

MORAL Balance

An Ethical Framework to aid Medical Decision-Making

MORAL Balance Analysis 3

COVID 19 - Commencing CPR without PPE and implications for DNACPR communication

What is the medical decision you are trying to make?

Should CPR be delayed in a confirmed or suspected COVID-19 patient until healthcare staff are wearing PPE? i.e. Is the Resuscitation Council (in the context of COVID-19) correct that full PPE measures must be followed by staff prior to commencing CPR?

Make sure of the Facts

Outline the facts of the case and decision in question (e.g. diagnosis, prognosis, comorbidities, frailty, all treatment options, verbal or written statements, resources). Include degree of uncertainty if present.

Effectiveness CPR

- Cardiorespiratory arrest encompasses a wide range of pathologies, for which the anticipated mortality (and response to/utility of CPR) will vary significantly.
- The average survival-to-discharge rate for adults who suffer in-hospital arrest is < 20%.¹
- CPR is anticipated to be of greatest effectiveness where it is commenced with the minimum delay from onset of cardiorespiratory arrest.
- There is limited evidence for the utility of CPR in severe COVID-19 disease, however the mortality rate is likely to be very high.
- Some patients are dying with COVID-19 not because of infection. Arrest in such circumstances may carry a different prognosis and response to CPR (potentially better, potentially worse).
- Most survivors of cardiac arrest will need admission to critical care and require mechanical ventilation.

COVID-19

- It is currently estimated that COVID-19 prevalence may peak at 60-80% of the UK population. Asymptomatic and undiagnosed infection will become common in arresting patients.
- 10% of the confirmed cases of COVID-19 in Italy are in healthcare professionals. Unclear how and when they became infected.
- COVID-19 deaths in healthcare staff has occurred. Younger age has less mortality. Staff sickness or isolation (and therefore unavailable to work) a problem for safe staffing levels. CPR team will be drawn from front line clinical staff.

PPE

- Donning of PPE prior to contact with COVID-19 patients is estimated to take approximately several minutes (longer for larger teams of people).
- CPR is aerosol generating putting healthcare staff at risk of infection.²
- CPR scenarios are high stress and high intensity - high risk PPE failure

¹ https://www.ncepod.org.uk/2012report1/downloads/CAP_fullreport.pdf

² NHS England. COVID-19: Guidance for infection prevention and control in healthcare settings. Department of Health and Social Care (DHSC), Public Health Wales (PHW), Public Health Agency (PHA) Northern Ireland, Health Protection Scotland (HPS) and Public Health England; 2020.

Current Guidance CPR and COVID-19

- Updated guidance from the Resuscitation Council (in the context of COVID-19) stipulates that full PPE measures must be followed by staff prior to commencing CPR.³ There is an acknowledgment that this will delay onset of CPR: the risk of transmission to staff and the wider population is considered to outweigh the benefit from earlier resuscitation efforts.

Do Not Attempt CPR Orders

- Do Not Attempt Cardiopulmonary Resuscitation (DNACPR) orders provide clear instruction to healthcare teams in the event of cardiorespiratory arrest. They are used to prevent CPR attempts that would be contrary to the patient's best interests (in the form of a prior expressed wish, or anticipated futility).
- In a COVID-19 statement, The Resuscitation Council (UK) specifically recommends that "Patients for whom a 'do not attempt cardiopulmonary resuscitation' (DNACPR) and/or other similar decision is appropriate should also be identified early."⁴
- GMC Guidance:
 - In patients who lack capacity, family should be consulted (unless before losing capacity the person stated that this should not happen). In other words, as a family member, you should be made aware of their condition, their chances of survival and plans for their treatment, including decisions about CPR. You may be able to help the healthcare team to make the best decision for the person, by explaining what you know about their beliefs and likely wishes. However, unless you have been given specific legal power (e.g. Power of Attorney) to make decisions about this type of treatment for them you are not entitled to make such decisions and should not be asked to do so.
 - As a medical intervention, the decision to offer CPR is made at the discretion of the treating clinicians. As established within case law (England and Wales) there is no legal obligation upon a clinician to offer a medical treatment that is "futile or burdensome".⁵ However such decisions sit within a wider legal framework that includes Article 2 of the *European Convention on Human Rights* (ECHR): the right to life. GMC guidance⁶ (itself based upon case law) stipulates that where a patient asks for a treatment that treating clinician does not consider "clinically appropriate", the clinician is not obliged to provide this, but should offer a second opinion.⁷
 - GMC guidance states that where insufficient information is known about a patient (or their wishes) to make a DNACPR decision, that the presumption should be in favour of CPR.
 - GMC guidance stipulates that "decisions about setting priorities that affect patients [must be] fair and based on clinical need and the likely effectiveness of treatments, and are not based on factors that may introduce discriminatory access to care."⁸ It further stipulates that where decisions around allocation of limited resources are made, "You must take account of any local and national policies that set out agreed criteria for access to particular treatments and allocating resources, and make sure that these policies are available to clinical staff."⁹

³ Resuscitation Council (UK). Guidance for the resuscitation of COVID-19 patients in hospital. Resuscitation Council (UK); 2020.

⁴ Resuscitation Council UK Statement on COVID-19 in relation to CPR and resuscitation in healthcare settings [Internet]. Resus.org.uk. 2020 [cited 25 March 2020]. Available from: <https://www.resus.org.uk/media/statements/resuscitation-council-uk-statements-on-covid-19-coronavirus-cpr-and-resuscitation/covid-healthcare/>

⁵ Re J (A Minor) (Wardship: Medical Treatment) [1990] 3 All ER 930.

⁶ General Medical Council. Treatment and care towards the end of life. 2010.

⁷ Re J (A Minor) (Child in Care: Medical Treatment) [1992] 2 All ER 614; *Burke v GMC* [2005] EWCA Civ 1003.

⁸ GMC, Leadership and management for all doctors [p85]

⁹ *Ibid* [p87]

Outcomes of Relevance to the Agents Involved

Agents are anyone who has a moral stake in the outcome (e.g. patient, family, other patients both in the hospital and outside the hospital, hospital staff, and society). Try and outline what outcomes matter most to these agents, especially taking account of any conversations you have had.

Patient

- Benefit from potentially life-saving CPR efforts.
- Desire to avoid futile and burdensome interventions with no realistic chance of success.
- Sense of responsibility toward society and healthcare workers - not wanting to make others sick.
- Not to suffer.
- To be involved in decision that effect the,.

Patient's Family

- Patient to live.
- Trust in the treating clinicians, especially where they are not able to witness care directly.
- Ability of gaining a clear understanding of events, especially where distance from patient may contribute toward confusion, misconceptions, and anxiety.
- Impact upon grief response following death.
- Avoidance of potential transmission to themselves and others.
- A dignified death for the patient.
- To be involved in decisions that affect them and be offered explanation.

Other Agents

Healthcare staff

- Desire to save the patient's life.
- Desire to optimise outcomes for both individual patient at hand, and other patients (including potential future patients, e.g. the wider population) - maintain critical care resource
- Self-protection from infection and protect own families.
- Risk of compassion fatigue and burnout within clinicians strain on the basis of the above
- Perceived concern legal or complaint, where necessity dictates deviation from "standard practice"
- Helping patients have a "good death" - avoid burdensome and futile interventions (e.g. CPR where there is no realistic chance of success).
- Fear of being overwhelmed by numbers of patients e.g. DNACPR decisions do we have the time to explain to families as ordinarily required

Society

- Save lives
- Prevent further spread of Covid-19, e.g. from staff to patients, staff to their families + wider.

- Maintain safety of healthcare staff - less sickness - more available to work, death of health care staff in media may detrimentally affect desire of staff to keep working.
- Concern that clinicians acting fairly and consistently - following national recommendations and standards.

Level out the Arguments in a Balancing Box

Populate facts and outcomes into a Balancing Box which uses Beauchamp and Childress's four principles of medical ethics.

<p style="text-align: center;">Autonomy (what outcomes matter to the patient)</p> <ul style="list-style-type: none"> • Optimisation of chances of survival/recovery • Reassurance that they are not being overlooked in context of anticipated high workload • Minimised risk of transmission to family or healthcare workers • Desire to protect healthcare workers - maintain healthcare capacity for others • Not to suffer • To be involved in decisions. 	<p style="text-align: center;">Burden (what are the burdens and to whom)</p> <ul style="list-style-type: none"> • Omission of CPR where it could be of benefit could cause unnecessary harm - this includes cases of patients being incorrectly allocated to the COVID cohort, or patients with a more favourable prognosis • Unnecessary CPR attempts with low likelihood of success - increased stress and risk of transmission for staff • Delays in DNACPR decisions may result in unwarranted CPR attempts - harm to patient • Uncertainty of making "wrong decision" • Use of limited PPE resource • Risk of transmission infection to staff or others
<p style="text-align: center;">Benefit (what are the benefits and to whom)</p> <ul style="list-style-type: none"> • CPR in appropriate cases improves survival • Being seen to try. • Use of DNACPR where appropriate promotes control of ("natural") death • Communication of DNACPR decisions with patient is a standard for quality end of life care: allows patient and/or family to anticipate of potential outcome 	<p style="text-align: center;">Justice (fairness in the distribution of benefits and risks)</p> <ul style="list-style-type: none"> • Opportunity cost of resource allocation - multiple conversations requiring time of specialised clinicians; unnecessary CPR uses time (and PPE) of multiple healthcare workers • Importance of clear and consistent policy that avoids perception of unfairness - potential fairness issue of CPR being commenced on basis of immediate staff availability • Different people (e.g. families) have different communication/emotional needs - a blanket policy may overlook difference and fail to provide required support

Level out the arguments by seeing if you can balance the calls of each principle and judging if each fact or outcome is truly commensurate?

Consider asking three questions of the Balancing Box:

(i) Anything of particular note?

It is very difficult to predict either the utility/disutility of CPR across such a broad group of patients, or the effect that a delay in commencing CPR would have

(ii) Where is the greatest conflict?

Delaying an attempt to save the life of the patient with a low possibility of success vs infecting healthcare staff

(iii) Where is the greatest congruence (agreement)?

The priority of minimising risk of transmission is common across all areas. Even where the specific focus of this priority may vary (e.g. risk to self vs risk to family), there is agreement that an increased risk of transmission to any individual equates to an increased risk of transmission to all.

Document Decision (it can be helpful to use the framework to help guide documentation or place this sheet in the medical notes)

Utilisation of **earlier DNACPR decisions** would prevent unnecessary CPR attempts (alongside the associated benefits of reduced staff exposure and PPE use). This would be the least ethically contentious approach, and would have the benefit of being consistent with clearly recognised and established policy, thereby ensuring consistency (and defensibility) of the strategy, and minimising the anxiety and suspicions of patients, families, and staff.

There does not appear to be any strong ethical reason to relax the **GMC standard of a shared decision and explanatory model for DNACPR**, such that patient or family discussion should continue to occur. Until there are overwhelming numbers of deaths - and doctor shortage a genuine concern across all specialties, this standard should continue. Additionally, there are many highly trained specialist nurses (e.g. cancer, palliative care, organ donation) who could lead these conversations.

Determination of the threshold for initiating DNACPR discussions should remain at the discretion of individual staff. It would be both ethically, and legally contentious to set limits on the basis of simple demographics (e.g. age of 65 or above), however it may be that some form of disease severity scoring could be used to fairly and impartially indicate an additional cohort of patients for whom DNACPR decisions might be considered.

In this difficult time of national crisis and pandemic - with real infection risks to healthcare staff, society and national healthcare infrastructure - the recommendation by the Resuscitation Council that PPE MUST be worn before commencing CPR should be followed. What healthcare staff should be doing in preparation - especially in areas where more easily reversible cardiac arrests occur (e.g. emergency departments, coronary care units) is rehearsing swift, accurate, careful PPE donning.

Facts or Outcomes which might shift the Balance

1. It is a paediatric arrest?
2. Easily reversible cause arrest?
3. Cardiac compression but no airway intervention.
4. It is an arrest on coronary care where outcomes from CPR much improved?
5. The patient is considered very low risk of being COVID-19 +ve? Or is fourteen days in, so may no longer be positive.
6. More effective treatment of COVID-19 is developed?