

Ref number	Author	DNACPR related aim	Hypothetical or actual experience	Setting	Participants	Study design	Quality rating	Main CPR related findings
35	ACKROYD, R. RUSSON, L. and NEWELL, R. (2007)	To investigate oncology patients and their relative's views regarding whether resuscitation needs to be discussed with them and how their views compare with those of the oncologist involved in their care	Hypothetical	Hospital	Patients and relatives	Quantitative - questionnaire	Moderate	<p>Patients and their relatives wanted to be involved in the discussion of resuscitation.</p> <p>Only 32% of patients and 28% of relatives wanted the doctors to make the final decision.</p> <p>The best way of addressing the issue of CPR was through direct discussions between patient, doctor and next of kin.</p> <p>Cancer patients were not deterred from 'wanting CPR' even when told of the low survival rates.</p>
42	ALBARRAN, J. MOULE, P. BENGER, J. et al (2009).	To compare the preferences of patients who survived resuscitation with those admitted as emergency cases about whether family members should be present during resuscitation	Both	Hospital	Patients	Case control study	Moderate	<p>The majority of patients want healthcare professionals to provide family members with an opportunity to be present during resuscitation. Patients should be routinely asked about their preferences for Family Witnessed Resuscitation (FWR). Those who had been resuscitated were more likely to want FWR.</p>
25	COHN S, FRITZ ZBM, FRANKAU JM, LAROCHE CM, FULD JP, et al (2013)	To present a rich qualitative description of the use of the DNA/CPR form in a hospital ward setting and explore what influence it has on the everyday care of patients	Actual	Hospital	Mixed - Health professionals and patients	Qualitative - interviews and observation. Case note review	High	<p>The study identified a range of ways in which DNA/CPR orders influence ward practice beyond dictating whether or not cardiopulmonary resuscitation should be attempted. Five themes encapsulated the range of potential impacts:</p> <ul style="list-style-type: none"> <li>• The specific design and primacy of the form</li> <li>• Matters relating to clinical decision making</li> <li>• Staff reflections on how the form can affect care</li> <li>• Staff concern over inappropriate resuscitation</li> <li>• Discussion with patients and relatives about DNA/CPR decisions.</li> </ul> <p>While the DNA/CPR form served a useful purpose, its influence negatively affected aspects of clinical care.</p>
40	COWEY E., SMITH L.N., STOTT D.J. et al (2015).	<p>(1) To identify family and health-care worker perceptions of an end-of-life care pathway for patients who die after acute stroke.</p> <p>(2) To determine whether patients with fatal stroke judged to require an end-of-life care pathway differ from patients with fatal stroke who die without introduction of such a pathway.</p>	Actual	Hospital	Mixed - Relatives and health-care professionals	Mixed method – Qualitative interviews and case note review	High	<ol style="list-style-type: none"> <li>1. Negotiating - Families were commonly involved in the decision to use the Liverpool Care Pathway (LCP), providing information about patients' treatment preferences.</li> <li>2. Patients' preferences - Around half of relatives (n = 9) felt responsible for some aspects of clinical decision-making on issues such as LCP implementation and resuscitation</li> <li>3. Relatives expressed discomfort and dissatisfaction when excluded from, or were overly responsible for, decision-making</li> <li>4. Care could be negotiated and families had the</li> </ol>

								power to alter the nature or timing of interventions, temporarily.
31	COX, K. WILSON, E. JONES, L. et al (2007).	To investigate the experience of discussing resuscitation decisions in an oncology setting from the perspectives of patients, their families and health care professionals.	Actual	Mixed	Patients	Qualitative - interviews	High	<p>Patients understood that they had been involved in a discussion about resuscitation. Resuscitation was viewed as something to do with the future progress of their illness.</p> <p>Discussions should not be held if someone was newly diagnosed or had recently commenced treatment. Relatives felt that discussions should take place much closer to death. Time and privacy during the discussion was valued.</p> <p>Patients want honesty and straightforwardness.</p>
24	FRITZ, Z., & FULD, J. P. (2015).	To develop an alternative approach to DNACPR discussions	Hypothetical	Hospital	Mixed; patients, clinicians, economist,	Adapted Delphi method - Interviews and focus groups.	Unable to appraise	<p>Consensus was achieved that the new approach should: be universal; have discussions and clinical conditions documented first; clarify goals of overall treatment (active treatment or optimal supportive care); contextualize the resuscitation decision among other treatment decisions; have a free text box for 'opting out' of invasive treatments, rather than tick boxes; be green; be limited to one page.</p>
27	GABER, K. BARNETT, M. PLANCHANT, Y. et al (2004).	To determine the views of patients with COPD towards cardiopulmonary resuscitation (CPR) and in hospital ventilation	Hypothetical	Hospital	Patients	Quantitative - survey	Moderate	<p>64/65 patients who completed the post-satisfaction survey agreed that CPR and ventilation should be discussed with all patients. 48/100 wanted CPR, NIV and IV. 19/100 did not want CPR but wanted NIV/IV.</p>
26	GORTON, A.J. JAYANTHI, N.V. LEPPING, P. et al (2008)	To determine patients' attitudes regarding discussing DNAR before they are critically ill	Hypothetical	Hospital Out-patient clinic	Patients	Quantitative - Prospective questionnaire based survey	Moderate	<ol style="list-style-type: none"> <li>78% of the patients expressed a desire to be consulted regarding their resuscitation status yet 95% had not had any kind of discussion.</li> <li>90% of the respondents said they would not find a discussion of their resuscitation status upsetting.</li> <li>14% would like to have the discussion after they became critically unwell</li> <li>87% of patients would like their relatives to be involved in discussion of their resuscitation status should they become critically ill and unable to hold such a discussion.</li> </ol>
39	HIGGINSON, I. J., RUMBLE, C., SHIPMAN, C. et al (2016)	To explore the nature and patterns of decision-making processes during the whole trajectory of ICU admissions	Actual	Hospital	Family members/close friends	Qualitative - Observation, interviews, review of medical records.	High	<p>Families did not necessarily want to make medical decisions because they felt they lacked sufficient knowledge.</p>
29	JOHNSON, H. and NELSON, A. (2008)	To determine the acceptability and understanding of a patient information leaflet about CPR	Hypothetical	Hospice	Patients	Qualitative - interviews	Moderate	<p>The leaflet was considered acceptable but felt that it should be followed by an individualised discussion including prognosis and led by a doctor known to the patient. A leaflet, prior to discussion is a good</p>

		given to inpatients and day-unit patients in one hospice, and to seek patients' views on communication about resuscitation						starting point. Discussion should focus on patient's knowledge of prognosis, goals for the future, desire for life prolonging treatments, information about the risks involved and the low chance of success.
41	LIVINGSTON, G. LEAVEY, G. MANELA, M. et al (2010)	To identify common difficult decisions made by family carers on behalf of people with dementia in order to produce information for family carers about overcoming barriers.	Both	Community	Carers	Qualitative – interviews and focus groups	High	1. Quality of life was important to the decision. 2. Discussions about end of life care were often influenced by experiences with other people they had known with dementia or other illnesses. 3. Sharing the decision with family and friends was helpful. The paper describes this 'family cohesion' as a facilitator to making decisions. The quotes in this paper show that families did find this a difficult decision.
36	LIVINGSTON, G. LEWIS-HOLMES, E. PITFIELD, C. et al (2013)	To improve end-of-life care for people with dementia in a care home by increasing the number and implementation of advanced care wishes	Actual	Care home	Mixed - family members and staff	Mixed methods - Qualitative interviews with staff/case-note review and post bereavement interviews with family carers	High	1. Many more residents had documented the discussion of advance care wishes including DNR orders after the intervention than before; a 500% increase and more than three quarters (previously less than half) died in the care homes; 2. Bereaved relatives were more satisfied with end-of-life care; more likely to report consultation regarding decisions and being supported and felt end-of-life symptom relief was either unchanged or improved. 3. Frequent themes from the qualitative interviews with family were: Lack of coordination around end-of-life care.
38	MCMAHON-PARKES, K. MOULE, P. BENGER, J. et al (2009).	To explore the views and preferences of resuscitation survivors and those admitted as emergency cases, as to whether family members should be present at their resuscitation	Both	Hospital	Patients	Qualitative - face to face interviews	High	Overall patients thought there were benefits to FWR: that the relative could 'be there' and 'for the patient' - that the presence of family might inspire survival and courage. Patients expected families to act as advocates but some questioned the appropriateness of this when families may not be thinking straight at that time and able to make rational decisions and aid closure for the family.
28	POLLOCK, K., WILSON, E., & NATIONAL INSTITUTE FOR HEALTH RESEARCH. (2015).	To investigate how patients, their relatives and health professionals initiate and experience discussion of ACP and the outcomes of advance discussions in shaping care at the end of life	Actual	Community	Mixed - patients, carers and health professionals	Qualitative longitudinal - multi-perspective case studies using interviews	High	Anyone with a good relationship to the patient and family (i.e. clinician/specialist nurse, GP) should initiate discussion – this may be several people, across sectors, if it's relevant. Discussions should be flexible, ongoing and iterative. There was discussion around the triggers to initiate the ACP. Discussions are often left too late and are clustered at EOL. Discussions should be straightforward, direct and well documented
44	OBOLENSKY, L. CLARK, T.	Evaluation of patient and relative experiences of the	Actual	Hospital	Patients	Prospective quantitative and	Moderate	Patients think the TEP is a good idea (96% of patients and relatives). Only 34% of patients were

	MATTHEW, G. et al (2010)	TEP (Treatment Escalation Plan)				qualitative evaluation		made anxious talking about TEP.
34	RAY, R., A. BROWN, J. and STREET, A., F. (2014)	To examine the ways family caregivers of people living with motor neurone disease (MND) experienced the dying of their relative and to identify how health practitioners can better prepare families for end-of-life care	Actual	Community	Family caregivers	Qualitative - Secondary data analysis	High	<p>Planning for EOL care: It was seen as harmful if carers were unprepared for the patient's sudden deterioration.</p> <p>There were positive outcomes where people were able to plan and felt well informed. EOL discussions need to begin early in the disease progression and continue throughout the course of the disease, and can enable people with MND and their family members to reconstruct normality to include dying as part of life and enable the development of a sense of control over care in an uncontrollable disease.</p>
32	SEAMARK, D. BLAKE, S. SEAMARK, C. et al (2012)	To assess whether hospital admission for COPD exacerbation is appropriate time for ACP discussions	Hypothetical	Community	Patients	Qualitative - interviews	Moderate	<p>Discussions should include resuscitation and ACP. There was a desire for someone they knew and trusted to have discussion. It is important that the family understands and the presence of family can help the decision process. Discussions should be held in the home or GP surgery after an admission to hospital.</p>
30	SEYMOUR, J. GOTT, M. BELLAMY, G. et al (2004)	To ascertain the views and values of older people in relation to Advance Statements (AS)	Hypothetical	Community	Patients and representatives	Qualitative – focus groups	High	<p>Participants expressed worries and difficulties in thinking about discussing death and dying</p> <p>The majority thought relatives would be able to decide on their behalf.</p> <p>Trust between doctor and patient, which was built up over time was seen to be important in creating an environment in which the communication necessary to underpin ACP could take place.</p>
33	VANDREVALA, T. HAMPSON, S.E. and CHRYSANTHAKI, T. (2002)	To explore older people's perspectives on end-of-life decision-making and advance care planning	Hypothetical	Community	Patients	Qualitative - interviews	High	<p>1. Timing of the conversation has to be right</p> <p>2. Decisions should be based on quality of life and often family would know what that meant to the patient. Patients wanted autonomy and were worried that doctors encourage DNAR just because they are old (ageism). Doctors were not seen as the right people to initiate the discussion as they may not know the person.</p> <p>3. Should family be involved? It could be burdensome for them to make the decision but this was seen as easier if there had been a discussion between the family beforehand.</p> <p>4. Living wills were mentioned spontaneously by 9/12 participants and were considered to be positive and could help professionals understand the patients' values.</p>
37	VANDREVALA, T.	To ascertain the views of older	Hypothetical	Community	Patients	Qualitative – focus	Moderate	Quality of life was a key determinant in DNAR/CPR

	HAMPSON, S.E. DALY, T. et al (2006)	people about resuscitation decision making				groups		decision making. Health professionals should Invite older people to determine their own definition of an 'acceptable QOL' and their position on the involvement of others based on perception of autonomy.
--	--	---	--	--	--	--------	--	--