Imperial College Healthcare NHS Trust

Cardiopulmonary Resuscitation (CPR) and Treatment Escalation Decisions in Adults

Module Study Guide

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0. Module Objectives

0.1. By the end of the e-learning module you will be:

0.1.1. Aware of the national guidance and legal framework relevant to CPR decisions.

0.1.2. Confident to approach a CPR and treatment escalation discussion with patients and/or those close to them.

0.1.3. Able to document a comprehensive CPR and Treatment Escalation Plan on Cerner.

1. Introduction to CPR

1.1. History

1.1.1. 1960 – CPR was introduced in the 1960s: "…to restart the heart after sudden cardiac arrest due to a rhythm disturbance, most commonly triggered by a heart attack."

1.1.2. 1970 – By the 1970s-80s: "…awareness of CPR had increased, and equipment was more widely available and portable. Attempts at CPR became more common in circumstances other than cardiac arrest due to a heart attack."

1.1.3. 2021: "CPR is often requested in circumstances where people are gravely ill and attempts to restart the heart would not work. We potentially subject people to a violent physical treatment at the end of their life, depriving them of a dignified death" or "we restore heart function for a brief period and subject people to a further period of suffering from their underlying terminal illness."

1.1.4. Over time, CPR has become misused and misunderstood.

1.1.5. Resuscitation Council UK Decisions relating to CPR. 3rd Ed 2014

1.2. Knowledge Check: What do you know about CPR?

1.2.1. Approximately what percentage of patients who suffer an inpatient cardiac arrest and are successfully resuscitated recover sufficiently to leave hospital?

- A. 75%
- B. 56%
- C. 44%
- D. 24%
- E. 15%

1.2.2. Answer: D. 24%

1.2.3. The National cardiac arrest audit 2019/20[1] showed that the overall survival to discharge following an in-hospital cardiac arrest is 23.9%.

1.2.4. An American study showed that 52% of patients aged over 65 had moderate to severe neurological disability at discharge after an in-hospital cardiac arrest.[2]

1.2.5. In predicted arrest in advanced cancer, survival is 0% (n=171) with CPR.[3]

1.2.6. [1] National cardiac arrest audit 2019/20, [2] Jama Intern Med 2013: 173(20)1-7, [3] Cancer 2001 Oct 1; 92(7): 1905-12

1.3. We also know that:

1.3.1. The burdens and risks of CPR include harmful side effects such as rib fracture and damage to internal organs.

1.3.2. There are frequently adverse clinical outcomes such as hypoxic brain damage and physical disability.

1.3.3. Remember, when a CPR decision is not made and a person's heart stops, the default position is to attempt CPR. This lack of decision-making can also deprive gravely ill people of a dignified death.

1.3.4. Treatment and care towards the end of life: good practice in decision making. GMC 2010.

1.4. **Knowledge Check: What do you understand about CPR?**

1.4.1. Select True or False to the following statements.

1.4.2. Question 1: 26% of those who arrest in hospital are alive a year later.

1.4.3. Answer 1: False – The correct figure is around 10%, i.e. about 50% of those that survived to discharge after an in-hospital cardiac arrest.

1.4.4. Question 2: 10% of those who arrest outside of hospital are alive a year later.

1.4.5. Answer 2: False – The correct figure is 5%.

1.4.6. Question 3: The chance of survival following a CPR attempt in patients who spend more than 50% of their time in bed is less than 4%.

1.4.7. Answer 3: True – Less than 4% of patients who spend 50% of their time in bed survive following a CPR attempt.

1.4.8. Question 4: Less than 2% of patients with cancer are successfully resuscitated when their condition is deteriorating, and the arrest is due to a pre-existing condition unresponsive to treatment.

1.4.9. Answer 4: True.

1.4.10. Question 5: We have seen that circumstances around the arrest and declining performance status are two of the factors affecting the success of CPR. Can you name a third factor?

1.4.11. Answer 5: A major factor is co-morbidity. The outcome is known to be poorer in the presence of pneumonia, renal and heart failure, sepsis and pre-existing hypoxia.

1.5. **Why making an appropriate CPR and treatment escalation decision is crucial**

1.5.1. They prevent futile and inappropriate attempts at resuscitation in those who are dying.

1.5.2. They allow a peaceful and dignified death.

1.5.3. They help to ensure the appropriate use of resources.

1.5.4. They ensure that decisions are made in a measured way and not in times of crisis.

1.5.5. They help patients and families to understand the seriousness of their condition, plan for the future, finish any outstanding business and to say goodbye.

1.5.6. They help ensure that the patients who are for CPR & treatment escalation are appropriately escalated if their condition deteriorates.

1.6. **So, why do we find CPR decisions so difficult?**

1.6.1. Uncertainty about the legal position and risk of medico-legal challenges.

1.6.2. Uncertainty about assessing capacity and decision making.

1.6.3. Concern that a patient and family have not accepted the prognosis and diagnosis.

1.6.4. Concern that a patient or family may think I was being negligent, even if it's clear that CPR would not be successful.

1.6.5. Uncertainty of the legislation concerning capacity issues and the Mental Capacity Act.

1.6.6. Uncertainty about what should happen if there is disagreement about the best course of action between patient or carer and the healthcare professional.

1.6.7. Uncertainty regarding who is allowed to make the decisions.

2. The key principles of CPR decisions

2.1. How familiar are you with the key principles related to CPR decisions?

2.1.1. Select True or False to the following statements.

2.1.2. Question 1: CPR is a medical treatment and therefore the decision of whether it may or may not be successful, and whether it should or should not be offered, is a medical one.

2.1.3. Answer 1: True – The decision of whether CPR will or will not be successful is a medical one. If it will not be successful, then as clinicians, our duty is to inform a patient with capacity (or, for a patient without capacity, those close to them) that the decision has been taken, and that CPR will not be performed.

2.1.4. Question 2: Where a cardiac arrest occurs unexpectedly, there is a presumption in favour of CPR.

2.1.5. Answer 2: True – If a person suffers a cardiac arrest unexpectedly, CPR should always be commenced until further information becomes available.

2.1.6. Question 3: If cardiorespiratory arrest is not predicted or reasonably foreseeable in the current circumstances or treatment episode, it is not necessary to initiate discussion about CPR with patients.

2.1.7. Answer 3: True – However, it is important to remember that if you know that a resuscitation attempt would be unsuccessful and is likely to subject your patient to an undignified death, then a CPR and treatment escalation decision is made and discussed in a timely manner as part of the patient's advance care plan.

2.1.8. Question 4: As healthcare professionals, we play a crucial role in supporting patients' participation in appropriate planning for their future care; this includes CPR and treatment escalation decisions.

2.1.9. Answer 4: True – Where a risk of cardiac arrest is identifiable, it is important that discussions are held in a timely manner and in advance, rather than in a crisis situation where the patient's ability to contribute to the decision-making process may be reduced.

2.1.10. Question 5: CPR decisions apply only to CPR.

2.1.11. Answer 5: True – It's a common misconception amongst the public that a DNACPR decision means that all other treatments will be withheld.

2.1.12. Question 6: CPR discussions are often better received if they are discussed as part of an advance care plan or treatment escalation plan.

2.1.13. Answer 6: True – It helps to put the CPR discussion in the context of the illness from which they are suffering, and to emphasise which other treatment options are or are not appropriate alongside this.

2.1.14. Question 7: A CPR decision can be based solely upon statistical evidence related to the illness from which the patient is suffering.
2.1.15. Answer 7: False – Each CPR decision must be made following a careful assessment of an individual's situation.

2.1.16. Question 8: CPR decisions should never be dictated by blanket policies and must be free from any discrimination. They should not be made on the basis of assumptions based solely on factors related to age, race, disability or a subjective view of a person's quality of life.
2.1.17. Answer 8: True – CPR decisions must always be individualised and never discriminatory or based upon assumption.

2.1.18. Question 9: In an acute illness, a CPR decision does not need to be reviewed once it has been made.
2.1.19. Answer 9: False – In an acute illness, the CPR decision should be reviewed frequently to respond to changes in a patient's condition, in either direction.

2.1.20. Question 10: Triggers to review a CPR decision include an unplanned or acute admission, an improvement or deterioration in a person's clinical condition or transfer between clinical teams or wards.
2.1.21. Answer 10: True.

2.1.22. Question 11: When a patient is acknowledged to be in the last weeks of life with an underlying, irreversible condition, the CPR decisions should be reviewed regularly.
2.1.23. Answer 11: False – In an end-of-life setting where there is an underlying progressive, irreversible condition, there may be little or no need for review.

2.1.24. Question 12: The ultimate responsibility for the CPR and treatment escalation decision lies with the most senior clinician, as the lead of the multi-disciplinary team, responsible for providing the person's care.
2.1.25. Answer 12: True – But there should be discussion of the decision, wherever possible, with other members of the healthcare team to ensure their agreement or consensus.

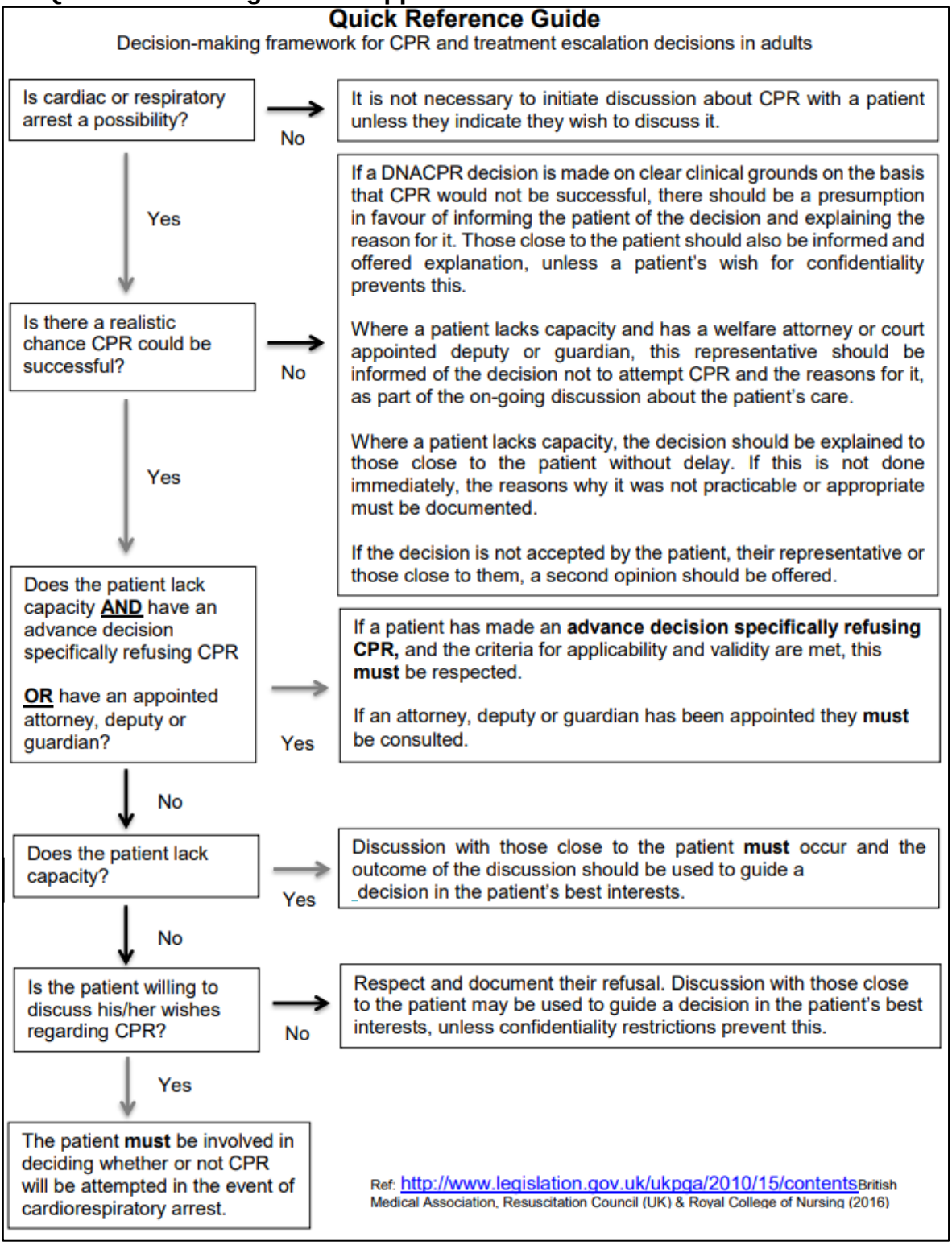
2.2. Making a CPR Decision

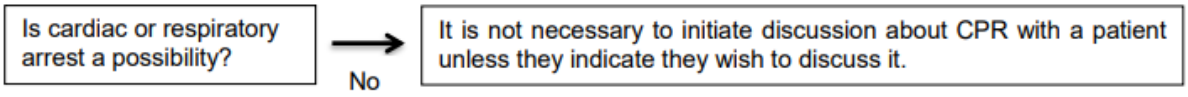
2.2.1. There are four possible foundations on which a CPR decision can be made. The foundation of the decision is important, as it will guide your approach to the CPR conversation.
2.2.2. Foundation 1: A person who is at an advanced stage of dying from an irreversible condition such that CPR will not be successful.
2.2.3. Foundation 2: A person who has an advanced illness and deteriorating health such that CPR will not be successful.
2.2.4. Foundation 3: A person for whom CPR is a treatment option but there is likely to be a poor or uncertain outcome.
2.2.5. Foundation 4: A person for whom CPR is quite likely to restore them to a quality of life that they would value.

2.2.6. For foundation 1 and 2, where CPR will not be successful: This is a medical decision – our duty is to inform a patient with capacity (or where they lack capacity, those close to them) that a decision has been made that CPR will not be performed.

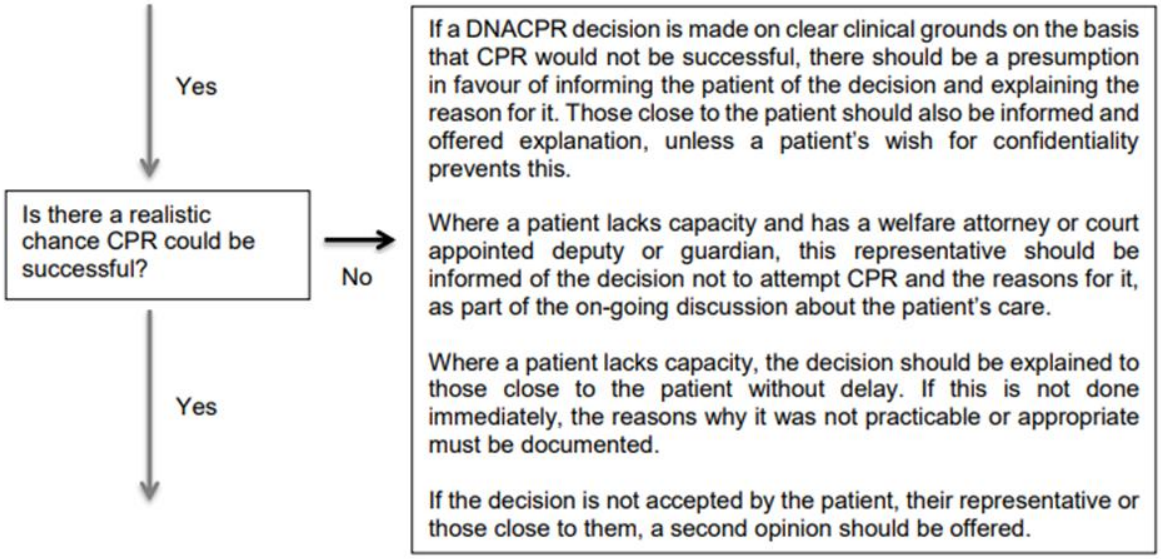
2.2.7. For foundation 3 and 4, where CPR has a chance of success: An informed conversation addressing the risk-benefit balance must take place, in order to help determine whether performing CPR is in a person's best interests.

3. Quick reference guide to support CPR decisions





3.1.1. When the chance of cardiac arrest is extremely low, there is no ethical or legal requirement to discuss CPR with a patient, or those close to a patient who lacks capacity, unless they indicate that they wish to do so.



3.1.2. Where there are clear clinical grounds that CPR will not be successful, it should not be offered or attempted. The clinical decision not to provide CPR and the reasons behind it must be explained to the patient or those close to a patient without capacity. This is a legal requirement (Tracey 2014).

3.1.3. Remember that if no decision is made re CPR then the patient by default will remain for CPR.

3.2. Tracey vs. Cambridge Hospitals NHS Foundation Trust

3.2.1. Janet Tracey was admitted to Addenbrooke's Hospital on 19 February 2011, after a road accident in which she sustained a serious cervical fracture. She had metastatic lung cancer and chronic lung disease with an estimated prognosis of 9 months.

3.2.2. She was intubated and ventilated and had two failed extubations. The family were informed that, if the third extubation failed, Mrs Tracey would be allowed to slip away, but there was no documentation of a discussion with Mrs Tracey despite her frequent questions as to what was happening to her and her acknowledged ability to communicate via a writing pad or a whisper.

3.2.3. A DNACPR form was written, and Mrs Tracey was successfully extubated and moved to the ward. The family subsequently discovered the DNACPR form and asked that it be removed, which was done.

3.2.4. Unfortunately, Mrs Tracey deteriorated further and, after discussions with the family (Mrs Tracey was clear at this point that she did not want to discuss resuscitation herself), a second DNACPR form was completed.

3.2.5. Mrs Tracey died on 7 March 2011 without attempted CPR.

3.3. **Tracey Judgement Summary Points**

3.3.1. A DNACPR decision potentially deprives a patient of life-sustaining treatment.

3.3.2. There should be a presumption in favour of involving the patient; not to do so deprives the patient of the opportunity to seek a second opinion.

3.3.3. Not to discuss or explain a decision about CPR with the patient would be in potential breach of Article 8 of the European Convention on Human Rights (the right to private and family life), which requires that individuals be notified and consulted with respect to decisions about their care.

3.3.4. If a clinician considers that CPR will not work the patient cannot demand it, but this does not mean that the patient is not entitled to know that the clinical decision has been taken.

3.3.5. Only if discussions about CPR are likely to cause physical or psychological harm to the patient may they be omitted; finding the topic distressing should not be a reason to omit them.

3.3.6. Where a patient lacks capacity and has an appointed welfare attorney or Lasting Power of Attorney (LPA) whose authority includes making potentially life-limiting decisions on their behalf, they must be informed of the decision and the reason behind it.

3.3.7. Where a person lacks capacity and does not have an appointed legal representative, those close to the person must be informed of the decisions made and the reasons behind them without delay. All attempts at contact should be clearly documented, as laid out in case law through Winspear 2015.

3.4. **Winspear vs. Sunderland Hospitals NHS Trust (2015)**

3.4.1. Sunderland Hospitals failed to call those close to the patient – his mother – to discuss his CPR status when he was assessed not to have capacity due to his known learning difficulties.

3.4.2. It was stated by the judge that:

3.4.3. "A telephone call at 3.00am may be less than convenient or desirable than a meeting in working hours, but that is not the same as whether it is practicable."

3.4.4. This case makes it clear that all practicable attempts must be made, and continue to be made, until the decision can be discussed with those listed as important to the patient.

3.4.5. "The High Court ruled the 28-year-old's human rights were violated by a failure to involve his mother when the DNR order was made at 03:00 GMT on 3 January 2011."

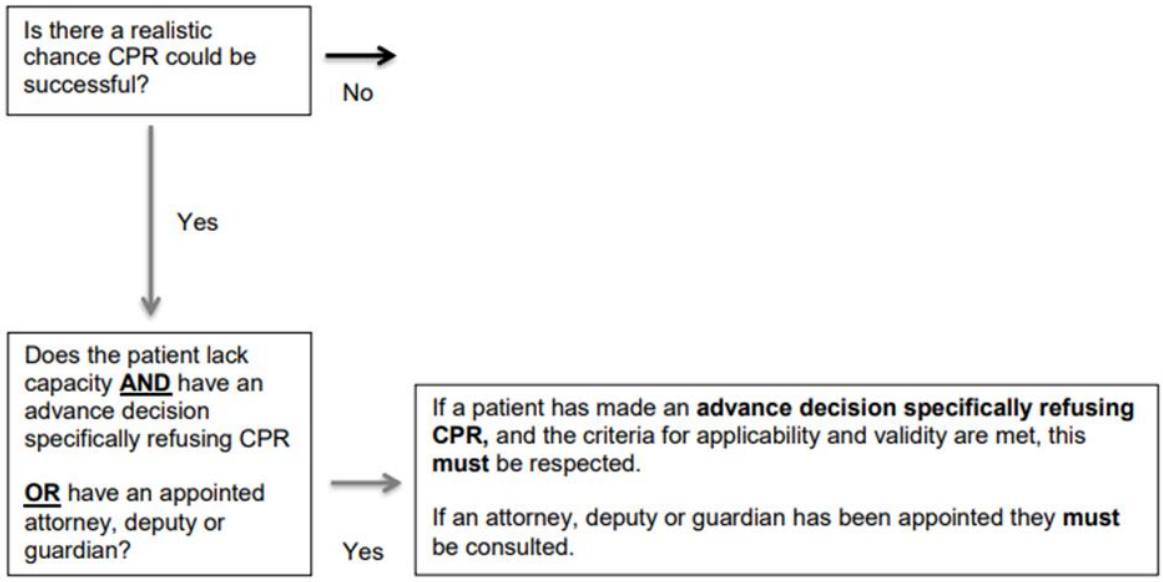
3.5. **CPR decision support**

3.5.1. Patients and those close to them have no legal right to request treatments that are clinically inappropriate, and this includes CPR.

3.5.2. If there is good reason to believe that CPR will not work, this should be explained sensitively and clearly using non-medical language.

3.5.3. If the patient and/or those close to them still do not accept the decision, then a second opinion should be offered or escalation to the Clinical Decisions Support (CDS)

considered.



3.5.4. If there is a chance, however small, that CPR may restart a person's heart and breathing for a sustained period of time, then the possible benefits of prolonging life must be weighed against the potential harms and burdens of CPR. This is not solely a clinical decision.

3.5.5. Where a patient lacks capacity but has a valid and applicable advance decision to refuse treatment (ADRT) that states they would not wish CPR even if their life were at risk, this is legally binding and must be adhered to.

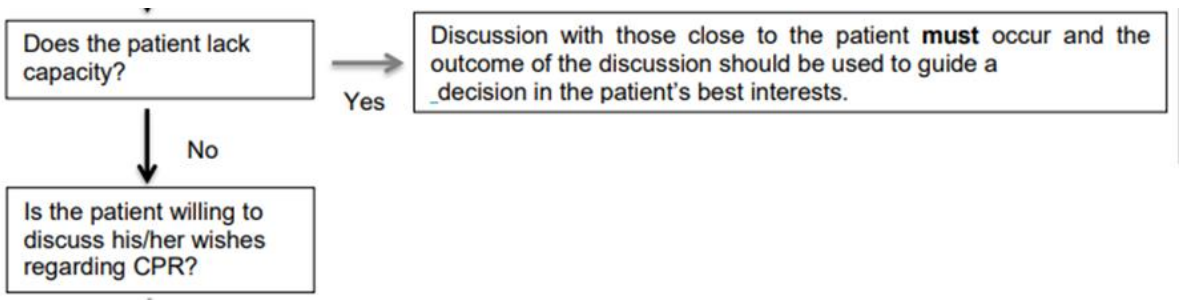
3.5.6. Where a patient lacks capacity but has a legal representative with the authority for life-sustaining decisions, then the decision should be discussed with them as if they were the patient themselves.

3.5.7. Where a person without capacity does not have a legal representative or an ADRT, then a decision must be made in their best interests.

3.5.8. The decision-maker must consider any previously expressed wishes and involve those close to the person in the best interests process.

3.5.9. Where those close to them do not hold an LPA or other document giving specific legal authority, they must understand that their role is to inform the decision-making process, rather than be the final decision-maker.

3.5.10. Where a patient lacks capacity and does not have anyone close to them or a legal representative to support the best interests process, consider asking an appropriate team, such as safeguarding or learning disabilities, for further advice."



3.5.11. If a patient with capacity declines to take part in the conversation, this should be respected and recorded. The decision should then be made in best interests, involving those close to the person if confidentiality allows.
3.5.12. In a situation where CPR may be successful and a patient has capacity and wishes to take part in discussions, decision making should be shared.

3.5.13. Question: What do you think should be included in a fully informed discussion?
3.5.14. Answer: What CPR involves (including the potential harm) and the likelihood it will restart the person's heart and/or breathing for a sustained period in them as an individual. The level of recovery that could be realistically expected if CPR were successful in them as an individual, including the likely need for ICU treatment after a successful resuscitation attempt and the potential need or appropriateness of any organ support. The person's views regarding CPR, including any previously expressed wishes. The likelihood of the person experiencing or suffering pain that they may find intolerable or unacceptable. The level of awareness a person may have for their existence or surroundings.

3.6. Further Considerations

3.6.1. In a situation where CPR may be successful if, after a fully informed conversation, the person wishes to remain for CPR, this should be respected.
3.6.2. In the unusual circumstance that the doctor feels unable to agree to the person's wish for an attempt at CPR, then a second opinion should be sought, or the CDS approached or the CDS approached to support with decision-making.
3.6.3. Adults with capacity are able to refuse any medical treatment, even if that results in their death, including CPR.

3.7. Provision of written information

3.7.1. The Imperial College Healthcare NHS Trust CPR and treatment escalation leaflet should be given to a patient (and those close to them, where appropriate) following a CPR discussion, to both emphasise the importance of the decision and to reinforce the information that has been provided in the discussion.
3.7.2. This is available on both the intranet and also as printed copies on the wards.

3.8. Previously recorded CPR decisions

3.8.1. A CPR decision does not automatically carry over from one hospital admission to another. Each time a person is admitted to the Trust, a new CPR decision must be considered and documented.
3.8.2. If a CPR decision has been documented previously, either within the hospital, within the community or on an electronic advance care plan, it is often enough to revisit that conversation briefly with the patient and/or those close to them, acknowledge that you have seen the previous CPR decision and that it will be honoured during this admission also. It can cause distress to re-discuss in full detail where this is not clinically necessary.
3.8.3. The recording of a CPR decision on a previous admission will be flagged to an admitting clinician by
3.8.4. Review prior decision appearing in the CPR status on the banner bar on Cerner.

3.9. **Decision making about attempting CPR**

3.9.1. Select True or False to the following statements.

3.9.2. Question 1: CPR should not be attempted if a DNACPR order is valid and applicable.

3.9.3. Answer 1: True.

3.9.4. Question 2: Where there is a reasonable chance of success and the patient has capacity, CPR should be attempted at the request of the Next of Kin (NOK) even if the patient has refused it.

3.9.5. Answer 2: False – The patient's own wishes must be respected.

3.9.6. Question 3: Where there is a reasonable chance of success and the patient does not have capacity, decision making is the responsibility of the NOK.

3.9.7. Answer 3: False – The responsibility lies with the consultant. The Mental Capacity Act requires the decision-maker to consult with those close to the patient, to see what the patient would have chosen themselves in this situation as part of the best interests process.

3.9.8. Question 4: Where there is no chance of success and the patient does not have capacity, the decision is the responsibility of the consultant.

3.9.9. Answer 4: True – In line with the best interest's process.

4. More than just a CPR decision

4.1.1. Select True or False to the following statements.

4.1.2. Question 1: Encourage prognostic conversations about appropriate treatments in the event of acute deterioration.

4.1.3. Answer 1: True.

4.1.4. Question 2: Provide a guide for future clinicians to inform decision making regarding treatment options when the patient's condition deteriorates, e.g. improves out of hours communication, and supports continuity of care.

4.1.5. Answer 2: True.

4.1.6. Question 3: Are disliked by junior doctors.

4.1.7. Answer 3: False – They are liked by junior doctors, especially out of hours, as they create a culture of thinking ahead.

4.1.8. BMJ Support Palliat Care 2012;2:A60.

4.1.9. Question 4: Minimise futile or burdensome interventions that are contrary to the patient's wishes.

4.1.10. Answer 4: True.

4.1.11. Question 5: Can facilitate understanding of a clinical situation with the patient and family.
4.1.12. Answer 5: True – They increase engagement and improve communication with the patient and family.

4.1.13. Question 6: Very few patients and relatives wish to participate in conversations about treatment escalation plans.
4.1.14. Answer 6: False – 96% of patients or relatives found the treatment escalation plan to be a good idea. J Med Ethics 2010;36(9);518-20

4.2. Treatment Escalation Plans

4.2.1. Encourage us to first consider and then discuss which treatments may or may not be appropriate for an individual in advance.

4.2.2. Conversations need to be framed and should include:
4.2.3. The patient's disease trajectory and likely prognosis.
4.2.4. Available treatment options to modify their disease.
4.2.5. Which elements of their condition are reversible, and which are not.
4.2.6. What other care options are available.

4.2.7. The types of treatments you may consider within a treatment escalation plan include, but are not limited to:
4.2.8. Level 3 care including dialysis, intubation and ventilation.
4.2.9. Level 2 care including non-invasive ventilation and inotropic support.
4.2.10. Level 1 care including IV antibiotics and IV fluids.

4.2.11. Treatment escalation decisions should be recorded on the joint CPR & treatment escalation form on Cerner.

4.3. This is not really about forms…

4.3.1. It's about a conversation.
4.3.2. We need to talk about DYING
4.3.3. Click on the following link to download more information: We need to talk about dying

5. Discussing a CPR decision

5.1. Most professionals have concerns about discussing DNACPR with patients and their families

5.1.1. "I'm worried about discussing these sorts of things with my patients because my colleagues may say something different."
5.1.2. "It can be hard to know when treatment is no longer beneficial to a patient."

5.1.3. “If I discuss DNACPR and such matters with a patient and their loved ones, they may get distressed and feel that they have only a few hours left. I don’t want to cause them that fear.”

5.1.4. “Accepting that a patient needs a DNACPR means accepting that I have failed them.”

5.1.5. “If I accept that a patient needs a DNACPR it means I’ve given up on them.”

5.1.6. “It is difficult to know when CPR would not work.”

5.2. These conversations are hard

5.2.1. But they can be made easier…

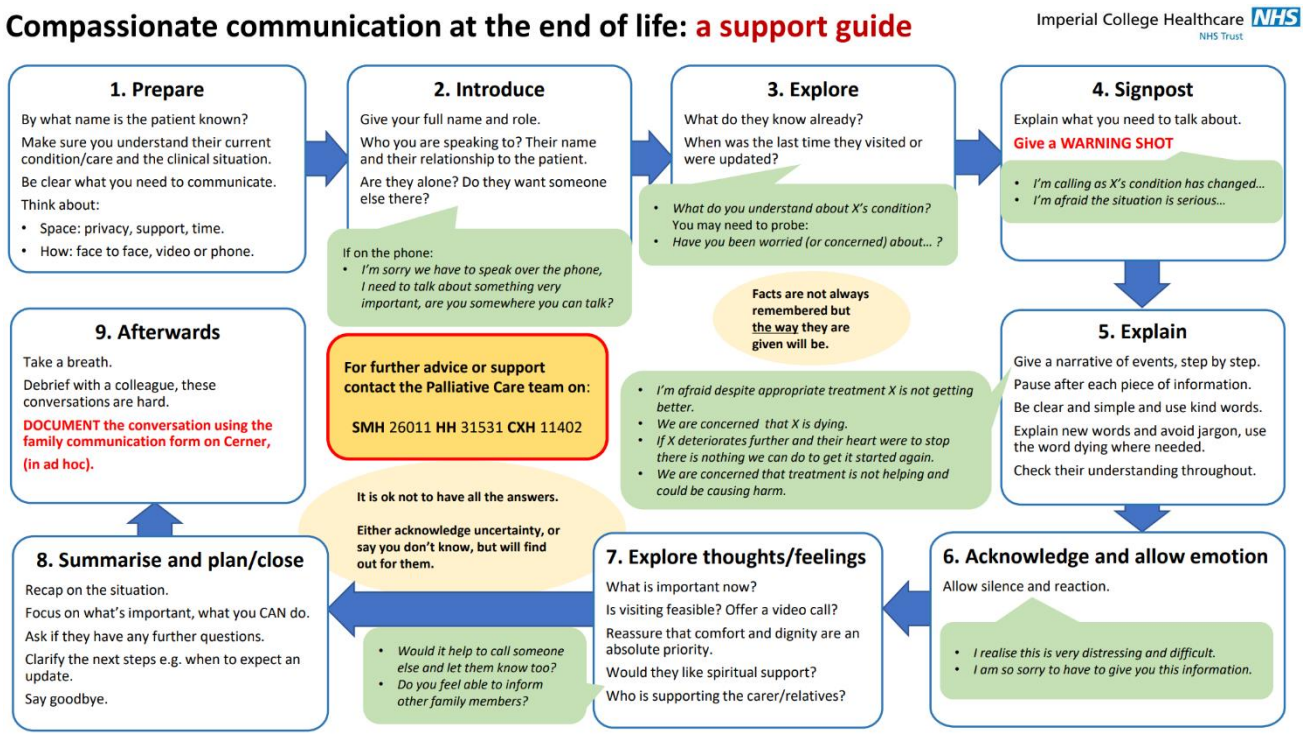
5.2.2. There is more than one way to have this conversation, and you need to find the approach that works best for you, as an individual.

5.2.3. We will share several examples of how to have this conversation with you.

5.2.4. Structure can help some people.

5.2.5. Click on the following link to download more information: [Compassionate communication at the end of life: a support guide]

5.3. Compassionate communication at the end of life: a support guide



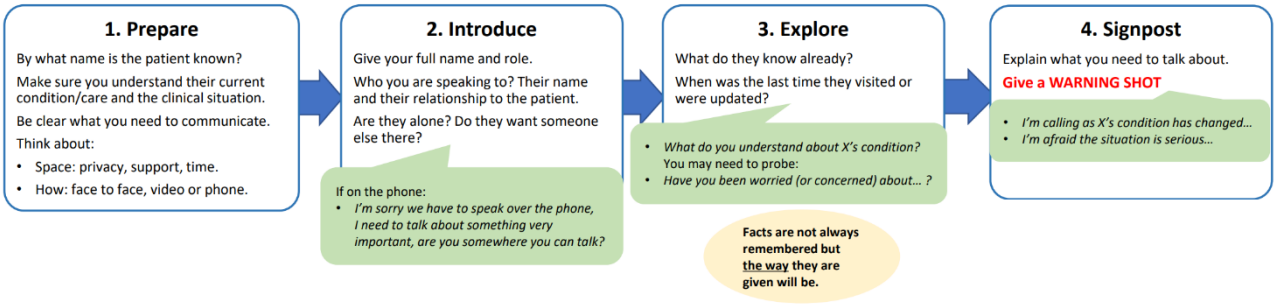
5.4. **Mr. Martin**

5.4.1. Mr Martin is a 90-year-old man with a background history of advanced dementia, frailty and IHD. Since the diagnosis of dementia five years ago he has been steadily declining, but this has become particularly apparent in the last 12 months.

5.4.2. He is now bed bound, with a QDS double-handed package of care, and is dependent for all ADLs. He is doubly incontinent and is beginning to have challenges with swallowing safely. He has lost approximately 10kg in the last three months.

5.4.3. He has been admitted with pneumonia for the second time in two months. He has been treated with IV antibiotics and his condition has now stabilised, although he remains off baseline.

5.4.4. A DNACPR decision has been made for Mr Martin whilst on the ward as, given his co-morbidities and frailty, it is thought CPR will not work to restart his heart if it stops beating.



5.4.5. Unfortunately, Mr Martin has been assessed not to have the mental capacity to allow him to be informed that this decision has been made and so Mr Martin's son, as his nominated next of kin, must be informed instead.

5.5. **Video 1: Watch the video whilst observing the framing of the conversation**

5.5.1. Question 1: What do you think about the way the conversation was initiated?

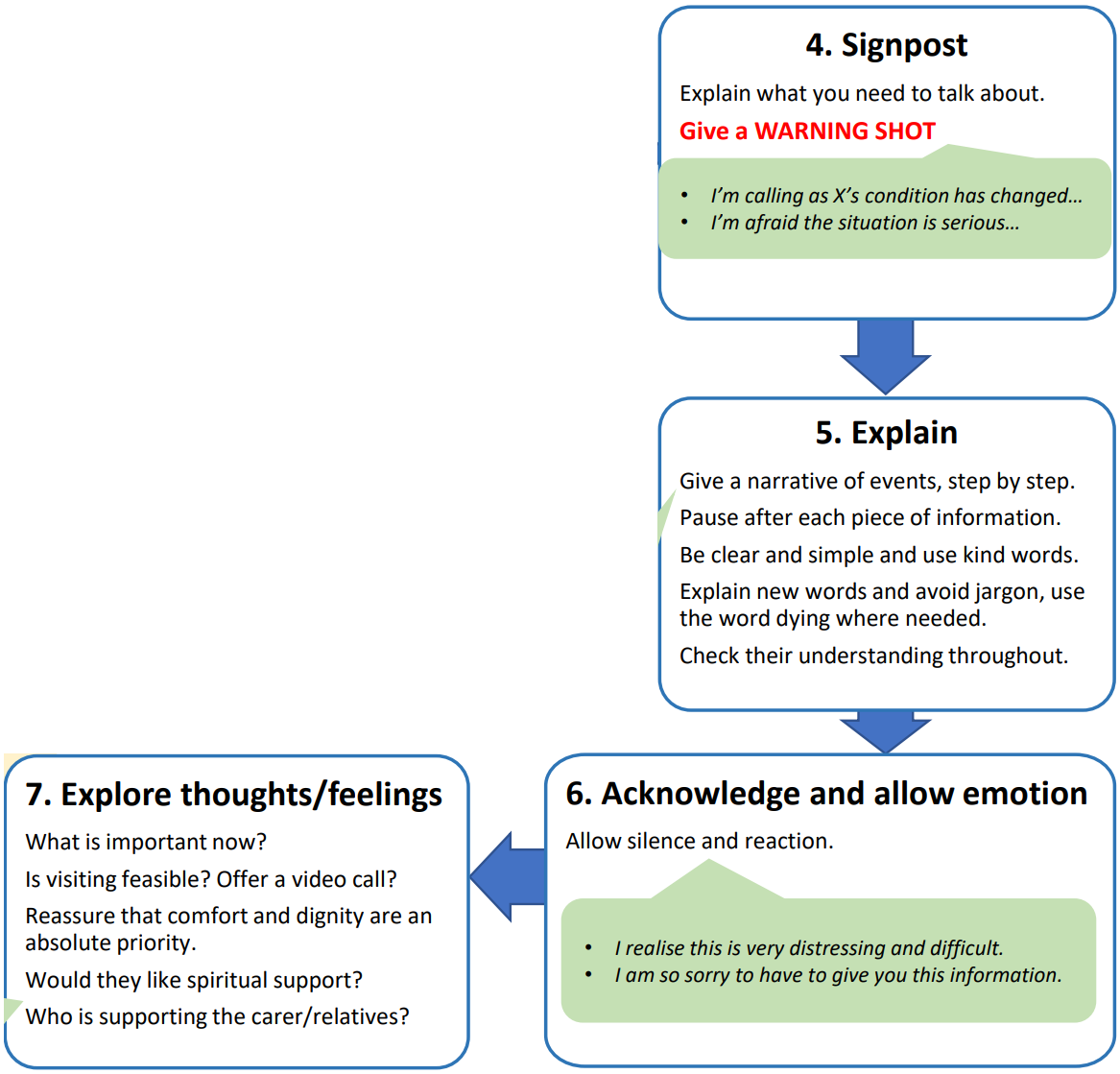
5.5.2. Answer 1: The conversation was initiated with a clear introduction and confirmation of who was being spoken to. The reason for the conversation was also clearly explained.

5.5.3. Question 2: What strategy did the clinician use effectively to frame the conversation?

5.5.4. Answer 2: The clinician first explored what Mr Martin understood about his father's condition and recent admission and then was able to build the conversation from this point, framing the whole conversation in the context of his father's illness. This is probably one of the most important steps in these conversations.

5.5.5. Question 3: Did you also notice that towards the end of this clip a warning shot was used? Can you remember how the clinician introduced this?

5.5.6. Answer 3: The clinician introduced the warning shot by asking the relative whether he thought his father was back to his usual level of functioning. She was then able to agree with him, that his father was not back to his usual baseline and then use this to build further and to give the warning shot.



5.6. **Video 2: Watch the video discussing CPR.**

5.6.1. Question 1: How did the clinician continue the conversation? Which strategies did she use effectively?

5.6.2. Answer 1: Following on from the warning shot, the clinician continued to frame the conversation within the context of Mr Martin's deteriorating health and the likelihood for repeat infections and further deterioration. The CPR conversation was then explained within the context of irreversible illness.

5.6.3. Question 2: What strategy did the clinician use to discuss the treatment of CPR?

5.6.4. Answer 2: The clinician explained the difference between CPR on television and CPR in reality, clearly explaining the burdens of treatment and why it would not work in Mr Martin's case. Select the NEXT button for examples.

5.7. **Explaining the reality of CPR – useful phrases**

5.7.1. "We are concerned that we are reaching a point where it is just too much for you/your loved one to manage, and we know if we reach a point where your/his/her heart were to stop, there is nothing we can do that is likely to get it started again."

5.7.2. "There is one more thing that I would like to talk to you about today… what our focus of care should be when they/you become much less well and their/your heart stops beating."

5.7.3. "We know that given your/your loved one's illness and the limited treatment options, that at some point in the future you/they will die from this illness and your/their heart will stop beating. When this happens, our focus of care will be for you/them to die in comfort and dignity with family around – rather than attempting to restart the heart, which we know will not work."

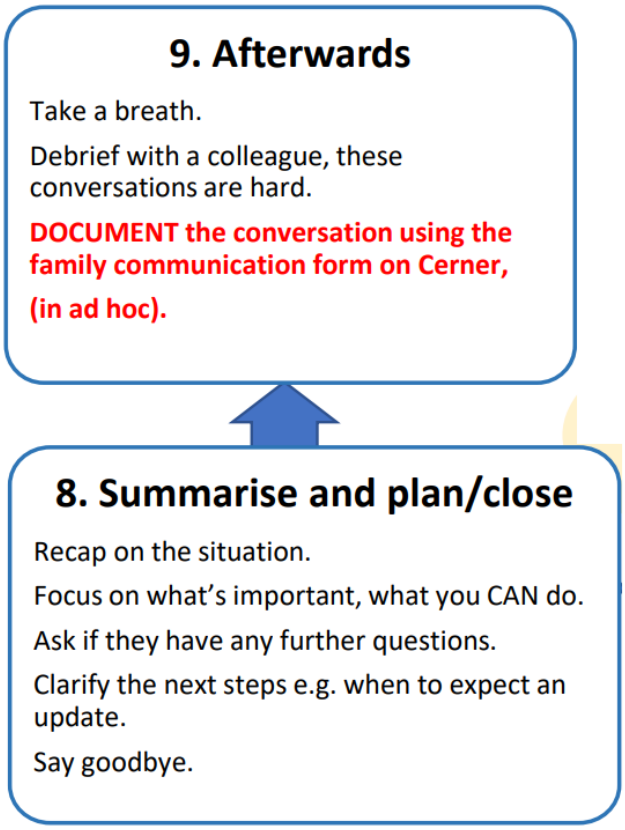
5.7.4. “Resuscitation might reverse a temporary problem with the heartbeat or breathing. If someone becomes so unwell that their heart stops beating or they stop breathing as a result of an advanced illness, it’s not temporary or reversible and therefore sadly resuscitation does not work.”

5.7.5. Question: Consider how the clinician followed up the question about other treatments posed by Mr Martin’s son and used this to frame the treatment escalation conversation.

5.7.6. Answer: The clinician used the opportunity this question presented to introduce the topic of other treatments being either appropriate or inappropriate. If required, you can introduce this yourself by saying:

5.7.7. “Our discussion so far has only been about CPR, but it is a good time for us to think together about other aspects of care.”

5.7.8. It is important to focus on what treatments you can give rather than what you can’t, e.g. treating infection or a focus on comfort and dignity.



5.8. **Video 3: Watch the video whilst thinking about how the conversation closed.**

5.8.1. Question: How did the clinician close the conversation? What do you think was done well?

5.8.2. Answer: The clinician informed Mr Martin's son what would happen next, who the conversation would be shared with and left an open door for further conversations if he or other family members had more questions or concerns.

5.8.3. Health professionals can unintentionally give patients and their families the impression that CPR is likely to be successful

5.8.4. Doctor: "We thought it was important to ask if you wanted to be resuscitated. What would you want to happen?"

5.8.5. Patient's Thought: "He'd only be asking me this if he believes it will work, so I'd better go for it" or "Of course I want to live."

5.8.6. Patient's Response: "I'd like you to try please."

5.9. **Self-Care**

5.9.1. CPR and treatment escalation conversations are challenging.

5.9.2. They can be emotional.

5.9.3. They can resonate with you on a personal level.

5.9.4. Good practice is to not have these conversations alone, but with another member of the healthcare team.

5.9.5. Always try and debrief afterwards with other professionals involved.

5.9.6. Reflect on the situation and conversation, what went well, what was difficult and what you may do differently next time.

5.9.7. Look out for yourself and colleagues emotionally.

5.10. **Mrs. Galway**

5.10.1. Mrs Galway is a 64-year-old lady with metastatic gastric cancer.

5.10.2. She is being seen in the oncology outpatient clinic for the results of her most recent scans.

5.10.3. The scan results confirm progression of her cancer after first-line chemotherapy.

5.10.4. The visit today is to discuss second-line chemotherapy options, and also to begin advance care planning conversations focused around CPR and treatment escalation decisions.

5.11. **Video 4: watch the next video of a CPR conversation**

6. Documenting a CPR and Treatment Escalation Plan on CERNER

6.1.1. Select True or False to the following statements.

6.1.2. Question 1: Clear documentation regarding CPR decisions is a legal requirement.

6.1.3. Answer 1: True.

6.1.4. Question 2: Poor documentation can adversely affect patient care if key decisions and discussions are not recorded properly.

6.1.5. Answer 2: True.

6.1.6. Question 3: The right place to record discussions and decisions on CPR and treatment escalation are in the body of the medical notes.

6.1.7. Answer 3: False – Discussions and decisions on CPR and treatment escalation should be recorded on the CPR & treatment escalation form where they can be easily found, rather than in the body of the medical notes.

6.1.8. Question 4: Documentation of CPR decisions is very carefully examined by regulatory bodies such as the CQC.

6.1.9. Answer 4: True.

6.1.10. Question 5: CPR & treatment escalation decisions can be made by doctors of any grade?

6.1.11. Answer 5: False – CPR & treatment escalation decisions must not be made by doctors below the grade of ST3.

6.2. **Video 5: Watch the video demonstrating how to complete a CPR and treatment escalation form in Cerner**

6.2.1. The video content is also available as a PDF, please click here to view it: Cerner

6.2.2. Click here view examples of completed CPR and Treatment Escalation Plans. These are for training purposes only.

6.2.3. Click here learn how to view, endorse or print a CPR and Treatment Escalation Form.

6.2.4. Remember:

6.2.5. A new CPR & treatment escalation form should be created on each new admission and every time there is a clinical change to the plan.

6.2.6. The modify button should only be used to add Consultant endorsement to a decision temporarily taken by a doctor of ST3 or above.

6.3. **Understanding the banner bar**

6.3.1. The CPR status of a patient is visible on the banner bar on Cerner.

6.3.2. It is important to remember that the banner bar does not reflect the treatment escalation status. You must view the CPR and Treatment Escalation Plan in full to see the treatment escalation decisions made.

6.3.3. Banner Bar Options:

- Blank Resus Status
- For CPR
- No CPR
- Review Prior Decision

6.4. **Blank Resus Status:**

6.4.1. There is no recorded decision, either past or present, regarding cardiopulmonary resuscitation and treatment escalation on Cerner.

6.4.2. Any deterioration requires appropriate escalation including 2222 if required.

6.5. **For CPR:**

6.5.1. For full cardiopulmonary resuscitation and treatment escalation.

6.5.2. Any deterioration requires appropriate escalation including 2222 if required.

6.6. **No CPR:**

6.6.1. Not for cardiopulmonary resuscitation but may remain for treatment escalation up to and including treatments within a level 3 environment.

6.6.2. Please check full details of decision on CPR & treatment escalation form.

6.7. **Review Prior Decision:**

6.7.1. Visible when a patient has had a CPR & treatment escalation decision recorded on Cerner on a previous admission but there is no decision for this admission.

6.7.2. Any deterioration requires appropriate escalation including 2222 if required.

7. Summary

7.1.1. You have now completed this module on cardiopulmonary resuscitation (CPR) and treatment escalation decisions in adults. Hopefully, you have found the information helpful, and you can take the key learning points forward into your clinical work.

7.1.2. In summary, the key points to remember are:

7.1.3. CPR and treatment escalation decisions are medical decisions.

7.1.4. CPR and treatment escalation decisions should be made within the context of an advance care plan and as early as is predictable within an individual's disease trajectory.

7.1.5. A CPR and treatment escalation decision must be made by a consultant and only remains valid for 48 hours if it is made temporarily by a ST3 or above.

7.1.6. The distinction between whether CPR will or will not work in an individual is very important:

7.1.7. Where CPR will not work, it should not be offered, and our legal duty is to inform people of the decision made.

7.1.8. Where CPR may work, our duty is to discuss the risks and benefits of CPR, and to reach a shared decision with the patient, potentially including family.

7.1.9. Where there is disagreement, a second opinion should be sought from a consultant colleague, or the decisions escalated to the CDS.

7.1.10. Documentation of all decisions regarding CPR and treatment escalation must be documented in full on the CPR form itself, not in the body of the medical notes.

7.1.11. Accurate completion of the CPR and treatment escalation forms is crucial, in particular recording the responsible decision-maker and details of the discussions with a patient or family member (in the event that a patient is assessed to lack capacity).

7.2. Further resources

7.2.1. All information in this training module can also be found on the end-of-life pages of the intranet.

7.2.2. For any questions, or further information relating to end-of-life care (including CPR and treatment escalation decisions), please email imperial.eolc@nhs.net.

7.2.3. Please visit the end of life care pages. You will need access to the Imperial College Healthcare intranet, and you may not be able to access the end of life care pages until after you have started work with Imperial.

7.2.4. This is the end of the module. To complete the assessment please return to the pre-assessment system.

8. Assessment

8.1. Question 1:

8.1.1. An 88-year-old man suffers with ischaemic heart disease, and end stage heart failure (NYHA stage 4 – echo 2 months ago showed an EF <10%). He has been admitted to hospital 3 times within the past 6 months with exacerbations of his heart failure and his condition is steadily deteriorating. He doesn't like being in the hospital and has expressed a wish to be cared for at home. He has been assessed to have the mental capacity to make decisions regarding his CPR and treatment escalation status.

8.1.2. Select all the correct statements and then select the SUBMIT button.

- A – There is a possibility he may suffer a cardiac arrest.
- B – A DNACPR decision is based on clear clinical grounds.
- C – The DNACPR decision and discussions should be documented in his notes and on the CPR & treatment escalation form in Cerner.
- D – A discussion should be had with him on whether he wishes to be resuscitated.

8.1.3. Answer 1: Statements A, B and C are correct. Statement D is incorrect.

8.1.4. In this situation CPR will not work to restart the heart. Our duty is to inform the patient that a DNACPR decision has been made, not to offer the option of CPR.

8.2. Question 2:

8.2.1. A 43-year-old woman has been diagnosed with an aggressive untreatable cancer. She is deteriorating rapidly and has been informed that she has a few weeks left to live. She has been assessed to have the mental capacity to take part in decisions about her healthcare.

8.2.2. Select all the correct statements and then select the SUBMIT button.

- A – If she does not wish to discuss resuscitation, the decision can be left and not made by the clinician.
- B – A DNACPR decision is based on clear clinical grounds.
- C – She should be informed of the DNACPR decision.
- D – There is a clear possibility that she will die in the next 12 months.

8.2.3. Answer 2: Statements B, C, and D are correct. Statement A is incorrect.

8.2.4. If a patient does not wish to discuss resuscitation, their consent should be sought to discuss this with their next of kin (NOK) instead.

8.3. Question 3:

8.3.1. A 69-year-old woman who was previously fit and well had a cerebrovascular accident five days ago and has been unconscious since admission.

8.3.2. Select all the correct statements and then select the SUBMIT button.

- A – It is possible that she may survive a cardiac arrest, it is unclear from the information provided.
- B – It is unclear from the information provided what her prognosis might be.
- C – You need to establish whether she has expressed any wishes regarding future care prior to losing capacity.

- D – The NOK's (Next of Kin's) wishes should be considered and adhered to.

8.3.3. Answer 3: Statements A, B, and C are correct. Statement D is incorrect.

8.3.4. Where a patient lacks capacity and there is no appointed Lasting Power of Attorney, decision-making lies with the responsible consultant, as the lead of the MDT (Multidisciplinary Team), using the best interests process.

8.3.5. The next of kin's wishes should be sought and discussed as part of the best interests process, but the overall decision remains a medical one.

8.4. **Question 4:**

8.4.1. An 82-year-old woman has fallen in her nursing home and sustained a fractured neck of femur. Her past medical history includes end-stage COPD for which she is on LTOT (long-term oxygen therapy) and can mobilise approximately 1-2 metres before being limited by breathlessness.

8.4.2. In hospital, she develops a severe chest infection, and her condition deteriorates rapidly. In the event of a cardiopulmonary arrest, resuscitation is unlikely to be successful.

8.4.3. Select all the correct statements and then select the SUBMIT button.

- A – CPR is unlikely to be successful – a DNACPR decision is based on clear clinical grounds.
- B – If she has capacity, a discussion should take place with her as to whether she would like CPR attempted.
- C – If she has capacity, a discussion should take place with her regarding treatment for her chest infection, e.g. antibiotics.
- D – If her mental capacity is in question, an assessment needs to be made, and the outcome documented.
- E – All treatments should be withheld as she has a DNACPR decision in place.

8.4.4. Answer 4: Statements A, C, and D are correct. Statements B and E are incorrect.

8.4.5. A DNACPR decision only applies to CPR. A patient may be DNACPR but still be receiving other treatments, and the treatment escalation plan should be looked at to find this information.

8.4.6. In this clinical scenario, CPR will not work. Our duty is to inform a patient with capacity that a DNACPR decision has been made, rather than offer it as an option.

8.5. **Question 5:**

8.5.1. A 60-year-old man with multiple sclerosis is admitted to hospital with unstable angina. On admission, he tells staff that he does not want to be resuscitated, and he has been assessed to have the mental capacity for this decision.

8.5.2. What considerations must be made before a DNACPR decision is made?

8.5.3. Select all the correct statements and then select the SUBMIT button.

- A – It is possible that he may survive a cardiac arrest.
- B – The benefits and burdens of CPR should be discussed with him before he makes a decision.
- C – The clinician should complete a DNACPR as requested without question.
- D – All discussions should be documented, including details of an assessment of mental capacity.

- E – The clinician should refuse a DNACPR as there is a clear possibility he may survive a cardiac arrest.

8.5.4. Answer 5: Statements A, B, and D are correct. Statements C and E are incorrect.

8.5.5. The clinician should discuss the benefits and burdens of CPR with the patient, ensuring that they are fully informed before making a decision.

8.5.6. Adult patients with capacity are able to refuse any medical treatment, including CPR, even if that results in their death.

8.6. **Question 6:**

8.6.1. A 30-year-old man is brought into the emergency department after breaking his leg playing rugby.

8.6.2. Select all the correct statements and then select the SUBMIT button.

- A - All people should be asked on admission what their views are on resuscitation.
- B - It is inappropriate to instigate discussions regarding DNACPR.
- C - He is unlikely to suffer a cardiac arrest.
- D - CPR should not be attempted unless a person asks for it.

8.6.3. Answer 6: Statements B and C are correct. Statements A and D are incorrect.

8.6.4. This person is unlikely to suffer a cardiac arrest and it would be inappropriate to instigate discussions regarding DNACPR.

8.6.5. If there is no CPR decision present and a person suffers a cardiac arrest, CPR must be performed until an appropriate assessment has been made.

8.7. **Question 7:**

8.7.1. A 79-year-old woman with a new diagnosis of dementia is admitted to hospital with an NSTEMI. It is considered appropriate to make a decision regarding CPR as her condition is quite unstable during the first 24 hours of her admission. Although her memory is impaired, she is still physically active, walking 2-3 miles each day with her husband, and it is felt that CPR is likely to be successful.

8.7.2. Select all the correct statements and then select the SUBMIT button.

- A - Establish whether she has capacity and document all details of assessment.
- B - If she is assessed not to have capacity, establishing whether she has any previously expressed wishes is important.
- C - If she is assessed not to have capacity, establishing whether an LPA has been appointed with the authority for decisions regarding life-sustaining treatment is important.
- D - A DNACPR form can be completed without any discussion as she probably doesn’t have capacity.
- E - A DNACPR form can be completed based on clinical futility due to her dementia.

8.7.3. Answer 7: Statements A, B and C are correct. Statements D and E are incorrect.

8.7.4. It is important to determine whether a person has capacity and to document the outcome of the assessment made specifically around the decision of CPR.

8.7.5. A diagnosis of dementia is not enough to base a CPR decision upon.

8.8. **Question 8:**

8.8.1. Regarding CPR & treatment escalation decisions:

8.8.2. Select all the correct statements and then select the SUBMIT button.

- A - Documentation of a CPR & treatment escalation decision in the medical notes instead of on the CPR & treatment escalation form is acceptable.
- B - Only doctors of ST3 and above may make CPR & treatment escalation decisions.
- C - An assessment of a patient's mental capacity, specific to the ability to make a CPR & treatment escalation decision, must be completed and documented every time a decision is made.
- D - If a person is assessed to lack the mental capacity to be informed of the CPR decision themselves, there is a requirement, as per Winspear 2015, to inform someone close to them instead.

8.8.3. Answer 8: Statements B, C and D are correct. Statement A is incorrect.

8.8.4. Full documentation of the CPR & treatment escalation decision and the conversation surrounding it must be completed on the CPR & treatment escalation form itself, where the narrative is easy to find in an emergency situation. When this documentation sits in the body of the structured notes, it is not easily accessible if required urgently.

8.9. **Question 9:**

8.9.1. Regarding the use of Cerner for CPR & treatment escalation decisions:

8.9.2. Select all the correct statements and then select the SUBMIT button.

- A - When the banner bar reads "review prior decision," this means that a CPR & treatment escalation form has been completed on a different encounter in Cerner.
- B - The junior doctor recording a CPR & treatment escalation decision on behalf of a Consultant or ST3 and above must make sure to record the decision-maker's name rather than their own at the bottom of the CPR & treatment escalation form.
- C - When the banner bar reads "no CPR," this means you do not have to escalate a patient if they deteriorate.
- D - A junior doctor can add the consultant endorsement of a CPR & treatment escalation plan on their behalf.

8.9.3. Answer 9: Statements A, B and D are correct. Statement C is incorrect.

8.9.4. The patient may not be for CPR, but the banner bar does not tell you anything about their treatment escalation plan. You must access the full CPR & treatment escalation form for further information regarding the escalation status and act accordingly.

8.10. **Question 10:**

8.10.1. Communicating CPR & treatment escalation decisions:

8.10.2. Select all the correct statements and then select the SUBMIT button.

- A - CPR & treatment escalation conversations are best framed within the context of an end-of-life conversation and by explaining what is and isn't reversible within their condition.
- B - CPR & treatment escalation conversations are best kept as short as possible for the person and/or those close to them's benefit.
- C - It is important within the conversation to acknowledge and allow the emotion of the person and/or those close to them.
- D - As the conversation is closed, it is important to recap key points and confirm next steps, e.g. when you may next meet.

8.10.3. Answer 10: Statements A, C and D are correct. Statement B is incorrect.

8.10.4. Although these conversations can be challenging, it is important to take the time to discuss things clearly, concisely, and at the pace the person and those close to them require. Doing it well once will save lots of distress and time in the future.