

Flash card team training: A guide to design and implementation

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Introduction

There is growing recognition that 'those who work together should train together'. This need for multidisciplinary team training is supported by several important publications including the Health Education England (HEE) patient safety syllabus², the Ockenden report³ and the RCoA's ACSA standards⁴ and GPAS recommendations⁵.

Delivering regular theatre team training can often prove challenging, with time pressures being a common hurdle to overcome. Flash Card Team Training is an emerging resource providing the opportunity to talk through short clinical scenarios during the busy working day in theatre. This concept was applied in the design and piloting of a flash card pack at East Kent Hospitals NHS Foundation Trust (EKHUFT) in 2019-20 (Burr, Featherstone). The scenarios included emergencies and patient safety issues with the aim to raise awareness of the human factors which impact on patient safety.

More recently, the RCoA has developed three focused flash card scenarios to highlight the problem of unrecognised oesophageal intubation as part of a wider patient safety campaign⁶. Evaluation of this campaign has reinforced the value of this multidisciplinary team training tool. Feedback has also highlighted a demand for more scenarios to reflect the breadth of clinical practice of theatre teams.

In light of this, we are publishing this flash card starter pack. This resource is adapted from the EKHUFT flash card pack and comes with a flash card template theatre teams can use to develop their own scenarios according to the learning needs locally. We also recognise that the implementation process at the local level process has its own unique hurdles. The accompanying implementation guide breaks down this process into practical steps providing tips to help you make it a success.

Aims

- To empower theatre teams to effectively implement flash card team training as a sustainable practice across their own departments, beginning with the use of a flash card starter pack.
- To equip theatre teams to design their own flash card packs with scenarios adapted to meet their own learning needs.

Implementation

In this section we provide you with practical steps to consider during the implementation process. These steps are divided into planning and preparation, piloting, and rollout stages, with rollout being the introduction of flash card team training to theatre teams across your department/organisation.

Planning & preparation

Assembling the implementation team

Identify the following members to facilitate the implementation process:

- Team leader (with a consultant supervisor as required) to coordinate the implementation process.
- Flash card champions
 - Roles to include promotion, troubleshooting, obtaining feedback, involvement in designing any additional flash cards.
 - Recruit a team that is a representative multidisciplinary theatre team, aiming for at least one champion from each of the roles (e.g. surgeon, scrub nurse, ODP, theatre support worker, anaesthetist).

Reviewing the flash card starter pack

Involve the implementation team and consider when additional flash card scenarios are to be added (see the designing a flash card pack section for further guidance)

Top Tip

A key stage to consider designing additional scenarios is after piloting the flash card starter pack

Planning the rollout

Set a date for rollout allowing time for:

- Project approval in line with local policies
- Promotion
- Piloting
- Designing any additional flash card scenarios

Top Tips

- 1. Set a date for rollout when most of the flash card champions will be available.
- 2. Consider carefully the state of your department/hospital around the time of rollout.

Promotion

Aim to make all multidisciplinary team members across your department aware of the following:

- The concept of flash card team training (see the User Guide in the flash card starter pack for further information)
- The dates for piloting and rollout

Top Tips

- 1. Employ the help of the multidisciplinary champions in spreading the word.
- Promotion at cross-specialty meetings can be particularly effective.

Piloting

Run a focused pilot to allow a sample of theatre teams across the department with the aims to:

- Familiarise teams with the process of flash card team training.
- Obtain feedback on the running of sessions and suggestions for additional scenarios.

Ensure the flash card champions are present at as many sessions as possible during the pilot.

When teams are running a session for the first time, encourage them teams to read the User Guide and Ground Rules before selecting a scenario.

Emphasise to theatre teams the importance of keeping to sessions to 5 minutes.

Obtain written feedback (survey questions provided) for each session.

Post-pilot evaluation:

- Collate all written and verbal feedback from the flash card champions.
- Identity any issues in the running of the sessions and consider changes to be made to improve this during rollout.
- Consider any suggestions made for additional scenarios and whether to design these prior to rollout (see section on design for further information)

Top Tips

- 1. Consider selecting theatre teams where the champions are already working.
- 2. We recommend a 1-week pilot with sessions at morning and afternoon team briefs across the theatre teams selected.
- 3. A short face-to-face briefing may be required by the flash card champion if the team are entirely new to the concept of flash card team training.
- 4. Using a timer can help teams to keep to 5 minutes this will improve sessions running well when teams are more pushed for time.

Rollout

Scheduling rollout

Meet with the implementation team to confirm the rollout date and decide on a regular schedule

Involve departmental leads in the scheduling process

Briefing

Remind all staff across the theatre department when the rollout will begin, how often it will be running, and where to access the flash cards pack and feedback surveys.

Flash card pack distribution

Ensure all theatre teams have access to a copy of the flash card pack.

Keep hard copies of pack in consistent and visible places where team briefs occur.

During rollout

Consider recruiting more flash card champions to increase the capacity of your implementation team.

Collect all written feedback.

Evaluation

Meet regularly with the implementation team to review feedback.

Review the schedule and consider any changes that may need to be made to reach all theatre teams.

Keep a record of any potential patient safety issues that are identified.

Adaptation

Adapt the pack when required to keep up to date with learning needs any potential patient safety issues identified.

Top Tips

- 1. A schedule once a month for one week provides a means of capturing lists that occur on different days of the week.
- 2. Share team-based learning across the department on a regular basis.
- 3. If potential patient safety issues are identified, try to incorporate this in designing additional flash cards.

Designing a flash card pack

This section provides guidance on the steps to designing your own flash card pack. It contains a flash card template to assist you in writing your own flash card scenarios that can be added to the flash card starter pack provided.

Step 1: Set your learning goals

Before writing scenarios consider what the learning needs are for the theatre teams in your department.

Use additional resources such as staff surveys, incident reporting/any near misses, learning points from team meetings (audit/QI/M&M).

In setting the learning goals consider specific human factors, non-technical and technical skills e.g. "To empower team members to speak up and challenge each other when required".

Step 2: Choose the scenarios

Decide on the general theme of each scenario and the number of scenarios you need to fulfil the breadth of the learning goals you have set.

Involve your flash card champions at this stage in the design process (see implementation section).

You may want to draw on themes from several of the categories below:

- Emergencies:
 - General: Quick Reference Handbook (QRH)⁷
 - Specialty specific e.g. obstetrics, paediatrics
- Patient safety issues:
 - Never events e.g. wrong-site surgery, wrong-implant prosthesis, retained foreign object post-procedure, incorrect swab count, drug administration error (dose, route, type), transfusion error, unrecognised oesophageal intubation - near miss vs already occurred
 - Others e.g. Stop-Prep-Block, wrist band error, distractions, interruptions, staff skill mix
- Team performance issues e.g. unwell team member, disagreement, challenging relative

Step 3: Write the scenarios

Use the flash card template below to write your chosen scenarios.

Refer to the sample questions as examples of the style of questioning to focus each scenario on particular human factors.

We recommend using this flash card template as it is:

- Consistent with the structure and question format used in the flash card starter pack. This familiarity makes it easier for teams to follow new flash cards.
- Concise; designed to be used within the 5 minute timeframe.

Step 4: Complete your flash card pack

Compile all flash card scenarios you have chosen together – this may be a combination of the starter pack with some of your own.

Be sure to include the introductory flash cards provided in the starter pack (User Guide, Ground Rules and Flash Card Reader Key).

Add a feedback survey – you can create a QR code/link to a generic feedback survey. We suggest asking the following questions:

- Has your team identified any changes that need to be made following this flash card exercise?
- To what extent do you agree that this flash card exercise was a beneficial team training opportunity?
- Are there any ways this flash card exercise could be improved?

Decide whether you will be using digital and/or hard copies of your flash card pack:

- If you are planning on using hard copies for the rollout, try to use a digital copy during the piloting stage.
- If printing hard copies, we recommend using A5 size.

FLASH CARD TEMPLATE				
Title A brief headline that captures the problem within a scenario				
Flash card reader	An optional role to encourage full team participation.	Resources		
Initial scenario	Create a brief scenario. This should be a short paragraph. This could be a 'known' or 'unknown' patient emergency (QRH) or a team-based potential patient safety issue E.g.,	 Human factors team training tools/aides Guidelines/protocols (local/national) Specialist/senior help Equipment 		
Opening question	Start with an open question that any team member can respond to E.g., What would you do? (See below for more examples)			
Further events	Again, this should be brief. Provides the opportunity to increase the complexity/acuity of the scenario. Can facilitate a more focused discussion around a particular area of team-working (See below for examples)			
Further questions	More focused questions drawing out particular skills or human factors. Try up to 3 questions. (See below for examples)			
Closing question	A learning-focused question (See below for examples)			

Sample questions

Opening questions

- What would you do?
- What initial steps would you take as a team?
- What steps would you take to reduce the risk of harm to the patient?
- How would you manage this emergency/situation?
- What is the concern?
- What do you expect to happen next?

<u>Further questions</u>

Human factors/team performance themes		Further questions
Decision-making		What would aid your decision-making as a team? How would you decide on treatment options in order to improve x problem in the patient's condition? If the problem persists, how do you decide whether to continue with surgery?
Resource Utilisation	Equipment / Environment	What resources might help you in this situation? What drugs might be needed - are they immediately available? If the crash trolley was required where would you access it? What special equipment might be needed to manage this situation and where is it located? Where is the necessary equipment located? What equipment that is required is not immediately available in theatre?
	Protocols	What protocol might help you in this emergency? What resources are needed to evaluate the problem and ensure the correct diagnosis is made?
	Senior / specialist help	Who would you call for help? If the patient required specialist intervention (outside of theatre) how would you arrange this? When senior help arrives how do you reallocate roles? How do you contact x? If the problem gets worse, how would you call for help?
Leadership		How would you allocate roles? How would you restore effective teamwork is this emergency? The surgeon wants to operate immediately but the anaesthetist wants to resuscitate more before GA - how do you resolve this issue?
Situational awareness		If you were unsure of your role in this emergency, what would you do? How and when would you conduct a team debrief (following an emergency)? How do you ensure both staff and patient safety in this situation? e.g., unwell staff member what are the risks to the patient in this situation? How might this x (patient safety issue) have arisen? How would you manage the rest of the list following this?

Teamwork		Which roles would each team member take? What would your individual roles be in this emergency? If a diagnosis of x was declared, how would the team decide upon individual roles? How would you ensure effective teamwork and delegation of tasks? How could the QRH be used to allocate roles? What steps need to be undertaken as a team to establish the diagnosis? How would team members not immediately present respond once alerted?
Communication	Raising concerns	How would those aware of the problem tell the rest of the team? How would you ensure your concerns are acknowledged appropriately? How would you effectively raise this concern? How would you stop a member of team from doing x (patient safety issue)?
	Challenging a senior colleague	What would you do if a senior team member does not acknowledge a patient safety issue?
	Other	How would you give your colleague feedback? How do you communicate as clearly and effectively as possible in this emergency?
Technical skills		How would you assess the patient in a stepwise manner? What potential underlying problem must be excluded? How would you establish this cause of x unknown problem? What would you do if x intervention was indicated? E.g., DCCV What drug(s) are used to treat this problem? How do you operate this item of equipment? e.g., fire extinguisher What other tasks need to be performed to stabilise the patient?

Closing questions:

- Can you share what you have learnt from this discussion with the team?
- What have you learnt as a team based on this simulation?
- Are there any changes you need to make as a team in preparation for the list/the next case?

Human Factors tools/aides (see flash card starter pack and UOI flash cards for more information):

- SNAPPI⁸
- PACE⁹
- SBIC
- DODAR
- CUSS
- SHEEP¹⁰

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 (https://www.rcoa.ac.uk/bulletin/april-2023/5-minute-flashcards-theatre-team-training)

References

- 1. Health Committee Minutes, (2009) attributed to the Clinical Human Factors Group (2009)
- 2. HEE Patient Safety. Available at: https://www.hee.nhs.uk/our-work/patient-safety
- 3. Department of Health and Social Care. Ockenden review: summary of findings, conclusions and essential actions (2022). Available at: https://www.gov.uk/government/publications/final-report-of-the-ockenden-review
- 4. Anaesthesia Clinical Services Accreditation Standards. RCoA. Available at: https://www.rcoa.ac.uk/sites/default/files/documents/2022-07/ACSA-STDSFULL-2022.pdf
- 5. Guidelines for the Provision of Anaesthetic Services. RCoA. Available at: https://www.rcoa.ac.uk/safety-standards-quality/guidance-resources/guidelines-provision-anaesthetic-services
- RCoA Unrecognised Oesophageal Intubation Flash Cards. Dr Tom Burr (2021).
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- 7. Quick Reference Handbook, Guidelines for crisis in anaesthesia: Association of Anaesthetists 2021 (https://bit.lv/3FtdJre)
- 8. SNAPPI approach: Weller JM et al. Frampton, Improving team information sharing with a structured call-out in anaesthetic emergencies: a randomized controlled trial. Br J Anaesth 2014;112(6):1042–1049 (https://bit.ly/3HvIE9g).
- 9. PACE approach: Yianni L, Rodd I. G236(P) Pace 'Probe, Alert, Challenge, Escalate' Model of Graded Assertiveness Used in Paediatric Resuscitation. Archives of Disease in Childhood 2017;102:A93 (https://bit.ly/3Fwr2Hv).
- 10. The SHEEP Model. Human Factors in Healthcare: Level 1. D. Rosenorn-Lanng (2014). Oxford University Press