Belfast Health and Social Care Trust

Reference No: SG 17/12

Mortality and Morbidity policy – learning through recording, reviewing, monitoring & analysing deaths.				
Author(s)	Dr JR Johnston Co-Chair, Standards and Guidelines Committee			
Ownership:	Dr AB Stevens, Medical Director			
Approval by:	Standards and Guidelines Committee		**Approval date:**	S+G 17/5/12 PC 21/5/12
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Version No.	V1.1	**Supercedes**	Legacy policies	
Key Words	Mortality;morbidity;death;review;MCCD;MMR			
Links to other policies	Guidance on actions to be taken after a patient's death			

1.0 INTRODUCTION / PURPOSE OF POLICY

1.1 Background

There are many different methods available for studying adverse events and hazards that arise within a healthcare system and each has its strengths and limitations. Their primary aim is to reduce the incidence of these incidents through learning from past experience.

A study of mortality and morbidity (M&M) is one of the oldest quality assurance approaches in health care. It has become increasingly important for trusts to demonstrate that they are systematically and continuously reviewing patient outcomes and especially mortality and morbidity.

Scrutiny of mortality rates and concerns about patient safety have intensified with the extensive coverage of investigations into NHS hospital failures e.g. Francis report - Mid-Staffordshire NHS Foundation Trust, 2010. The Health Care Commission (now Care Quality Commission), in its review of the Mid Staffordshire Trust, found that the Trust did not know about key issues in mortality and was not able to provide convincing evidence that it was capable of finding these out or taking action as a result. Recommendations from these hospital inquiries have led to an increased drive for NHS Trust boards to be assured that deaths are reviewed and appropriate changes made to ensure patients are safe.

A recent study by the National Institute for Health Research[1] indicated M&M meetings did not always identify whether a death was unexpected; they lacked a systematic and standardised mechanism for highlighting contributory factors & corrective measures and few recorded proceedings or action plans.

For M&M meetings to focus on quality improvement, they need a systematic and transparent way to examine the causes of a patient's death, highlight contributory factors and identify what can be done to prevent recurrence of avoidable errors.

Furthermore some M&M meetings reported issues to their clinical governance and risk committees, but there was no reporting framework between these committees and the Board regarding mortality data. Because the public focus on patient safety increases, Boards need to be assured that the deaths that occur in their hospitals are not the result of unsafe care in the services they provide. As high quality of care in healthcare organisations occurs when Boards have oversight of data associated with monitoring clinical quality and safety, outcomes from M&M meetings could contribute to the intelligence that the Board receives for assurance. This could be done by having high level mortality monitoring performed by a Mortality Review Group (MRG) with onward reporting through the Assurance Framework.

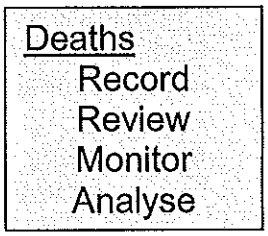
1.2 Purpose

The aim of this policy is to set out clear roles and responsibilities and procedures to ensure that all deaths occurring throughout the BHSCT will be recorded, reviewed, monitored and analysed.

This will ensure that:

A. The details of every death are **recorded** in the patient's clinical record and on the Trust Morbidity & Mortality Review System.

B. Clinical staff (doctors, nurses, midwives & allied health professionals), throughout the BHSCT, will systematically **review** deaths in their service and, through learning, assure their service is safe and outcomes improve.



C. **Monitoring and analysing** mortality collectively throughout the Trust will provide assurance that the Trust is doing all it can to learn from episodes of care where death or harm have occurred during the course of providing care.

1.3 Objectives:

This policy will ensure in a practical, feasible and thorough manner that:

- the details of every patient death in a BHSCT hospital is recorded and reviewed on the Trust Morbidity & Mortality Review System.
- where a death certificate or stillbirth certificate is issued, those details are copied into the clinical record and onto the Morbidity & Mortality review System, to initiate the review process.
- every patient death has the capacity to be part of the mortality and morbidity scrutiny and learning process.
- there is consistency of approach to the review of patient mortality and morbidity within BHSCT and for that approach to be as multi-disciplinary as appropriate and possible.
- the outputs of any such reviews are structured to aid learning.
- the outputs of any such reviews are clearly documented and archived.
- clear reporting mechanisms are in place, to escalate areas of concern identified by M&M meetings, so that the Trust is aware and can take appropriate action.
- existing arrangements and mechanisms for monitoring adverse events will be linked to this analysis of mortality.

2.0 DEFINITIONS/SCOPE OF THE POLICY

2.1 Scope

This policy will apply to all staff in all specialities and all deaths throughout the hospital - secondary care areas - of the Trust. It will not apply to community areas.

2.2 It is primarily concerned with the certification of death & stillbirth or referral to the Coroner and the review of & learning from the causes of death rather than the process of verification of death.

2.3 Definitions:

Mortality – for the purpose of M&M meetings, mortality relates to all deaths occurring in secondary care in the BHSCT ranked by ward, team and/or specialty.

Morbidity – relates to adverse outcomes.

Complication: an additional problem that arises following a procedure, treatment or illness, is secondary to it and complicates the situation. Details of 'Clinically coded complications' are available from the Clinical Coding Dept.

Misadventure - Any injury or adverse reaction resulting from any medical treatment. Some examples are medication errors, IV infection, surgical mistakes and postoperative septicaemia. Details are available from the Clinical Coding Dept.

Avoidable/Preventable – these terms are used interchangeably in the NHS and for the purpose of this policy, 'preventable' or 'unpreventable' will be used with reference to whether anything could have been done to change the outcome.

Mortality & Morbidity Meetings (M&Ms)
M&M reviews are a systematic activity designed to enable clinicians and managers at any level (preferably multidisciplinary) in the Trust to understand and learn from the underlying conditions that lead or contribute to death or harm to patients.

There is review and discussion of clinical cases, outcome data (clinician and patient reported) and related information (e.g. complaints, complications, misadventures, SAI or other benchmarking data).

Morbidity & Mortality Review System
This is an IT system available on the HUB which allows inpatient deaths to be recorded and reviewed by the consultant in charge of that patient. The electronic record is then submitted to the relevant Mortality Review meeting for review.

The system can be accessed via the HUB homepage under 'I want to' dropdown box then 'Register a death'. Alternatively within IT systems > All IT systems > Clinical systems/LABs > Mortality & Morbidity Review System

Mortality and morbidity do not have to be reviewed in the same meeting.

Mortality reviews focus on the events of and learning from episodes where death has occurred.

Morbidity reviews could include the examination of re-admission rates, returns to theatre, specific complications of procedures, infections, falls or even prolonged length of stay. Morbidity reviews will vary from specialty to specialty.

3.0 ROLES/RESPONSIBILITIES

3.1 Trust Board
The Trust Board will receive reports on mortality (and morbidity) that provide assurance that safe and high quality care is being provided throughout the BHSCT.

3.2 Medical Director,
- carries overall responsibility for ensuring the BHSCT approach to the review and analysis of mortality is implemented both consistently and comprehensively.
- is responsible for supporting the M&M review process ranging from individual case reviews to that of amalgamated specialty data.

- will ensure that patient safety initiatives support a systematic review of case note samples, using the Global Trigger Tool, to detect adverse incidents, reviewing with mortality data and monitoring trends in related harm.
- will chair a regular Mortality Review Group (MRG) meeting.
- will ensure that the outcomes and learning from M&M reviews is routinely discussed at the Mortality Review Group and, if necessary, the Safety and Quality Steering Group (SQSG).
- is responsible for dissemination of the findings of the review process onwards, ultimately to the Board.
- will respond to external enquiries about mortality.

3.3 **Directors** are responsible for:
- ensuring all deaths are recorded within Directorate.
- ensuring that appropriate multi-disciplinary M&M meetings take place in all specialities and for holding a list of M&M / Audit meetings within their Service Directorates.
- establishing a reporting process from M&Ms; primarily up to their AMD and Directorate and then for further escalation as appropriate.

3.4 **AMDs** are responsible for
- review of Directorate and specialty specific mortality on a regular basis.
- ensuring appropriate multi-disciplinary M&M (audit) meetings take place in each Speciality.
- identifying a M&M (audit) meeting Chair(s).
- ensuring the appropriate escalation process which would initially be to the AMD.

3.5 **M&M (audit) Chairs** are responsible for ensuring:
- appropriate attendance by all relevant disciplines and professional groups.
- every death recorded within their specialty area to be tabled at a mortality review meeting
- Agenda setting.
- Notes on review of each death to be recorded on the Morbidity & Mortality Review System.
- Collation of review findings, learning points and actions for improvement for each M&M meeting.
- Reporting M&M findings to AMDs / CDs and Directorate.
- Escalating upwards any areas of concern.

3.6 **Medical staff**
- All consultant medical staff are required to participate fully in the M&M process.
- All medical staff are expected to participate fully in all M&M meetings that are relevant to their practice

3.7 **Nurses, midwives, allied health professionals and other clinical staff**
All healthcare professionals should be involved in M&M reviews, as part of their clinical practice. This involvement could range from simply being aware of the outcome of such reviews insofar as they affect their area of practice, to full involvement in the production of data and implementation of recommendations.

Midwives may complete stillbirth certificates and therefore may initiate the BHSCT Mortality review process.

4.0 KEY POLICY PRINCIPLES

Following a review of practice in the UK and mirroring changes occurring in Trusts since the Mid-Staffordshire reports, this policy details how deaths occurring throughout the BHSCT will be recorded, reviewed, monitored and analysed. It outlines the processes to be undertaken by

- individual clinicians,
- the teams they work in and
- by the BHSCT as a whole.

While it is accepted that not all deaths occur as a result of an adverse incident or harm and many are not unexpected, the essence of this policy is that each death should have the capacity to be part of a mortality and morbidity review by clinical (doctors, nurses, midwives & allied health professionals) staff as well forming the basis of ongoing monitoring and analysis. The whole process is designed to be practical, feasible and thorough. The Trust Mortality & Morbidity Review System is an IT system set up to facilitate the recording and reviewing of deaths.

4.1 The details of every death in the BHSCT will be entered onto the Trust Mortality and Morbidity Review System shortly after death by the person responsible for completing the MCCD (usually at the time of completing the MCCD). The record will include the information recorded on the MCCD and the consultant in charge.

4.2 Every death will then be reviewed by the Consultant in charge of that patients' admission (Reviewing Consultant) and they will be asked to provide confirmation / further information on:

- the cause of death and
- whether there were any
    - complications.
    - misadventures.
    - compliance with any triggers (table 1) indicating further review.

Ordinarily, this will occur on the next 'working' day, but should occur within a maximum of 2 weeks.

4.3 Every death in the BHSCT must have the capacity to be reviewed at a mortality and morbidity scrutiny and learning process. The triggers detailed in table 1 should be used to aid the selection process to become part of the review. However, when it is obvious there have been no complications and perhaps when death was expected and there are no learning points to be garnered from scrutiny, a death may not be discussed in detail at the M&M Review meeting.

Notwithstanding this, those deaths which do fulfil any of the criteria as set out in table 1 must be reviewed at the next M&M review meeting.

The exact process and level of detail will depend on the clinical details of each case with, for example, unexpected deaths receiving greater scrutiny than expected deaths.

The BHSCT Mortality Review system will be used to record details of that review.

4.4 Where the death relates to a reported / reportable incident, an Incident Report form must be completed and the death must be reviewed. This should be flagged up to the Line Manager and the Risk and Governance department.

4.5 In normal circumstances, all individual reviews of in-hospital deaths should be carried out within 6 weeks of a patient's death. Where cases are referred to the Coroner or subject to police investigation, this timescale may not be possible.

4.6 The details of every BHSCT Mortality Review will be stored in the Morbidity & Mortality Review System and this system will be used to generate reports to include:

Recorded deaths
Mortality Review meeting details
Individual Mortality Review case details
Other reports as required by speciality / other.

4.7 M&M meetings

M&M meetings need to:

1. Review the record of all deaths.
2. Identify those nominated by consultants for closer examination.
3. Have a systematic and standardised format.
4. Review any contributory factors associated with these deaths.
5. Formulate learning and action plans if required.
6. Record and archive the meetings.
7. Report findings through their AMD & Directorate and then upwards to the MRG.

4.8 Requirements for M&M meetings

Each M&M group should identify and confirm with the AMD:-

- Chairman.
- Terms of Reference / Objectives.
- Frequency of meetings – may depend on frequency of deaths.
- Membership – (multi-disciplinary and multi-professional).
- Working arrangements with other Specialty M&M groups and frequency of joint meetings.
    - Surgical Specialty M&M Groups should agree working arrangements and joint meeting frequency with Anaesthesia and vice versa.
- Working arrangements with other Quality Groups within Service Directorate.
- Arrangements for minutes / notation / archiving.
- Mortality 'inclusion/exclusion' criteria for routine patient case note review.
- Morbidity (e.g. complications and misadventures) 'inclusion/exclusion' criteria for routine patient case note review.
- BHSCT Morbidity & Mortality Review System to be used.
- Storage and retrieval of minutes in line with the Trust requirements.
- Reporting arrangements, especially when there are several groups (e.g. anaesthetists and surgeons) and to include escalation of concerns.

4.9 Review and learning

Specifically, clinical staff will:

- attend mortality and morbidity review meetings.
- contribute knowledge and experience to those meetings.
- openly look for prevention strategies, without resorting to blaming others.

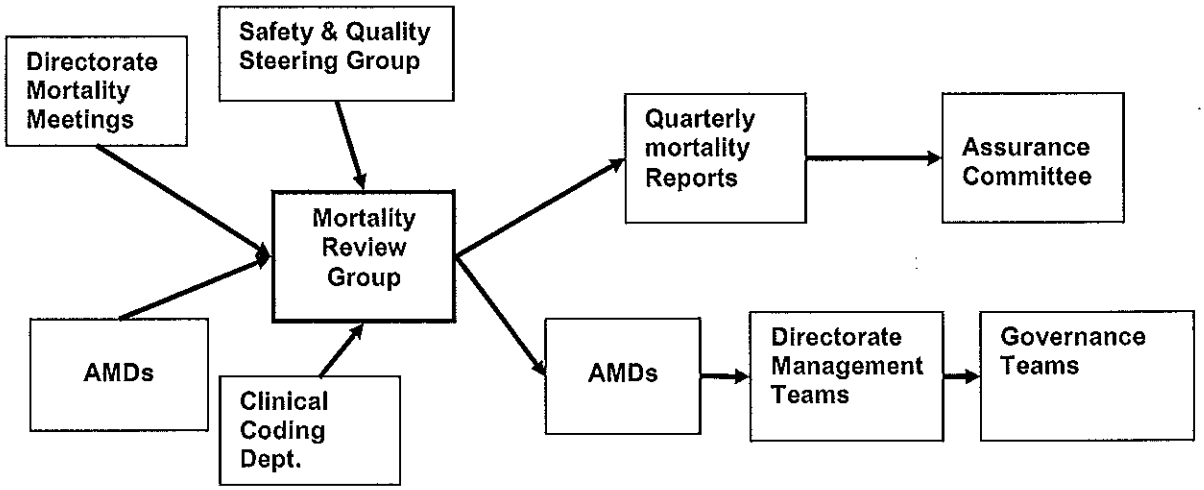
- help colleagues to deliver safer care on the basis of what has been learned, by building safeguards into existing practice and challenging practice that has been demonstrated to be unsafe.
- look to improve and standardise palliative care for patients and their families.
- be able to provide evidence of how they have used learning from M&M reviews at their individual appraisal or team performance review meetings

4.10 Mortality Review Group

The Mortality Review Group (MRG) will

- consist of the
    - Medical Director
    - Director of Nursing
    - Deputy Medical Director
    - AMDs
    - Risk and Governance
    - Director of Performance
    - Co-Chair of Standards and Guidelines
    - Clinical Coding Department

- function as an overview group for monitoring mortality.
- ensure the Trust's stance on mortality surveillance is one of total vigilance and includes examining clinical processes, coding architecture and follows evidence based improvement strategies.
- use information from regular reporting groups such as M&M meetings, clinical coding dept and ensure this flow has centralised co-ordination.
- harmonise trust wide mortality review processes by actively encouraging greater coordination between the clinical M&M review of individual mortality and the centralised clinical coding assessment of mortality.
- Set out the background to the HSMR and chart the Trust's previous and current performance.
- ensure the underlying clinical coding data which constitutes the HSMR is robust and reliable so that the Board and clinicians have absolute confidence in the data.
- understand the reasons behind the Trust's current HSMR and evolve change strategies.
- enable Trust leadership to identify whether any problems are administrative or whether further clinical investigation is necessary in specific areas.
- Use regular case note review techniques [Global Trigger Tool (GTT)] to identify avoidable deaths.
- Use Hospital Standardised Mortality Rates (HSMR) and individual mortality data to help shine a light on potential areas for further analysis or investigation.
- make recommendations based on the findings of all of the above.
- ensure there is dissemination of lessons learnt and derive organisational learning from these multiple assessments of mortality.
- explore and learn from other organisation's mortality review processes that have successfully reduced mortality rates.
- Report to the Board quarterly



5.0 IMPLEMENTATION OF POLICY

5.1 Dissemination

This policy requires dissemination throughout the Trust, especially to patient areas.

5.2 Resources

These will be needed for audit leads and the hosting of the BHSCT mortality review form on the Intranet.

Training presentation and guidance on use – are available in appendices

6.0 MONITORING

Monitoring of this policy will be done by

- comparison of the mortality returns from the wards and that obtained from the Registrars returns to the General Register Office.
- audit comparison using the Global Trigger Tool.

7.0 EVIDENCE BASE / REFERENCES

Mortality and Morbidity policy - Leeds Teaching hospitals NHS Trust - September 2009
Mortality & Morbidity Reviews Policy – University Hospitals of Leicester - January 2011.
Guidelines for Morbidity and Mortality review meetings – The Royal Children's Hospital, Melbourne – March 2010.
Departmental Mortality Review – The Royal Children's Hospital, Melbourne – March 2010.
Board Assurance Report on Hospital Mortality : Royal Wolverhampton Hospitals; Feb. 2011

1. J Higginson, N Fulop and M Marrinan. NIHR King's Patient Safety and Service Quality Centre. March 2011. Mortality and morbidity meetings: a study of the structure, format and reporting framework in a hospital setting. ISBN 978-0-9568550-0-8.

8.0 CONSULTATION PROCESS

Medical Advisory Group, Safety & Quality Steering Group, Policy and Standards and Guidelines Committees, Mortality Review Group

9.0 APPENDICES / ATTACHMENTS

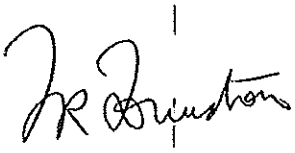
Appendix 1 = MMR system – How to record/register a death
Appendix 2 = MMR system – How to review a death(Consultant)
Appendix 3 = MMR system – How to setup an MMR meeting
Appendix 4 = MMR system – Full Training presentation
Appendix 5 = Triggers for M&M Review of Deaths

10.0 EQUALITY STATEMENT

In line with duties under the equality legislation (Section 75 of the Northern Ireland Act 1998), Targeting Social Need Initiative, Disability discrimination and the Human Rights Act 1998, an initial screening exercise to ascertain if this policy should be subject to a full impact assessment has been carried out.
The outcome of the Equality screening for this policy is:

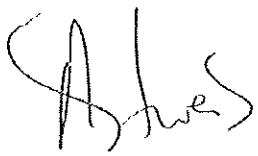
No Impact

SIGNATORIES



_____ **Date: _____June 2012____**

Name
Title



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Name

Appendix 1

Belfast Health and Social Care Trust

Morbidity & Mortality Review system
Recording a death

Access to MMR system

- MMR system is accessed via the Trust intranet home page under the 'I want to' dropdown box. Alternatively, a link is located within 'IT systems > All IT systems > Clinical systems/LABs > Mortality & Morbidity Review System'
- The system will confirm if you are the correct user. Log on using trust credentials. (Some users may need to add the prefix BELFASTTRUST\ to their username. e.g BELFASTRUST\doctor.smith)

Register a death

- Click on ' New death'
- Patient demographic details can be retreived by clicking on search icon. If the patient is no longer listed, details must be entered manually.(Initially, users of BOIS will have to enter demographic details manually . BOIS search module to be added)
- Select team and consultant responsible for the patient during this episode
- Enter required information on each of the tabs. Notes/Outcome/Recorder details

Saving and submitting

- Saving can be a one or two stage process.
- Once you are sure all details entered are correct and all mandatory fields have been completed click on save draft

Save Draft

- If neccessary you can revisit a saved draft at a later time if all required information is not currently available.
- Incomplete fields will be highlighted in red
- If all required information has been entered, click on

Contact details

- If you are experiencing any issues accessing the MMR system or problems registering a death please contact:
- Phillip Connolly : Email:
- Christine Murphy: Email:

Appendix 2

Belfast Health and Social Care Trust

Morbidity & Mortality Review system
Consultant reviewing a death

Access to MMR System/Selecting patients for review

- Once a death has been registered onto the system and submitted for review an email will be sent to the named Consultant.
- When the email has been received the review should be completed within 48 hours.
- Click onto the link contained in the email which will bring you through to the system. Confirm you are the named user.
- Once into the system click on the 'pending review' icon.

- A list of cases waiting to be reviewed will be shown.
- If you are NOT the responsible Consultant for a case, select patient :
  - Indicate who is the responsible consultant from the drop down menu. Click save draft then submit for review.
  - They will get the email.
  - If you do not know, select the "Responsible Consultant unknown"
  - This case will default to the M&M audit lead 'unattached'

Review a death

- If you are the responsible consultant select a case awaiting review
- Notes and details entered by registering Doctor can be reviewed
- Details entered previously by registering Doctor cannot be amended, however additional notes/corrections can be made on the 'Consultant notes' tab.
- 'Review Death' tab questions, including entering an Incident number if required, need to be answered.

Saving and submitting

- Once all required details are complete click 'save draft' and then 'submit for review'.
- The case is ready to be selcted for discussion by the Audit/M&M lead at the next team Morbidity & Mortality meeting.

Contact details

- If you are experiencing any issues accessing the MMR system or problems registering/reviewing a death please contact:
- Phillip Connolly : [redacted] Email [redacted]
- Christine Murphy: [redacted] Email: [redacted]

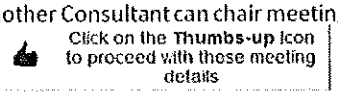
Appendix 3

Belfast Health and Social Care Trust

Morbidity & Mortality Review system
Setting up Mortality meeting

Setting up Mortality meeting

- Access system through the path:
  - HUB>IT systems>All IT systems>Clinical Systems / Labs>Morbidity and Mortality review system
- Confirm you are the named user, if not log in using trust credentials.(When switching between users in some areas it may be necessary to prefix your username with 'BELFASTTRUST\' e.g. BELFASTTRUST\firstname.surname)
- Click on 'M&M meetings' tab on the MMR system home screen, then 

- Teams you are a part of will be available for selection
- Assign a chairperson. Another Consultant can chair meeting in your absence.
- Select date of meeting, 

- Meetings can be created in advance or at the time of the meeting

Selecting attendees and Reviewing a death at meeting

- To proceed with a meeting click on the 'M&M meetings' tab then on 
- Select team and corresponding meeting which has already been set-up previously
- Use the 'Attendance ' tab to select and record attendees at the meeting
- Move onto the 'Deaths' tab which will show deaths registered and relevant to your team
- Select patients for discussion and using corresponding tabs record:
  - Contributory factors (if any).
  - Avoidable factors.
  - Learning lessons.
  - Action points
- Clicking on the 'Save' icon will submit the record and return to the list of patients to be discussed

Contact details

- If you are experiencing any issues accessing the MMR system or problems registering/reviewing a death please contact:
- Phillip Connolly : [redacted] Email: [redacted]
- Christine Murphy: [redacted] Email: [redacted]

Appendix 4

Please click on the icon below to access the MMR system – Full training presentation

http://intranet.belfasttrust.local/policies/Documents/Mortality%20and%20Morbidity%20Review%20system%20full%20training%20presentation%20-%20Web%20version.pptx

Appendix 5.

Table 1. Triggers for M&M Review of Deaths

Departments, Units, Areas, Specialties & individual clinicians will review deaths when the following triggers apply:-

1. It is Area, Unit or Specialty policy to review all deaths.

2. Unexpected death e.g. following
    - fall in hospital.
    - pulmonary embolism.

3. Following Complications / Misadventure / Incident. The following are examples:-
    - Due to treatment / procedure / operation.
    - Cardiac arrest / crash calls.
    - Medicine related incident e.g.
        - prescription error.
        - over coagulation related to warfarin prescription.
    - Surgical
        - Unplanned return to theatre.
        - Change in planned procedure.
        - Unplanned removal / Injury/ repair of organ.
    - Infection
        - MRSA bacteraemia.
        - C. difficile.
        - VRE (vancomycin-resistant enterococcus).
        - Wound infection, deep surgical sepsis.
        - Nosocomial pneumonia.
    - Readmission to Intensive Care or High Dependency Care.
    - Unplanned transfer to Intensive Care or High Dependency Care.
    - Readmission within 30 days of previous hospitalisation.

4. Elective admission – except cancer / haematology.

5. All deaths in low risk HRGs i.e. unexpected. For example,
    - Minor ENT procedure
    - Tonsillectomy
    - Hernia Repair
    - Arthroscopy
    - Minor skin procedures
    - Vasectomy
    - Varicose vein surgery

6. All paediatric (18 years or less), Neonatal, Obstetric.

7. Cases referred to the Coroner's Office.

8. Complaint(s) received which is M&M related.