

Standardised death review in EDs

Why is this project important?

The purpose of the Standardised Death Review process is to:

- Provide a consistent approach to the review of all deaths in, or within 24 hours of admission from Emergency Departments
- Identify opportunities to improve and maintain the overall quality of care provided in Emergency departments and the community.

What are the outcomes we wish sites to achieve?

By undertaking this project all sites will have undertaken a review of their current approaches to death reviews and implemented improvements to ensure it is consistent with best practice.

This project is providing a range of resources from which sites can select to customize and use to suit their local context. Improvements made to processes and any outcomes from the re-invigorated death review process should be reported as part of your quarterly QSO reports. By the end of the project we hope to get a better sense of what is working well in supporting effective death review processes in the ED.

Which deaths should be reviewed?

All deaths in the ED (including any sub-units it manages) and any admitted patient death that occurs within 24 hours of leaving the ED should be reviewed. Any unanticipated death following discharge from an ED will be reviewed upon notification to the Emergency Department.

How can I review deaths in my ED?

It is recommended that death review follows a two step process. The initial step is a screening of all deaths followed by a multidisciplinary review of those deaths worthy of further assessment in context of an improvement process. Most deaths in the ED occur from an irreversible cardiac event prior to arrival or are from expected causes such as severe disease progression at the end of life. Screening assists in identifying those deaths in which further review may identify areas to target for improvement.

How often should deaths be reviewed?

Death screening should occur monthly. Multi-disciplinary review should occur at the Morbidity and Mortality Review Meetings which should be held between one and two monthly.

What occurs during the screening process?

The screening process acts as the primary review of the medical record categorising cases and identifying those whose management warrants secondary review by a multidisciplinary team (the M&M meeting).

Screening should ideally occur on a monthly basis. Some facilities may have a process for screening deaths across the whole facility. If so liaise with the appropriate personnel to decide on the management of ED deaths so as to avoid duplication of processes.

A designated screener/s within the ED would undertake the first stage review of the patient's medical record using the standardised screening tool (Appendix I), categorising each case and presenting trended data.

Who should do the screening?

A designated screener should have:

- demonstrated audit skills and an ability to understand and interpret the clinical information accurately
- the ability to access senior medical advice as required
- detailed understanding of the ED environment
- generally, this responsibility is undertaken by an emergency physician or senior doctor or nurse, however, could be performed by any suitably trained staff member with access to senior medical advice as required.

Consider rotating the responsibility for death screening over time.

How should deaths be categorised?

All deaths in the ED will be categorised according to the following.

Category	Description
5	Anticipated death due to disease progression
4	Death following cardiac or respiratory arrest which occurred before patients arrival at hospital
3	Unexpected death despite known preventive measures taken in an adequate and timely fashion
2	Unexpected death not reasonably preventable with clinical intervention
1b	Preventable death where steps may not have been taken to prevent it
1	Cases where death may have resulted from medical intervention or lack of intervention. Cases where death is unrelated to the natural course of the illness and differing from the immediate expected outcome of the patient management. Note: This is a SAC 1 incident. Ensure case has been appropriately reported.

What is an M&M?

Multidisciplinary Mortality and Morbidity (M&M) meetings are an important factor in mortality and case review. M&M meetings provide a forum for discussion of deaths, and care and the management of significant clinical events.

Which cases should be discussed at an M&M?

The designated screener should review the cases to determine which deaths are most likely to benefit from a broader, multi-disciplinary review of process. In general,

- Category 1 referred to RCA process, should be reviewed by the M&M if deemed appropriate
- Category 1b, should be reviewed by M&M
- Individual relevant Category 2 and 3 cases may be reviewed by M&M
- All Category 4 and 5 cases are not usually reviewed in depth unless issues are noted
- Any end of life issues (eg, lack of end of life planning, lack of symptom control etc) with category death should also be noted, and reported to the M & M.

What makes an M&M meeting effective?

Principles underpinning the conduct of an effective M & M are that they:

- occur on a regular, scheduled basis and are of a (short) duration to facilitate clinician attendance.

- are multidisciplinary, inviting all types of health professionals, senior and junior, clinical and managerial. Members from other departments should be invited when relevant.
- critically analyse the circumstances surrounding outcomes of care, focusing on processes and systems of care – not individual behaviours.
- make recommendations focusing on measures that can prevent similar outcomes or adverse incidents in the future
- oversee progress in implementation of recommendations made.
- employ a short, standardised review process that highlights avoidable deaths and contributory factors, allowing for staff involvement in the design and flexibility for specialty-specific questions as necessary
- carry out the review openly, summarising actions at the end of the meeting and tracking them at the following one.
- allow adequate time for case discussions using the review questions as an aid.
- integrate M&M meetings into the wider governance structure and monitor meeting outcomes for shared learning and assurance

What should be reported from an M & M?

- Outcomes and decisions of these meetings should be documented in a brief meeting report (Appendix IV). It is useful to collate these and review on a quarterly basis (Appendix V) to produce an annual review (Appendix VI).
- No patient or clinical identifying information should be included in the report.
- If issues that are raised represent substantial risks to the Department's ability to deliver its service, or to provide safe care, they should be referred to the Network / Facility Patient Safety and Quality Committee for inclusion on the Network / Facility Risk Register. The Department must consider and document actions that can be taken to manage or minimize the risk and notify appropriate department/ facility managers in an appropriate timeframe relative to the risk identified.
- See template Meeting Report (Appendix IV)

How should an M&M Meeting be run?

- Terms of Reference should be agreed and adopted by the committee (see Appendix II)
- The Chairperson is responsible for creating an atmosphere that is conducive to open discussion and should ensure all members have an opportunity to contribute
- See Template Agenda (Appendix III)

How should cases be presented?

- The Chair, in consultation with the designated screener, should decide which cases are presented for review
- A clinician should be nominated to present specific cases
- Where appropriate if similar issues are identified by the screener the process or issue, rather than specific cases, may be reviewed
- Any information about death or adverse events, either in detailed or summarised format, should be de-identified
- Focus should be placed on identifying the issues related to any processes or systems of care that contributed to the death, and not on the individuals who provided the care. Primary questions to consider for each case are:
 - What happened?
 - If there was a breach of a standard of care or an error, why did it happen?
 - What can be done to prevent a recurrence?
- Discussions should consider if any measures may be recommended or implemented to prevent a similar incident or adverse outcome. Not all cases need to result in recommendations.

- Consider using a fishbone diagram or Vincent's model to assist in identifying causative factors (Appendix VII)

How does reviewing deaths in ED fit in with the facility and statewide review that occurs already?

These guidelines are consistent with NSW Ministry of Health policy. Identify whether anyone has been allocated the responsibility for death reviews for the hospital and work with them to ensure alignment of processes and reporting.

End of life management

In each M & M Meeting for relevant deaths the committee may discuss the circumstances of the death itself including;

- symptom control - was the patient settled and peaceful?
- privacy - in what setting did they die?
- were family made aware the patient was dying?
- had the patient with a known life limiting condition been afforded appropriate end of life planning by their usual treating team/GP?.

Are there other considerations for the M&M?

M&M meetings provide a valuable opportunity for an ED to review the quality of the care it provides.

Additional M&M functions

M&Ms may also review:

- Serious adverse events (other than deaths)
- Clinical indicators which reflect performance
- IIMS incidents (particularly those with principle Incident type of Clinical Management)
- Near misses
- Complaints
- Cases requiring open disclosure
- The ED Risk Register

Qualified Privilege

M&M meetings have no special legal privilege. Although the Health Administration Act allows the Minister to nominate approved quality assurance committees, which attract qualified privilege, approval is rarely sought or granted for individual departmental M&M committees. Therefore, minutes of meetings should be written from the assumption that they could potentially become public documents. This means writing the minutes in a style which avoids statements of blame, avoids details of individual cases, and concentrates on the actions arising from the deliberations.

Appendix I: Template Emergency Department Death Audit Screening Tool

Facility:	Date of Screen:																
Initials:	M F																
MRN:	Adm Date:																
Age:	Date of Death:																
<p>Representation: Yes No Unknown</p> <p>Timeframe: days/months</p> <p>If yes: New Problem Same Problem (avoidable) Same Problem (Unavoidable)</p> <p>Place of previous admission:</p> <p>Date of Discharge:</p>																	
<p>Clinical details of presentation:</p> <p>Co-morbidities:</p>																	
<p>Palliative care: Yes No Unknown</p> <p>Advance Care Directive: Yes No Unknown</p> <p>No CPR order: Yes No Unknown</p>																	
<p>Consider whether any of the following may have impacted on the patient's death: (circle those that apply)</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">Technical procedure performed:</td> <td style="width: 15%;">Yes / No</td> <td style="width: 33%;">Possible missed diagnosis:</td> <td style="width: 15%;">Yes / No</td> </tr> <tr> <td>Possible delay in diagnosis:</td> <td>Yes / No</td> <td>Possible delay in treatment:</td> <td>Yes / No</td> </tr> <tr> <td>Possible clinical management error:</td> <td>Yes / No</td> <td>Problems during retrieval:</td> <td>Yes / No</td> </tr> <tr> <td>Other:</td> <td>Yes / No</td> <td>Adverse drug event:</td> <td>Yes / No</td> </tr> </table> <p>Briefly provide details of any of the above:</p>		Technical procedure performed:	Yes / No	Possible missed diagnosis:	Yes / No	Possible delay in diagnosis:	Yes / No	Possible delay in treatment:	Yes / No	Possible clinical management error:	Yes / No	Problems during retrieval:	Yes / No	Other:	Yes / No	Adverse drug event:	Yes / No
Technical procedure performed:	Yes / No	Possible missed diagnosis:	Yes / No														
Possible delay in diagnosis:	Yes / No	Possible delay in treatment:	Yes / No														
Possible clinical management error:	Yes / No	Problems during retrieval:	Yes / No														
Other:	Yes / No	Adverse drug event:	Yes / No														

Outcome of Screening:

Category	Description	
5	Anticipated death due to disease progression	
4	Death following cardiac or respiratory arrest which occurred before patients arrival at hospital	
3	Unexpected death despite known preventive measures taken in an adequate and timely fashion	
2	Unexpected death not reasonably preventable with clinical intervention	
1	Cases where death may have resulted from medical intervention or lack of intervention. Cases where death is unrelated to the natural course of the illness and differing from the immediate expected outcome of the patient management. Note: This is a SAC 1 incident. Ensure case has been appropriately reported.	
1b	Preventable death where steps may not have been taken to prevent it	

Referral Destination:

Has this case been, or does this case need to be referred elsewhere?

Destination	Meets Criteria	Date Referred
ED M&M		
DMS / Facility Executive		
Coroner (see checklist for criteria) Is the Coroner's report available for review?		
RCA (Category 1a or 1b)		
NSW Maternal & Perinatal Committee		
Mental Health Client Death		
Other:		

End of Life Care:

Symptom control - was the patient settled and peaceful?	Y N N/A	
Was privacy attained - in what setting did they die?	Y N N/A	
Were family made aware the patient was dying?	Y N N/A	
Had the patient with a known life limiting condition been afforded appropriate end of life planning by their usual treating team/GP?	Y N N/A	
Other comments		

Appendix II: Template M&M Terms of Reference

Purpose

To contribute to improved clinical quality and patient safety through:

- Critical analysis of the circumstances surrounding the outcomes of care
- Making recommendations which focus on improvement and prevention.
- Initiating action on and overseeing these recommendations.

In particular the committee will review or provide the opportunity to review:

- Deaths screened as appropriate for further review
- Data regarding adverse outcomes or clinical events which provide useful insight into the quality of care provided
- Relevant clinical indicators
- Relevant individual and/or trended complaints
- Open Disclosure cases involving major adverse events.

The committee will consider whether any issue raised needs to be recorded and maintained on a Network /Facility or Departmental Risk Register.

Membership

Membership for this committee is open and inclusive of:

- Any clinical staff working in the Department
- Invited clinical support and managerial staff working in the department
- Clinicians from other Departments with which there is frequent interaction or specific involvement in cases to be presented.

Conduct

- The meeting will occur monthly on the day (e.g. first Monday) of the month at (time).
- The Department Head will nominate a Chair.
- An agenda will be circulated 5 working days in advance of the meeting.
- Brief actions notes will be kept and circulated to members after the meeting.
- The chair will ensure that discussion focuses on service improvement and not on individual blame

Reporting Lines

The committee reports directly to the Department Head/ Network Director / Facility Manager and will submit minutes to the Network / Facility Patient Safety and Quality Committee, and relevant Network / Facility managers.

Appendix III: Template Agenda

1. Present
2. Apologies
3. Review of previous minutes
4. Review of progress of outstanding recommendations/actions
 - a.
5. Deaths:
 - a. Number screened, and categories allocated
 - b. Review of selected deaths
 - c. Coroner / RCA report follow-up
6. Review of serious adverse events
7. Selected clinical case review
8. Presentation of clinical indicators
9. Review of complaints
10. Review of Risk Register
11. Next meeting

Appendix IV: Template: Emergency Department Morbidity and Mortality Meeting Report

Network / Facility : _____
Date: _____ Time: _____ Venue: _____

Attendees

Name / Designation / Role	Name / Designation / Role

Actions from Previous Meeting:

Action	Outcome to Date	Person Responsible	Next Steps

RCA/Coroner report follow-up:

(include case initials, MRN, date of death, any further action required)

- Case 1
- Case 2

Case Reviews

(Listing of specific cases reviewed by MRN – unless covered under item 4)

Recommendations and actions from this month's case reviews:

Recommendation	Action Required	Person Responsible	Timeframe

Referrals

(Issues which specifically need to be highlighted to bodies external to the committee)

- SAC 1 Referrals
(Any case determined to be SAC 1 & not previously assessed as such – identify by MRN or IIMS id)
- Specific Issues
(Any issue unable to be resolved by the M&M committee which needs to be highlighted to the Department Director and relevant Patient Safety and Quality Committee)
- Additions to Risk Register

Distribution of M&M Meeting Report

- Copy to all Department members
- Quarterly summary report of outcomes to Department Director/ Network Director / Facility Manager for inclusion on Network / Facility Patient Safety Quality Committee Agenda

Appendix V: Template: Emergency Department Quarterly M&M Summary

..... Department / Service
..... (Insert dates for period under study)

General Morbidity & Mortality Information

Number of deaths screened	
Number of Category 5	
Number of Category 4	
Number of Category 3	
Number of Category 2	
Number of Category 1 & 1b	
Number of deaths reviewed by M & M	
Number of other clinical cases reviewed	

Coroner's /RCA reports viewed
(include case initials, MRN, date of death, any further action required)

- Case 1
- Case 2

Summary of Key Issues Identified From Morbidity & Mortality Reviews

-

Outstanding Issues from other Departments

-

Outstanding Issues to other Departments

-

Recommendations to *(insert your overseeing committee/meeting)* for Clinical Practice Changes

-

Actions from previous *(insert your overseeing committee/meeting)* Recommendations

-

Appendix VI: Proposed Quarterly Reporting Proforma*

Facility Name

Year

Performance measure	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Total # deaths				
Percentage of deaths with a completed review				
Percentage of deaths referred for further investigation ¹				
Percentage of potential category 1 and 1b with preventability confirmed ² and remedial action agreed ³ .				

¹ Further investigation is mandatory for potential category 1 and 1b deaths. All recommendations arising from investigation into potential category 1 and 1b deaths are to be reported at a local and system level. Further investigation of any category 2-5 deaths are to be managed at the local level.

² Should be reported through the IIMS process

³ This is obtained by looking at the number of potential 1 and 1b deaths reviewed at an M&M in that quarter that resulted in agreed actions as a percentage of overall number of 1 and 1b deaths for that quarter.

Appendix VII: Identifying contributing factors for consideration in incident or case review: examples of a structured approach

1. Template Fishbone Diagram

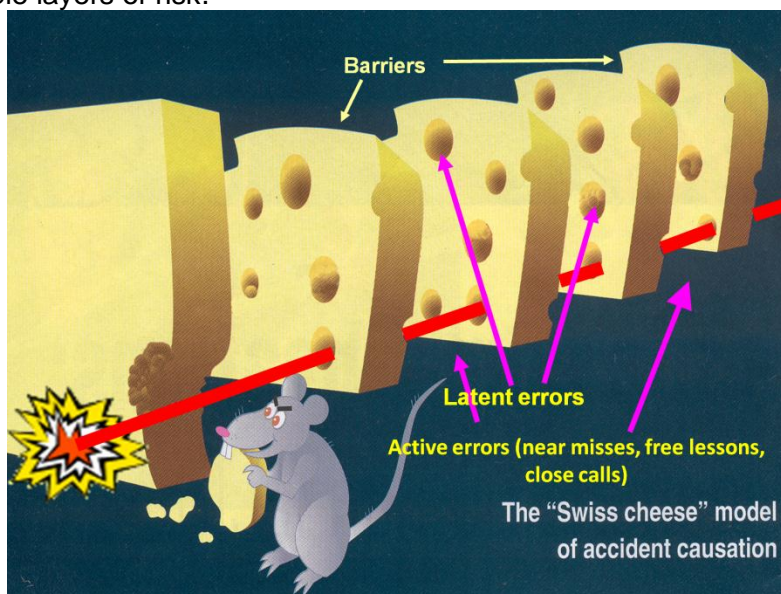
A template fishbone diagram (see following page) has been used with good effect in a variety of facilities including Auckland Hospital, New Zealand by Dr Scott Orman who provided details of how this works in practice and the benefits it produces.

During the M+M meeting the selected case is presented as a sequence of events and basic facts, via powerpoint. The fishbone slide is then projected, and through discussion with the membership, it is filled in in real time. This requires a bit of preparation, mainly anticipating questions the audience will ask, such as "What is the evidence for this?", "Is there a guideline?" etc. It can be helpful to pre-prepare some slides to address these anticipated questions. Real time access to the internet and hospital intranet so other material can be sourced as required is helpful.

A graphical image prompts the audience to consider systems/resources issues etc as well as clinical issues.

Clinicians involved are prompted to discuss any 'lessons learned' and these are added onto the fishbone. If there is a clear single 'root cause' on the fishbone this is clearly identified.

Clinical issues (mainly around decision-making) also provide a springboard into a bit of psychology - i.e. why we make the decisions we do under certain circumstances (ED circumstances are often 'adverse', unfortunately!). Fixation errors and anchoring bias have been prominent features and there is value in the audience learning about these so they can hopefully avoid cognitive traps while working on the ED floor. The 'Swiss cheese' model (see below) is also a useful discussion tool - most ED M+ M cases seem to reflect multiple layers of risk.



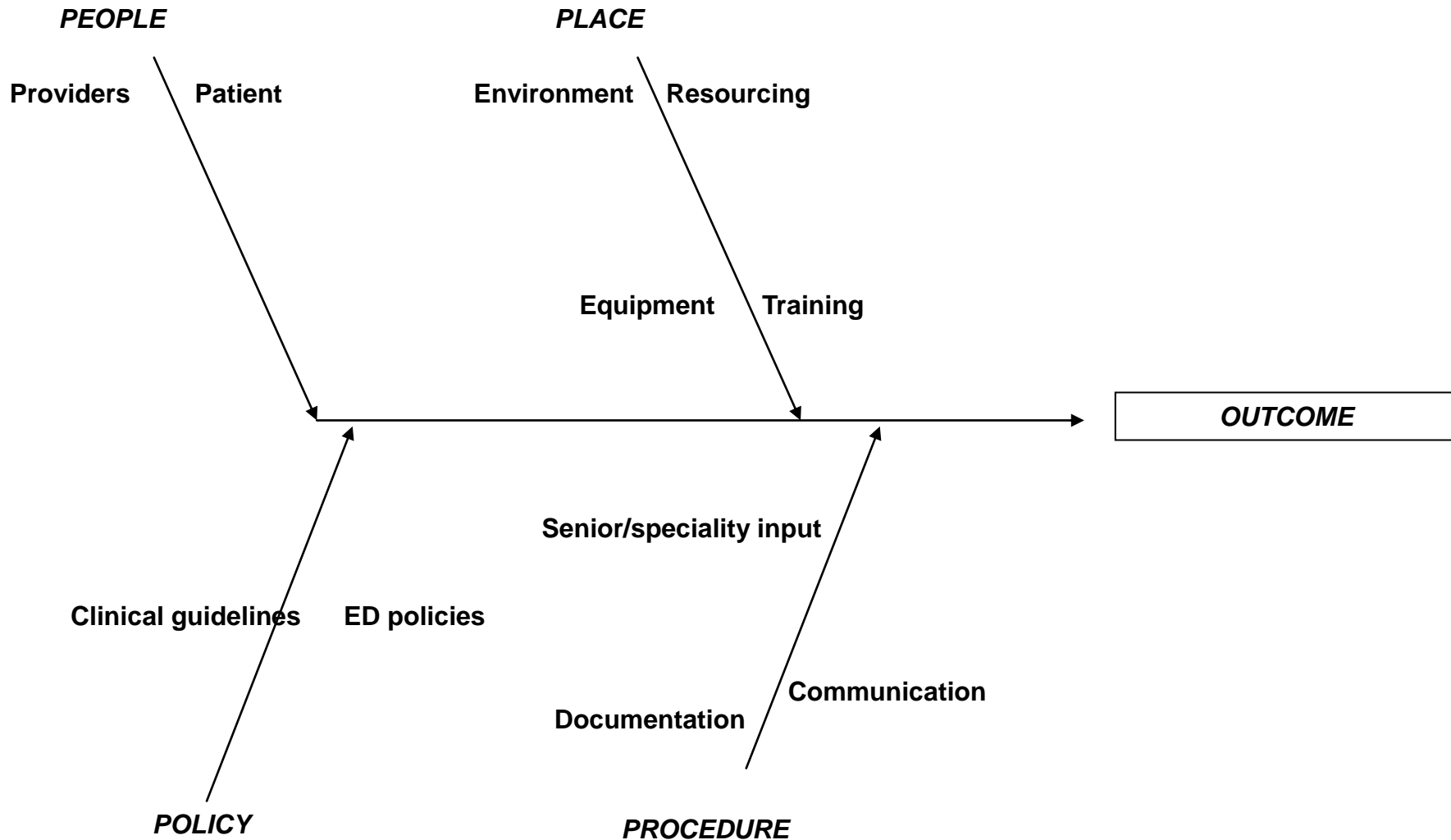
As clinicians become more aware of systems/process/resource issues that contribute to poor outcomes (as well as just the clinical ones), plus awareness of some of the cognitive traps that can occur, we can move more from retrospectively analysing cases with poor outcomes to proactively identifying hazards and fixing them before a poor outcome results.

For more information see article

https://www.aamc.org/download/250814/data/a_systems_approach_to_mm_conferences.pdf

ED Quality Framework

Standardised death review in EDs



2. Vincent's Framework

Vincent *et al*, in their 1998 BMJ article¹ recommend a framework (see below) that enables a structure upon which to develop and formalise analysis of adverse outcomes. Instead of focusing simply on the actions of the staff involved and on patient characteristics, the whole gamut of possible influences can be examined. The framework allows key topics to be focused on and also to consider what the most effective method of remediation might be and where effort should be directed.

Institutional context

- Economic and regulatory context
- National Health Service Executive
- Clinical negligence scheme for trusts

Organisational and management factors

- Financial resources and constraints
- Organisational structure
- Policy standards and goals
- Safety culture and priorities

Work environment

- Staffing levels and skills mix
- Workload and shift patterns
- Design, availability, and maintenance of equipment
- Administrative and managerial support

Team factors

- Verbal communication
- Written communication
- Supervision and seeking help
- Team structure

Individual (staff) factors

- Knowledge and skills
- Motivation
- Physical and mental health

Task factors

- Task design and clarity of structure
- Availability and use of protocols
- Availability and accuracy of test results

Patient characteristics

- Condition (complexity and seriousness)
- Language and communication
- Personality and social factors

Table 1: Vincent's framework: Factors that influence clinical practice taken from "Framework for analyzing risk and safety in clinical medicine." Vincent C, Taylor-Adams S and Stanhope N *BMJ* 1998; 316:1157-7

¹ Framework for analyzing risk and safety in clinical medicine. Vincent C, Taylor-Adams S and Stanhope N *BMJ* 1998; 316:1157-7