A Clinical Guideline for Management of Patient Catastrophes in Theatre

For Use in:	Theatres
By:	Medical (Anaesthetic & Surgical), Nursing, Theatre and Recovery staff, Operating Department Practitioners
For:	As above
Division responsible for document:	Surgical Division
Key words:	Catastrophe Intraoperative death
Names of document authors:	Dr Debbie O'Hare
Job titles of document authors:	Consultant Anaesthetist
Name of document author's Line Manager:	Dr Mike Irvine
Job title of author's Line Manager:	Consultant Anaesthetist
Supported by:	David Spackman, Clinical Director for Anaesthesia
Assessed and approved by the:	Clinical Guidelines Assessment Panel (CGAP) If approved by committee or Governance Lead Chair's Action; tick here √
Date of approval:	03/05/2022
Ratified by or reported as approved to (if applicable)**:**	Clinical Safety and Effectiveness Sub-Board
To be reviewed before: This document remains current after this date but will be under review	03/05/2025
To be reviewed by:	Dr Debbie O'Hare
Reference and / or Trust Docs ID No:	12976
Version No:	1.2
Compliance links: *(is there any NICE related to guidance)*	None
If Yes - does the strategy/policy deviate from the recommendations of NICE? If so why?	N/A

This guideline has been approved by the Trust's Clinical Guidelines Assessment Panel as an aid to the diagnosis and management of relevant patients and clinical circumstances. Not every patient or situation fits neatly into a standard guideline scenario and the guideline must be interpreted and applied in practice in the light of prevailing clinical circumstances, the diagnostic and treatment options available and the professional judgement, knowledge and expertise of relevant clinicians. It is advised that the rationale for any departure from relevant guidance should be documented in the patient's case notes.

The Trust's guidelines are made publicly available as part of the collective endeavour to continuously improve the quality of healthcare through sharing medical experience and knowledge. The Trust accepts no responsibility for any misunderstanding or misapplication of this document.

Version and Document Control:

Version Number	Date of Update	Change Description	Author
1.2	03/05/2022	Reviewed no clinical changes needed – key people updated	Dr Debbie O'Hare

This is a Controlled Document

Printed copies of this document may not be up to date. Please check the hospital intranet for the latest version and destroy all previous versions.

Contents **Page**

Definitions of Terms Used / Glossary

After-Action Review (AAR): A structured debrief method used when outcomes of an activity or event have been unexpected i.e., particularly successful or unsuccessful. It aims to capture learning from these tasks to avoid failure and promote success in the future.

Patient Catastrophe in Theatre:
Any incident that leads to death or permanent disability of a patient that takes place within the theatre complex including recovery area.

The first victim(s) affected by this are the patient and their family.

Second victim:
Healthcare providers who are involved in an unanticipated adverse patient event, in a medical error and/or patient-related injury and become victimised in the sense that the provider is traumatised by the event. Frequently, these individuals feel personally responsible for the patient outcome. Many feel as though they have failed the patient, doubting their clinical skills and knowledge base. (Scott et al, 2009)

Third victim:
Patients subsequently treated by individual or team who remain adversely affected in the aftermath of an intra-operative catastrophe.

Objectives

To provide guidance on:

- Immediate measures which may need to take place after an unexpected death or an incident resulting in severe patient harm in theatre
- Standards of disclosure to the patient's family
- Implementing effective support systems for staff involved

Scope

This guideline should only be applied to incidents in theatre that fit with the definition of 'patient catastrophe' i.e., any incident within theatre complex that leads to the death or severe permanent injury or disability of a patient. Examples of intra-operative catastrophes other than death include, but are not limited to, cardiac arrest, wrong-site surgery, peri-operative visual loss, intra-operative awareness and intra-operative stroke (AAGBI 2005, Gazoni et al 2012).

Any member of the theatre team may be affected by an event in theatre which leads to the harm of a patient, regardless of whether an adverse outcome was anticipated or not. There is some evidence that even when intra-operative deaths occurred in high-risk

emergency cases, i.e., where intra-operative death was more 'expected', subsequent impact on team performance and patient outcomes was greater than in more unexpected, perceived low-risk elective cases (Goldstone et al, 2004).

It is recognised that on occasions patients undergo surgery when the severity of the surgical insult means that the patient is unlikely to survive without surgery (ASA 5). Staff involved in such cases may still be adversely affected and this should be considered as part of the debrief at the end of the case and line managers should consider referral to occupational health where appropriate. In such cases completion of a Datix report is inappropriate but cases should still subject to review at departmental morbidity and mortality meetings.

There are too many variables to allow prediction of whether an intra-operative catastrophe will impact significantly on the individuals and teams involved i.e., if an event produces 'second victims'. Similarly, the severity and duration of any individuals' response are influenced by multiple personal, professional and social factors. For this reason, this guideline aims to provide a standardised approach to the management of events following a patient catastrophe within the theatre environment that can be adapted as required to individual incidents.

It is outside the remit of this guideline to list the well-recognised range of physical, emotional and psychosocial symptoms (Scott et al, 2009; Gazoni et al 2012) that can be experienced by individuals affected by a patient catastrophe. Further details can be found on Workplace Health & Wellbeing website (Staff support following adverse events) via the Trust intranet. Similarly, it is outside the remit of this guideline to detail the recognised phases of an individual's response to such events (Scott et al, 2009).

Quick reference guide

Rationale

The majority of theatre staff are likely to be involved with a sudden death or other severe patient harm leading to permanent disability at some point in their careers.

Trust guidance on how to manage a patient catastrophe within the operating theatre is needed so that nationally recommended guidance can be adapted and implemented locally. This recommendation comes jointly from the AAGBI ("Each hospital must have a procedure for dealing with and investigating catastrophic events" AAGBI 2005) and the RCOA ("Sometimes death will occur in the operating theatre. Policies and facilities…are needed to support relatives of the deceased and also staff involved." RCOA 2015).

The psychological impact on staff following death or serious injury to a patient should not be underestimated and they can become 'second victims' of the incident (after the patient and family directly affected). Although there will be individual variations in staff responses to such events, but there are often predictable phases to their response (Scott et al, 2009).

The evidence-base surrounding how best to manage individuals and teams affected by a sudden catastrophe in theatre is small but growing. There is evidence (Gazoni et al, 2012) that involvement in such catastrophes can affect actual or perceived performance of those most affected. This has a potential risk of creating 'third victims' of such events.

The impact of such patient catastrophes will clearly vary with individual circumstances of the event. However, the manner in which the aftermath of such events are handled by relevant departments and the Trust can significantly impact upon:

- How patient and/or their family respond to the event
- Staff wellbeing
- Any lessons that can be learned and subsequent change implemented (Manser, 2011)

It is incumbent on colleagues, departments and the Trust to provide practical help and support to affected team members according to individual needs. This is consistent with good clinical governance, corporate governance and risk management strategies.

Processes to be followed

Immediate measures

- Contemporaneous records of the event must be kept.
    - All involved staff must provide their statement at the time.
    - An accurate and contemporaneous record of the anaesthetic, operation and event must be kept. These must be legible, timed, dated and signed.
    - Electronically stored monitoring records must be printed and filed in the notes. If stored monitoring records are unavailable, recordings must be made on the basis of recollection as accurately as possible and preferably corroborated by staff who were present at the time.
    - Original notes and charts must not be altered in any way at a later date.
    - Amendments and additions must be recorded separately, timed, dated and signed.
- The clinical commitment of the anaesthetist/surgeon concerned must be reviewed immediately by the clinical director.
- A consultant anaesthetist/surgeon with coordinator/theatre manager should make a decision whether the trainee anaesthetist/surgeon should continue with his/ her list or shift.
- A lead consultant anaesthetist/surgeon with coordinator/theatre manager should make a decision whether the consultant anaesthetist/surgeon should continue with his/her list or shift.
- The clinical director or a consultant not involved with the incident should take responsibility for checking the patient and equipment. If there is a suspicion of equipment failure or a hazard affecting the theatre, a decision may be made to take the theatre or anaesthetic machine out of commission until further notice.
- In the case of an anaesthesia related death, all anaesthetic equipment, drugs, syringes, and ampoules should be kept and stores securely for investigation. An accurate record should be made of all the checks undertaken including time and date of inspection. Further investigation may be required by medical equipment maintenance personnel, manufacturers or toxicologists. Clinical engineering and pharmacy should be informed as appropriate as soon as possible after an incident so that necessary checks may be undertaken.
- A critical incident (‘Datix’) form should be completed electronically immediately after the event.

- The question 'Do staff require immediate wellbeing support as a result of this incident?' should be marked 'Yes'.

Communication with patient relatives

- A team approach should be adopted to breaking bad news with relatives and should include senior members of the surgical, anaesthetic and nursing team responsible for the patient (Clegg et al, 2013)
- Breaking bad news should not be done over the telephone. It will be necessary to invite the relatives to come to hospital informing them that some complication had occurred, but no details should be given over the phone.
- Find a suitable quiet and comfortable room free from interruption for the interview.
- The task of breaking bad news should not be carried out by a trainee or staff grade/associate specialist doctor without a consultant present
- Explain the bad news first in a straightforward and honest way, followed by answering any questions which may arise.

Effective staff support systems

Immediate/Early measures

- The process of making accurate contemporaneous notes, critical incident form completion and early initial debrief can be time-consuming, but they are essential. Affected staff members need to be relieved of their immediate clinical duties to allow sufficient time for this. This needs to be taken into account by theatre co-ordinators/managers when managing overall theatre workload after an intra-operative catastrophe.
- The team should initially be debriefed at a time to suit all staff and ideally within a few hours of the event.
- The aims of this initial debrief are to:
    - provide and record information
    - gain feedback while details are still fresh
    - identify theatre team members who may be particularly affected by the event for further follow-up
    - identify organisational or team factors that could be improved upon for future practice
    - explain to team members what next steps are likely to involve

- Peer group discussion is often most useful in identifying and assisting staff members who are affected by such incidents. A consultant (anaesthetist and/or surgeon) not directly involved in the incident should facilitate the initial debrief.
- The structure and content of the debrief will be dictated by the circumstances of the event and guided by the experience of the facilitator.
- A crucial pre-requisite to any debrief is that all members of the team involved are present and feel able to speak freely without blame or judgment. Creating this 'bubble of safety' and establishing the ground rules for the debrief is one of the main functions of the facilitator (Clegg at al, 2013).
- An **'After Action Review' (AAR)** is one structured debrief method that is being increasingly used within the NHS (adapted originally from military practice)
    - See Appendix 1
- The expected duration of an AAR is 15-20mins but is dependent on individual circumstances.
- The AAR is based on four questions to structure the debrief:
    - What was supposed to happen?
    - What actually happened?
    - Why was there a difference?
    - What can we learn from this?

Subsequent measures

- It is vital that members of the theatre department support the theatre staff and a senior colleague or mentor should be assigned to this role.
- Staff members should be encouraged to recognise if they may have been adversely affected by a catastrophe in theatre to allow them to take personal responsibility to seek help (e.g. from their GP or through Workplace Health & Wellbeing).
- For medical staff members affected, follow-up of the incident should take the form of three-party discussion involving: the member of staff, assigned mentor/supervisor and relevant clinical director.
- Clinicians are advised to be a member of a medical defence organisation.
- In some cases, the media may try to approach staff at the hospital or home. A Trust manager trained with dealing with the media should be the only person communicating with them. All media enquiries should be directed to this manager.

Longer term

- Training in delivering feedback including, but not limited to, the use of structured debrief methods such as AAR for senior medical, nursing and theatre staff should be considered as a means to maximise learning from intra-operative catastrophes to improve safety and quality of care.

Audit standards / monitoring compliance

To ensure that this document is compliant with the above standards, the following monitoring processes will be undertaken:

100% compliance with the following:

- Datix form completed for all deaths in operating theatre excluding ASA 5 patients.
- Datix form completed for all patient incidents in theatre that lead to permanent injury or disability.
- Discussion with family members in appropriate setting with consultant present documented in patient's medical notes.
- Case is discussed at departmental Clinical Governance within 3 months of event or within 3 months of outcome of Coroner's referral if applicable.

The audit results will be sent to the Anaesthetic Clinical Governance Lead who will ensure that these are discussed at relevant governance meetings to review the results and make recommendations for further action.

Summary of development and consultation process undertaken before registration and dissemination

The authors listed above drafted this document on behalf of the anaesthetic directorate. It was presented at the anaesthetic clinical governance meeting and circulated for comment to anaesthetists, surgical directorates, occupational health and theatre matron. Advice has also been sought on specific issues from the Trust legal department and pharmacy.

This version has been endorsed by the Clinical Guidelines Assessment Panel (CGAP).

References

Clegg, I. & MacKinnon, R. (2013) Strategies for handling the aftermath of intraoperative death. Continuing Education in Anaesthesia, Critical Care & Pain 14 (4), 159-162.

Gazoni, F.M., Amato, P.E., Malik, Z.M. & Durieux, M.E. (2012) The Impact of Perioperative Catastrophes on Anesthesiologists: Results of a National Survey. *Anesthesia & Analgesia,* 114, 596-603

Goldstone, A.R., Callaghan, C.J., Mackay, J. et al (2004). Should surgeons take a break after an intraoperative death? Survey and outcome evaluation. BMJ, doi:10.1136/bmj.37985.371343.EE.

Manser, T. (2011) Managing the aftermath of critical incidents: Meeting the needs of health-care providers and patients. *Best Practice & research Clinical Anaesthesiology* 25, 169-179.

Pratt, S.D., & Jachna, B.R. (2015) Care of the clinician after an adverse event. *International Journal of Obstetric Anaesthesia 24, 54-63*

The Association of Anaesthetists of Great Britain and Ireland (AAGBI), (2005) Catastrophes in Anaesthetic Practice – dealing with the aftermath. http://www.aagbi.org/sites/default/files/catastrophes05.pdf

Royal College of Anaesthetists (RCOA), (2015). Guidelines for the provision of Anaesthetic Services http://www.rcoa.ac.uk/system/files/GPAS-2015-FULL_5.pdf

Scott, S.D., Hirschinger, L.E., Cox, R.E. et al (2009) The natural history of recovery for the healthcare provider “second victim” after adverse patient events. *BMJ Quality & Safety in Healthcare 18, 325-330*

Further information on AAR method of debriefing:

1. http://www.ksslibraries.nhs.uk/elearning/km/aar/

   15min video presentation outlining AAR
2. http://www.kmbestpractices.com/uploads/5/2/7/0/5270671/after_action_review_postcard_pdf_400.2kb.pdf

Monitoring Compliance / Effectiveness Table **Appendix 1**

Element to be monitored	Lead Responsible for monitoring	Monitoring Tool / Method of monitoring	Frequency of monitoring	Lead Responsible for developing action plan & acting on recommendations	Reporting arrangem
Datix form completed for any patient catastrophe in theatre Cases presented for clinical governance within 3 months	Mortality & Clinical governance leads Anaesthesia	Case review critical incident review	Regular time period e.g., every 3-6months or ad hoc	Anaesthetic Clinical Governance Lead and Lead for emergency theatres if applicable	Cases di at goverr meetings Departm governar