily about to die. At least one study, that reviewed 58 cases of patients with DNACPR orders among an overall cohort of 470 cases, concluded that resuscitation decisions take into account the age and general prospects of a patient above clinical evaluations of the probability of survival per se.

Counter to the narrow intentions of DNACPR orders, several studies from hospital settings have suggested mortality is higher for those with such orders, independent of other variables. Recent quantitative studies show that DNACPR orders continue to affect both basic (e.g. being prescribed an angiotensin-converting enzyme inhibitor when admitted with heart failure) and intensive (e.g. being accepted to a medical intensive care unit) treatments. Although, empirical studies have demonstrated that patients with documented decisions not to resuscitate have worse outcomes than those with similar characteristics but without such orders, quantifying changes to provision of care has been difficult—it has proved much easier to measure omissions of care. Given this, our research undertook to explore how DNACPR orders might influence everyday practice through a qualitative approach that emphasizes the possibly broader impact it might have on ward culture, rather than to seek specific aspects of clinical care that might be negatively affected.

**Aim**

Given that the explicit intention of a DNACPR order is only to withhold resuscitation in the event of cardiac arrest, the evidence that they are interpreted and acted on in a wide range of other ways prompted the work described in this article. By adopting a qualitative methodology, our research uniquely explores the ways in which the DNACPR order form is routinely used, as well as if and how this simple piece of paper might produce unintended effects.

Rather than rely solely on interviews, we combined these with observational data in order to contextualize what people said, and hence generate a rich overall account of hospital practice—what social sciences refer to as ‘ethnography’. Although, there is a small but long-standing tradition of conducting such studies, one of the enduring problems of observational research within hospitals has been the struggle to reconcile making generalizations, while acknowledging the very varied nature of specialties and ward cultures. In addition, Van der Geest and Finkler suggest that the general death of hospital ethnographies is based on a mistaken sense of ‘familiarity’ with the setting. Yet, what is apparently simple and familiar to clinicians because of the dominance of an overarching hospital culture can be shown to be less straightforward when encountered from a fresh perspective. As Pope notes, ‘carrying out ethnographic research with people in medical settings can provide a catalyst
for reflection and opportunities to feedback to doctors and other health care professionals.

There are few previous ethnographic studies which directly relate to DNACPR orders. Timmermans’ work on CPR in the emergency department of an American hospital raises questions about its efficacy vs. its symbolic status in general culture. From a UK perspective, Page provides detailed descriptions of CPR practice, including many instances of its ineffectiveness, but does not directly address the use of documented resuscitation orders. Costello provides an account of the relatively early use of DNR procedure as part of a larger study into the care of elderly, terminally ill patients, while Davey provides a detailed picture of DNR decision making within a study of clinical communication conducted in 1996–97 on acute surgical wards. In contrast to these, our study focuses specifically on the DNACPR form itself as the crux of current DNACPR practice within acute medical settings, in order to better understand the relationships between DNACPR use and care provision. To this end, we brought together a research team consisting of social anthropologists and clinicians to carry out a detailed study in an acute hospital.

**Methods**

This article is based on 6-months data collection on two acute wards in a medium-sized NHS hospital in the UK during 2010. The hospital could be said to be typical of this size: it has ~460 beds in 21 wards, a neonatal ward and 13 theatres, serving a population of ~275 000 from a mixed urban and semi-rural environment of ~600 square miles. The study was undertaken as one strand of a larger research project into the effects of DNACPR use compared to a new alternative form. Ethics approval was obtained from the Norfolk Research Ethics Committee.

The methods were chosen to capture the ways in which DNACPR decisions and the subsequent communication of these decisions permeated hospital care. Qualitative data collection comprised primarily of semi-structured interviews and ward-based observation. In addition, we reviewed relevant grey literature that was used during ward practice and undertook in-depth reading of more than 250 sets of patient notes (the latter was limited to the first 3 months to reach a nominal target of 100 ‘DNACPR’ sets of notes, matching the sample size power calculation for the quantitative arm of the study). Overall, the aim was to produce as detailed and holistic an account as possible.

Observation consisted of regular attendance on both wards over 6 months. This included both day and night shifts, shadowing ward rounds and following individual doctors, attending handovers, talking informally with doctors, learning about ward routines and professional practices, observing and overhearing everyday life from the nursing station/ward administration area and around the wards, as well as in other ‘staff’ areas in the hospital. It was conducted by J.M.F., who, though not being clinically trained or having a specific role on the wards beyond that of a research assistant came to be known and trusted by staff. She had no prior relationship to the wards or their staff. Although, senior staff were aware that she was part of a research team who were ultimately looking at an alternative to current DNACPR practice, as an anthropologist she undertook the research from a position of seeking to openly understand current practice rather than assuming there were problems with it. While observational research is always open to a risk of the Hawthorne effect, the extended period of time spent on the wards created a familiarity which counteracted any effect on staff behaviour or practices. In fact, it was precisely the standardized nature of everyday routine ward practices observed during this period which constituted the observational data to inform the study.

The interviews were undertaken by the same researcher (J.M.F.) following a semi-structured topic guide, to allow for sufficient flexibility, and were conducted in private settings within the hospital. Clinicians working on the two wards were purposively sampled to reflect the perspectives of doctors and nurses from a range of grades. They were approached for interview by e-mail in the first instance and then face-to-face. No clinicians approached in person declined to be interviewed. We had also obtained prior ethics approval to interview patients, and where relevant their relatives, who had had discussions with doctors about their DNACPR status. All interviews were audio-recorded and transcribed verbatim. Interviews ranged in length between 10 min and 1 h in duration, dependent on clinical pressures and time available.

Both transcripts and field-note data were initially analysed using NVivo 8.0 to identify emergent themes, and further refined using an adapted framework approach. Significantly, the flexibility of the software allowed for comparison across and within the different data sources. A sample of each was independently coded by J.M.F. and S.C. to ensure categories were sufficiently unambiguous and reliable; areas of apparent disjuncture catalysed further exploration and analysis to confirm whether existing codes needed to be refined or new ones were warranted. In addition, data from each ward were constantly compared in order to see to what extent it was idiosyncratic to a specific site. By doing
so we generated an initial framework for analysis of the remaining data. Common themes were regularly discussed among the team, and gradually collected together using NVivo into an encompassing set of those higher-order issues that best represent the data collected.

The results presented below are drawn from the overall dataset, which comprised of both observational field notes and verbatim interview transcripts. As such, the themes arise from analysis of the overall ethnographic description, rather than from the more usual thematic coding of solely interview data. However, where they best encapsulate a topic we provide indicative quotes from interviews.

Results

During the 3-month ‘notes review’ period, there were 103 ‘DNACPR’ decisions (exclusive of patients for ‘palliative care only’) documented among 581 admissions. Interviews were conducted with 28 clinicians, to complement the extended observational data collected. Of those, 13 were with doctors [five consultants, two specialist registrars and six doctors below Specialist Trainee level 3 (ST3) level] and 14 with nursing staff (two ward managers, three specialist nurses, three sisters, five staff nurses and one nursing assistant). Clinicians were asked about experiences over the course of their careers, to gain accounts of practice beyond the current study hospital; as a result their responses reflect experiences from a range of sites. Only two patient interviews were conducted during this phase of the study due to difficulties in recruitment, further discussed in ‘Results (Discussions between patients and doctors)’ and ‘Limitations’ sections. Due to such a small sample, data from those patient interviews are not included in this article.

From the interviews with clinicians and observations on the wards, we identified five key themes that encapsulate the impacts of the DNACPR form: design and use, decision making, how the form affected care, concern over ‘inappropriate’ resuscitation and having discussions with patients/relatives.

Design and use

Although clearly a significant item of documentation, what is initially surprising about the DNACPR form is the extent to which each hospital in the UK has designed its own version. Because it is crucial that it is consulted the moment a patient has a cardiac arrest, it must be sufficiently eye-catching and hence the majority of variants of the form (including those in the hospital of our research) are marked out by a significant red portion:

It’s very clear when you pick somebody’s notes up, if you get called to a cardiac arrest you’re thrust the notes in your hand, you see the form straight away in the front. That red and black form at the moment, you know, “stop what you’re doing!”

Senior Nurse, Acute Hospital

Collated into a folder, medical documents accumulate over time as a ‘set of notes’ and represent a visual manifestation of someone’s medical history. Significantly, although in the hospital of our study these were compiled chronologically starting from the front, if a DNACPR form was completed for a current admission it was always located before any of the other notes. Ostensibly, of course, this was to enable it to be unquestionably visible in an emergency; however, it also demonstrated that such orders are essentially also ‘atypical’ and ‘out of time’.

Because the accumulation of paperwork can often mean folders are extraordinarily bulky, they often reside in a trolley on the ward; at our field site the current admissions’ medical notes for each patient were placed in transparent plastic binders hung on the corridor wall at the end of each bay. This meant if the cover page was accidentally missing, which did occur, any current DNACPR form would be strikingly visible through the front of the folder. These particular forms not only had a red-filled header, but also ‘Do Not Attempt CPR’ in two centimetre high bold black print, along the right-hand edge of the A4 sheet. The material nature of the form clearly served to ‘fix’ a clinical decision. Whenever a DNACPR form was cancelled because either the decision was reversed (an extremely rare occurrence) or the patient had been discharged home, the front of the form was crossed through and marked either ‘cancelled’ or ‘patient discharged’ and dated. If the patient was ever readmitted, a new DNACPR form had to be filled in if a doctor decided it was appropriate. However, since hospital policy was that all documentation stays in a patient’s medical notes permanently, doctors acknowledged that if there were any old DNACPR orders in the notes they were more likely to consider the need for the patient to have one during their subsequent stay. A particularly striking and likely self-perpetuating example of recurrent form use is illustrated below (Figure 1).

Making the DNACPR decision

DNACPR decisions needed to be made and documented by a consultant or specialist registrar, not a junior doctor:

A consultant’ll do a ward round, and if from the end of the bed someone looks kind of frail…not the majority of times, but certainly I can think of...
examples where the forms are signed and probably not a great deal of thought has been put into them.

Junior Doctor, Acute Hospital

Senior doctors tended to express the hope that they would make ‘better judgements’, including matters of DNACPR, than more junior doctors. Perhaps that is what was alluded to in the above quote by the mention of viewing a patient from the end of the bed.

In addition, a text box required the doctor to give a reason for the DNACPR decision. What was striking was how entries tended not to refer to specific medical problems, but were often very generalized evaluations. The most frequent phrases used were ‘futility’, ‘fraility’ and ‘comorbidities’. One even, perhaps unintentionally, stated ‘multiple futilities’ (Figure 2). Certainly, the slippage between having to provide a reason, and the way that this could then describe the patient overall was noted by some of the staff themselves:

I think in some ways the piece of paper at the end of it isn’t as important, because it’s more about

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**Figure 1.** Multiple DNACPR forms amassed in a patient’s notes, demonstrating the prominence of resuscitation decisions.

**Figure 2.** ‘Futility’ and ‘multiple comorbidities’ are the most commonly documented reasons for making DNACPR decisions. ‘Multiple futilities’ was written down in this patient’s notes.
thinking how much you’re going to treat this patient in general.

Junior Doctor, Acute Hospital

Observations suggested that DNACPR completion was *ad hoc*, and that the form was not regularly completed for all patients for whom CPR might actually be thought inappropriate. For example, while some DNACPR decisions were made during the ward round, as a patient was assessed, this was not the norm. In many instances, it was filled out only when senior doctors became alerted by more junior ones or nursing staff that a patient was ‘going off’ (deteriorating), or if, on a Friday afternoon, a doctor was concerned that the patient’s health might dramatically decline over the weekend. Even this forward planning was not undertaken by all doctors. Speaking with clinicians, the general opinion was that a high proportion of DNACPR forms were completed by out-of-hours staff and such decisions would have been better made by the patient’s own medical team rather than by on-call doctors who may never have seen them before. Given DNACPR forms are only completed when a decision not to resuscitate has been formally made there was little way to know, when first encountering a patient’s notes, if the absence of a DNACPR order was a conscious clinical decision or an oversight. However, from interviews it was apparent that some doctors actively avoided issuing DNACPRs, either because they personally rejected their use or out of avoidance of the responsibility.

Others admitted to simply forgetting to fill in the form even though retrospectively they recognized a patient would have been appropriate for a DNACPR order. As one staff nurse noted in reference to the very varied timing and allocation of DNACPR orders on her ward, ‘It does depend, unfortunately. I can’t say there’s any real pattern to it.’

Blank DNACPR forms were stored in a drawer at the nurses’ station on the ward, although some were kept on the notes trolleys taken on ward rounds. Towards the top of the DNACPR form a section required confirmation that a nurse had been informed. Despite this, nurses were not often included formally in CPR decisions. In contrast, they were more readily involved in decisions about starting palliative treatments. There was only one incidence during fieldwork of a staff nurse actively refusing to sign a DNACPR because she disagreed with the doctor’s decision. The nurse felt responsibility to be the patient’s advocate, since the out-of-hours doctor did not have a detailed knowledge of the patient. When, later, the nurse raised her concerns with one of the regular consultants, they agreed with her and cancelled the DNACPR decision.

**The relationship between the form and care delivered**

In practice, the impact of a DNACPR order frequently appeared to extend from stipulating a specific mandate to functioning as a more pervasive label. We observed this was particularly noticeable during shift handovers. In addition to the written handover, during which the presence of a form was always referred to, the DNACPR status was invariably communicated at each verbal nursing handover, as in the following excerpt from the start of a nurse introducing one of the patients:

Bed 1.1 is [patient name], an 84 year old gentleman, not for resus; his wife [name] is his next of kin, he lives in a bungalow. He presented with acute confusion; the doctors want a full screen…

1 pm Nursing Handover, Acute Hospital

Although, clearly mentioning the DNACPR status at the beginning of a review accords with the importance given to the decision, much like placing the actual form at the front of the notes, it is worth highlighting how the DNACPR status was invariably mentioned before the patient’s condition or their clinical plan of care. As a result it serves as an implicit ‘master status’ labelling, dividing patients with DNACPRs from those without. As a result, often patients were referred to as being ‘not for resus’ in contexts entirely unconnected with the clinical issues at hand.

There were a few further manifestations of how DNACPR decisions functioned as a label, which, in combination, were indicative of its enduring and all-encompassing nature. On one ward, for example, a standard whiteboard chart used as a summary of current in-patients, included the symbol of a black dot to denote a current DNACPR order (Figure 3). In another example, the hospital’s new electronic medical record included a red-encircled ‘R’ next to the patient’s name, to stand for DNACPR. Even when it was no longer applicable, the ‘R’ remained as a permanent symbol, even if crossed through with a corresponding pop-up legend stating ‘old DNAR’.

Despite some clinicians reporting that they felt the presence of a DNACPR had no effect on everyday care and treatment decisions, over the course of our study it became clear that the majority suspected it did:

I have no doubt that [when] you make somebody DNAR it changes other aspects of their care… I try not to have too many patients with DNAR forms
done, for the reasons we’ve been talking about – that it changes people’s attitudes.
Consultant Physician, Acute Hospital

Out of the 28 semi-structured interviews conducted, for example, no one mentioned any positive impact beyond its intended remit. Of the 23 clinicians who did talk directly about whether a DNACPR status affected the wider care of a patient, seven thought it made no difference (two doctors and five nurses) in contrast to 16 who felt that it had a negative effect (10 doctors and 6 nurses). Some provided concrete examples of suboptimal care which they ascribed to the presence of a DNACPR order. Others discussed more generalized examples of how care might be affected. Of these, the majority stated that while it didn’t alter the care they personally gave, they felt that it affected the care provided by other members of staff:

I think the presence of the DNAR makes it a hell of a lot easier in their mind for them to say “actually probably not for that intervention, so we’ll just leave them be, do the best we can on the ward” and we’ll move on to the next patient.
Junior Doctor, Acute Hospital

Of the junior doctors interviewed, most thought that it affected nursing care in particular; nurses generally expressed the view that it affected the care provided by out-of-hours junior doctors, while consultants provided a more mixed response about who (other than themselves) might be responsible for variations in care. This identification of perceived changes in care by ‘other’ groups, although potentially skewed as a result of a general defensive strategy to not acknowledge changes in their own behaviour, nonetheless illustrates that the common view that those designated ‘DNACPR’ receive differential care. Potentially more interesting than this, it also could suggest that having a general sense that care is being affected is not necessarily driven by explicit and tangible forms of evidence, but rather a more general sense that is not predicated on definitive events.

Clinicians’ concern with ‘inappropriate’ resuscitation attempts

There is no doubt that the design and implementation of the DNACPR form does indeed provide clarity at the key time when CPR might be considered. In fact, staff frequently appeared to be relieved by the decision, which they felt removed ambiguity about a patient’s care.

However, our data for this theme overwhelmingly reflects clinicians recalling negative CPR experiences and the ways this shaped their views of current practice. For example, one senior
doctor admitted that she could remember instances when she had forgotten to complete a form and had come back after the weekend to face concerns that a particular patient, because they had lacked a DNACPR had had a crash team called out:

And I felt terrible, you feel terrible: poor 95 year old lady who’s had an attempt at resuscitation, probably inappropriately ... I often get...bleeped by nurses, particularly on the rehab ward where they don’t have much junior doctor cover, on a Friday afternoon and they say “Mrs So-and-so is not looking very well. Is she for resus?”

Consultant Physician, Acute Hospital

It was generally accepted that orders tended to be made on an ad hoc basis. There were therefore concerns about DNACPR instructions not being issued when they perhaps should have been with patients thereby remaining ‘for’ resuscitation inappropriately:

And you want to ask ‘You still want us to jump on their chest and, ok, not always break their ribs, but have a high possibility to, and actually have a high percentage that they’re not going to make it anyway?’ We do more damage, they’ve ended up with a lot more than they’ve started off with, and the body’s just worn out.

Senior Nurse, Acute Hospital

Almost all hospital doctors had been to an arrest call where a frail, elderly patient was resuscitated just long enough to endure the pain and indignity of the resuscitation attempt, only to inevitably succumb as the following describes:

We had [a patient] who we successfully resuscitated and then had to leave to die. You know, he is someone who clearly would have benefitted greatly from not having undergone an hour of CPR before being left to linger in his ward bed for another twelve hours before he finally passed away after we withdrew all his treatment. I think that if we had had a clear plan about where we were going with him I think he would have been spared a lot of pain and suffering.

Specialist Registrar, Acute Hospital

The impact of such futile resuscitation attempts for the patients, their families and other patients in the bay, as well as the clinical team is hard to measure.

**Discussions between patients and doctors**

As part of the study, we were able to review the medical case notes of all patients who were admitted during the first 3 months of observation. Of the 103 ‘DNACPR’ cases during this period, discussions about DNACPR with either patients or relatives were formally documented in 43 instances (41%). Of these documented instances, nearly three-quarters were with relatives alone (30/43), just under one-quarter with the patient alone (10/40) and the remainder (3/43) with both patient and relatives. The most common reason given for not discussing was documented as ‘poor comprehension’ on the part of the patient, encompassing both patients who were acutely confused and those who had long-standing dementia. There were only a few cases in which it was stated that the patient did not want to discuss the topic. In interviews, doctors stated time pressures and lack of benefit/potential distress as two main reasons for not initiating discussions about DNACPR.

Although guidance encourages doctors to at least consider whether the DNACPR decision should be made in consultation with patients and their relatives, doctors reported that discussions about resuscitation were often uncomfortable:

The biggest area of dissatisfaction that I hear about, from relatives mainly rather than patients, is the clumsy way that the subject was brought up… Even though they may fully agree with the decision…

Consultant Physician, Acute Hospital

However, although we were granted permission to interview patients who were documented in their medical record as having had a discussion about DNACPR, in practice we were only able to interview two patients during this period. When a patient was identified as having a discussion documented we asked their current doctor if they felt it was appropriate for us to approach that patient. Of the 13 ‘eligible’ patients some patients’ health had deteriorated since the discussion to a state that it was not felt appropriate to approach them for interview. Others felt too upset about the discussion, too tired or too unwell to take part in an interview. A significant minority did not recall a discussion with the doctor having taken place.

No official advanced care plans were presented by patients during the period of study, although one elderly patient had written on a piece of note paper, which was then stapled to her subsequent DNACPR form (Figure 4):

FOR DOCTOR
IF I ARREST
No Resus Please. It has been in my notes since 3 years ago so I know what I mean.
[Patient signature]
Thank you.
Discussion

Analysing the interviews and extended observation on two acute wards, five main themes surrounding DNACPR orders emerged: design and use, decision making, how the form affected care, concern over ‘inappropriate’ resuscitation and having discussions with patients/relatives. Our study overall suggests that the DNACPR form, while serving a useful purpose in immediately offering an instruction in the case of an emergency has associated unintended clinical repercussions that permeate other aspects of practice and care.

An unofficial ‘stop’ sign

DNACPR orders are common, and serve an important function in communicating a medical decision which needs to be accessed quickly in an emergency. However, their integration and use in the day-to-day care of patients poses several problems. The form’s bold existence at the front of the notes, serving as an extreme reduction in the recording of more nuanced clinical assessments, and the possibility that this single decision can pervade other aspects of care or to be misinterpreted were evident to us as researchers, and frequently recognized as problematic by the staff on the wards.

While a pragmatic choice, the colour red unavoidably has a range of secondary connotations: as a sign of caution, of danger, a ‘stop’ sign. The single instruction (DNR) cannot reflect the detail of complex assessments being made, nor provide guidance for all eventualities. And yet, it is precisely the requirement to have an unambiguous directive that can offer a rare kind of clarity. Ward staff frequently seemed to be palpably relieved if one had been completed for patients that they were concerned about, not only because a decision had been made, but because a range of imagined possibilities were instantaneously eradicated. As a result, the DNACPR form provides a clear source of stability across a diverse and constantly changing clinical team by ‘fixing’ a decision, and giving it a physical form. Moreover, the current DNACPR form’s clear definition of whose responsibility it is to make a decision about not attempting resuscitation—namely a doctor at ST3 level or above—is in marked contrast to the findings of previous research where confusion remained about whether it was appropriate for junior doctors to make DNR decisions.

The commonly used terms ‘futility’, ‘co-morbidities’ and ‘frailty’ are not particularly descriptive, but the nature of these terms may mean that the doctor did not think carefully or even ‘clinically’ about the patient’s situation. Because the act of collecting a form to complete could be said to already constitute the culmination of considerations, the completion of the text box may merely function as
a post hoc validation rather than a record of what was deliberated. As such, the DNACPR sheet does not represent a decision made in a single moment, but functions to bring to a close a period of assessment. Thus, though it might be read as a ‘stop’ sign for future treatments and intervention, it may also record a halting to the potentially on-going evaluations that parallel the living, and perhaps changing status of the patient.

A pervasive influence

The DNACPR form undoubtedly plays an active part in hospital care. However, perhaps one of its most significant characteristics is that it represents a simple, but relatively unusual, medical directive—to not do something. The default modus operandi of most clinical practice is to act: to ‘do’ something, whether that is to perform a procedure, administer medication or carry out a test. Although an apparently straightforward safeguard to prevent inappropriate resuscitation attempts, this characteristic exerts further diffuse but subtle influence.

The views of the majority of clinicians interviewed (16/23)—that the DNACPR might affect other aspects of care—tallies with our general observational findings and the existing literature in this field. DNACPR orders are often implicitly misinterpreted to mean that other care should not be given, and scenario studies have confirmed that both physicians and nurses modulate their behaviours when DNACPR orders are in place. Quantitative studies have shown that mortality is higher in those with DNR orders, independent of other variables. More recent research has shown that DNACPR orders continue to affect a range of treatments. Chen et al. carried out an observational study on 4537 patients admitted to 11 hospitals with acute heart failure, and found that patients with DNR orders were less likely to have a wide range of tests and interventions ranging from assessment of their left ventricular function to receiving anticoagulation therapies. Concerns that DNACPR decisions may be conflated with decisions not to give other treatments can prevent DNACPR orders being written: in the NCEPOD report into patients who underwent cardiopulmonary resuscitation, 76.9% of clinicians reported that they had not made a DNACPR decision because the patient was for ‘full and active management’.

It may be tempting to make crude interpretations of why no one interviewed thought that the presence of the form affected what they themselves did. Rather than assume it is a strategy to deny responsibility and blame others, it might alternatively be that all staff sensed the DNACPR form does have an effect, but that they could not identify this in themselves and so assumed its influence must lie elsewhere. In other words, the ubiquitous reaction suggests that it is hard to isolate which specific aspects of clinical treatment are directly influenced. Instead, it is the more diffuse, general and commonplace on-going activities of care that may change.

Overall, the relationship between the form in the notes, the patient in the bed and the staff on the ward is complex: the piece of paper both captures an important clinical decision by apparently rendering it unambiguous and available to other medical staff—yet in doing so, influences and alters a range of actions and decisions in subtle and unseen ways.

Difficult to discuss

In this study, we sought to understand DNACPR practice from as wide a perspective as possible. The interplay of the form with patients and relatives was part of this. In fact, despite approval to interview those individuals who had discussions about DNACPR, as well as being able to observe any related behaviours, it became clear that DNACPR orders operated in a domain largely separate from the patient and their family. As such the data to inform us simply were not there; patients and family appeared to be neither familiar with the meaning, function nor process of the form. In apparent contrast to this, there is a significant body of evidence that patients wish to have discussions about resuscitation. Even accounting for considerable selection bias towards patients who want to discuss such matters, the findings are so consistent that collectively they suggest that patients, if asked, do indeed want to be involved in such decisions. However, other work has shown that in practice few patients seek information about DNAR. Consistent with this, the General Medical Council (UK) (GMC)’s ‘Duties of a Doctor’ emphasizes that doctors should ‘work in partnership with patients’ and ‘... respect patients’ right to reach decisions with you about their treatment and care’. GMC guidelines suggest doctors should: ‘... carefully consider whether it is necessary or appropriate to tell the patient that a DNACPR decision has been made.... While some patients may want to be told, others may find discussion about interventions that would not be clinically appropriate, burdensome and of little or no value. You should not withhold information simply because conveying it is difficult or uncomfortable for you or the healthcare team’.

Despite this guidance, in practice, doctors frequently do not discuss resuscitation decisions with patients or feel uncomfortable doing so.
Costello\textsuperscript{25} suggests the absence of patient involvement in discussions could be a ‘protective strategy designed to alleviate further distress...’. Davey\textsuperscript{26} connects ‘non-involvement’ in discussions with the practice of waiting until a patient markedly deteriorates to issue a DNACPR order, stating ‘Another consequence of delay...is the lack of time for a “sensitive discussion” with the patient and/or their relatives...’. She also reports concerns about patients’ ability to understand the issues involved, and clinicians’ beliefs that such conversations would ‘cause needless distress’ as clinicians’ reasons for not involving patients in discussions.\textsuperscript{24}

The low rate of documented discussions during our observation period was consistent with this, although there were also other potential explanations: there may have been more ‘exploratory’ discussions which took place between physicians and patients or more casual or fragmented communications which did not translate into documentation.

At a time of political and cultural drive towards patient and clinician collaboration, perhaps summarized by the phrase ‘no decision about me, without me’,\textsuperscript{39} current DNACPR order practice exists in stark contrast to the prevailing tide. Moreover, although we do not have supportive evidence to justify, one could anticipate that the gulf between widespread lay perception of use of DNACPR orders and reality is wider than the public would imagine or tolerate. This is clearly a pressing area for future research.

**Limitations**

Like all qualitative research, the strength lies in providing a rich account of related themes. Further, by integrating different kinds of data, we have attempted to provide a more holistic account, in which interviews are interpreted in the context of direct ward observations over an extended period of time. Collection and interpretation of data was conducted with care and rigour, and on-going results were continually discussed among the entire research team. Given three of the team were clinicians and the other two were social anthropologists, reaching concordance regarding the overarching themes was itself a key means to establish methodological trustworthiness. However, clearly by being based on only two wards in a single hospital, specific details might not be generalizable.

Despite planning to interview patients (and potentially their relatives) who had had DNACPR orders completed after a discussion with a doctor, the low frequency of these discussions combined with the acuity of illness of the patients involved meant that only two such interviews occurred. This was deemed an insufficient number to draw out any reliable thematic results. As a result this data was excluded, leaving the clinicians’ perspective as the focus of the study. There is clearly further scope not only to investigate the views of patients and their relatives concerning DNACPR orders, but also the constitution and definition of the accompanying discussions, and how they attune with the understandings and expectations of those involved.

We also acknowledge that no on-ward resuscitation attempts were witnessed during the periods of fieldwork, although clearly three of the research team have first-hand experience as clinicians. While not directly key to the research aims or our findings, this limits our investigation by not providing an opportunity to talk directly to clinicians about a particular current case rather than generic views they hold about DNACPR orders.

This work was carried out as part of a larger grant which sought to explore the impact of an alternative to the DNACPR form. As such the research team did not come from a position of complete equipoise/neutrality. Care has nevertheless been sought to describe all the benefits associated with the use of DNACPR and embed such data within the context of the article, when such evidence was found.

**Conclusion**

In our study, it appeared that while the DNACPR form is recognized as serving a useful purpose in immediately offering an instruction in the case of an emergency, its influence permeated other aspects of practice and care. The use of the DNACPR form appeared to have a range of negative associations for clinical staff. In particular, staff were concerned that the quality of care was affected, a concern which has some credence given the literature. Yet during fieldwork it was not possible to identify particular changes in care even though there was a clear delineation between those patients who were and were not for resuscitation.

Moreover, the ad hoc use of the form and the variation in DNACPR use between individual doctors ensures that equity in considered decision making does not occur. Our study clearly shows the extent to which variation across a clinical team in DNACPR practice was driven by contextual issues such as timing, or if more junior colleagues happened to have prompted the issue, rather than factors pertinent to the individual patient. Perhaps as a result of these factors, discussions surrounding resuscitation are often awkward, and occur less frequently than recommended.
The material presence of the DNACPR form and its symbolic status extends much farther than might first be expected, interweaving questions of agency, the clinical imagination and, since it is permanently incorporated into a patient’s medical record, subsequent treatment expectations and decisions.

The findings in this article add to a mounting body of evidence suggesting that both the approach to, and documentation of, resuscitation decisions should be reconsidered and rigorously assessed. We have demonstrated the diverse ways that an apparently straightforward form can permeate everyday practice. In doing so, this study describes possible mechanisms to account for the established literature demonstrating worse outcomes for those with DNACPR orders. This study not only calls for changes in approach but additionally suggests DNACPR decisions should always be contextualized within a broader range of treatment options and clinical routines.

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**References**


