Cambridge Clinical Research Facility

NHS National Institute for Health Research

Emergency Scenario Simulation Training for Clinical Staff – what have we learnt from it?

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Background

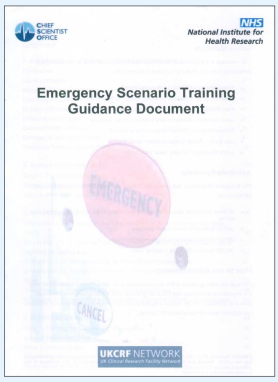
The expert investigation into the 2006 Northwick Park Clinical Research 'disaster' resulted - amongst others – in the stipulation to set up MHRA accredited Phase I Trials centres. Additional to Immediate Life Support (ILS) training, staff at theses centres would have to regularly undertake simulation training in dealing effectively with emergency situations they may encounter with clinical research participants (MHRA 2007).

Aim

In 2010, the management of the Cambridge Clinical Research Facility regarded such a training requirement as a 'gold standard' to be achieved by all its clinical staff, regardless of whether the unit would have Phase I trials or not. The aim was that each of the unit's clinical staff (26 Clinical Research Nurses, 2 Assistant Practitioners) would have effective emergency scenario simulation training at least once a year. This was to be additional to annual Basic Life Support/ Immediate Life Support training.

Rationale for Emergency Scenario Simulation Training

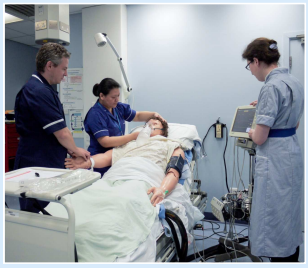
- To enhance research participants' safety
- To expose clinical research staff to peri-arrest situations relevant to their work
- For staff to gain confidence and competence in dealing with emergency scenarios in a safe and supportive training environment



In July 2012 the *Emergency Scenario Training Guidance Document* for Clinical Staff working in Clinical Research Facilities was launched nationally by the UK Clinical Research Facilities Network Education Group. These guidelines have further enhanced the emergency scenario training for the Cambridge CRF staff.

Method / Implementation

- Sought expert input for design of training programme
- Identified weaknesses in staff knowledge relating to clinical emergency situations
- Designed format that combined a carefully constructed formal training programme with running 'hands-on' scenarios in the Trust's Simulation Centre
- Established collaborative working between Cambridge CRF staff, the Trust's resuscitation trainers and medical clinicians working in the research field
- All learners have to actively engage in several simulated scenarios
- The learners have no prior knowledge of the scenarios
- Debriefing of the scenarios forms an essential part of the day
- Each session is followed-up with a detailed evaluation
- Identified improvements are implemented and re-evaluated



Outcomes

- 14 training days to-date - mean average number of learners per course, n = 5.7
- All CRF nursing staff have undertaken this training at least once a year
- Each scenario covered has generated relevant and new learning points the attendees considered valuable
- Course evaluations confirm that staff find the training improves their confidence in dealing with clinical emergency situations (for 73-85% of the learners the training was the only emergency situation they had encountered in the prior 12 months)

Examples of Scenarios

- Massive blood loss following liver biopsy
- Anaphylaxis following iv administration of investigational drug
- Syncope secondary to hypoglycaemia
- Sepsis due to chest infection in patient with severe traumatic brain injury

Lessons learnt / Discussion

- The organisation required for each session is complex and time-consuming, but becomes easier over time.
- It is essential to draw on the expertise of the Trust resuscitation trainers.
- Learners new to the training are worried about the unexpected and report high pre-course anxiety. To lighten this a scripted simulation scenario has been filmed to demonstrate an example of what to expect.
- It requires empathy (especially during the debriefing) and skill to ensure the attendees take to the learning outcomes. Trainers are advised to undertake specific training for this.
- Planned emergency scenario training should ideally be complemented with unannounced simulated scenarios happening in the actual work place.
- Formally arranged simulation training in a simulation centre has proven to be an effective way for clinical research staff to become more confident in the matter.
- The framework in place at the Cambridge CRF can be adapted elsewhere.

example programme	
09.00	Intro: relevance of training to clinical research; ground rules
09.10	Key issues - clinical emergency situations - discussion
09.30	ABCDE assessment, examples and practice with resus manikin
10.15	Oxygen policy
10.30	Break
10.50	Effective communication - SBAR handover - film clip & discussion
11.15	Anaphylaxis policy
11.30	DVD example of a what the simulation training will be like
12.15	Lunch
13.00	Introduction to Simulation Centre
13.15	Session is lead by CRF staff: facilitators involved: Simulation Centre Staff together with two CRF staff and (if available) doctor playing role of medic on site or on call In groups of 2 or 3, learners undertake 3 different scenarios. There is a live video link to adjoining room, where learners who are not actively involved in the simulation observe scenarios on a screen A debriefing session follows straight after each scenario
14.45	Break
15.00	2-3 further scenarios
16.30	Evaluation. Finish

Reference:
UK Clinical Research Facilities Network Education & Training Group (July 2012) *Emergency Scenario Training Guidance Document*, UKCRF Network Portal

MHRA (Nov 2007) Phase I Accreditation Scheme, Appendix 1, Point 7d
http://www.mhra.gov.uk/home/groups/is-insp/documents/websiteresources/con2033097.pdf

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