Needs Analysis and proposed behaviour changes for improving routine advance CPR decision-making in hospitals

Before developing the *Advance CPR decision-making* teaching resources, a Needs Analysis was undertaken to evaluate issues associated with advance CPR decision-making in the hospital setting. This included: (i) reviewing the current literature; (ii) focus groups with junior medical staff; and (iii) focus groups with senior medical staff.

A range of themes were identified from both the literature and the focus groups. These have been grouped together under three major themes:

1. Knowing what to say
2. Knowing how to say it
3. Wanting to say it.

In the following table, columns 1 and 2 list the themes related to CPR decision-making barriers; column 3 lists the source/s for that theme; and column 4 lists recommended interventions, which have been incorporated into this educational video resource.

Themes	Description	Source*	Video education
(i) Knowing what to say			
Lack of knowledge	Uncertain how to medically assess and predict prognosis from CPR: • variable experience of CPR outcomes • wanting a predictive tool Poor understanding of difference between active and palliative management. (Weil et al. 2015)	LI, JFG, SFG	Guidance for assessing medically, including statistics, uncertainty and how CPR decision relates to overall treatment plan. Promotes palliative care as an active treatment option.
Lack of skill/expertise	Difficulty predicting patient's likely illness trajectory. Juniors use intuition to assess prognosis (Becerra, Hurst et al. 2011) Significant variation in CPR decision-making approach being modelled by Consultants.	LI, JFG, SFG	Patterns of illness trajectories described. Frailty and lack of physical reserve discussed as poor prognostic indicators for CPR. 'Surprise question' and tools for assessing frailty discussed.
Lack of evidence/ guidelines for CPR outcomes	Guidelines only address technical aspects of providing CPR. (Brindley and Beed. 2014) Difficulty relating theory to individual patient.	LI, SFG	Explains gaps in research evidence for who should receive CPR. Importance of shared decision-making.

Themes	Description	Source*	Video education
(ii) Knowing how to say it			
Lack of knowledge	Range of views about role of family and patient in CPR decision.	LI, JFG, SFG	CPR decision-making framework supports routine involvement of patient/family.
Lack of confidence in ability to discuss CPR	Patients have falsely high expectations of CPR. Patient and family may have different desire for CPR. Concerns about upsetting patients. Juniors experience discomfort or embarrassment with these discussions. (Becerra, Hurst et al. 2011; Hurst, Becerra et al. 2013) Poor training for decision-making and communication. (Deep, Green et al. 2007; Siddiqui and Holley. 2011)	LI, JFG, SFG	Good communication is promoted as cornerstone of quality medical care. • introduces communication tool, 'Ask-Tell-Ask' • importance of acknowledging emotions is discussed using 'NURSE' tool.
Lack of role modelling and peer guidance	Described lack of modelling and mentoring by Consultants.	LI, JFG, SFG	'Goals of patient care' form and process is discussed: • requires Consultant leadership to promote CPR decision-making as routine part of an overall treatment plan • includes scripted questions.

Themes	Description	Source*	Video education
(iii) Wanting to say it			
Awareness	Clinicians under-estimate patients willingness to engage in these discussions. (Hurst, Becerra et al. 2013; Elo, Dioszeghy et al. 2005) Families can be unaware of terminal status of patient. (Hilden, Louhiala et al. 2004)	LI	Promotes ownership of decision-making by all doctors. Repeated conversations may be required.
Authority for decision-making	Juniors feel they don't have decision-making authority and feel frustrated when decisions are not made. Seniors feel frustrated by inaction of others in making decisions. Fear of complaint. (Myint, Miles et al. 2006)	LI, JFG, SFG	Promotes local consensus approach and shared responsibility for decision as part of routine hospital care.
Maturity of practice	Junior staff may lack experience to make decisions Poor insight into sub-optimal communication. (Deep, Griffith et al. 2008)	LI	Role delineation, mentoring and support. Decision-making needs to be overt. Involve whole team in decisions.
Resources	Time pressures to complete rounds. Inadequate time to establish rapport with patients and to co-ordinate family meetings.	SFG	Shared responsibility across system, depending on patient's health needs.
The system	Policies not reflecting contemporary practice. Potential for worse care with NFR decision. (Cohn, Fritz et al. 2013)	LI	Need for local consensus approach to decision-making. Emphasises that CPR decisions are part of an overall management plan. Audit and feedback on performance.

*JFG = Junior doctor focus group; SFG = Senior doctor focus group; LI = Literature