Mortality and Morbidity

NC Silver, M&M Lead ABN

M&M meetings are a key component of workplace-based learning, and continuing professional development.

The Goal of M&M is to provide doctors with the opportunity to discuss aspects of patient care where outcome was not as intended or anticipated and to review errors or adverse events in an open and reflective manner.

The purpose of this document is to provide a framework from the ABN that can be adopted as appropriate by individual Neuroscience Centres and hospitals. It may be helpful in providing a framework to enable case discussion for patients who died or suffered serious morbidity, or for cases where outcome was less than ideal and lessons might be there to learn.

The importance of M&M

- Regular review of deaths and complications
- Provides accountability
- Allow necessary improvement measures to ensure patient safety
- Supports professional learning
- Improves system and process variations
- Identifies and explores individual, system, and process failures
- To facilitate identification and sharing of governance issues with other professionals and across a wider hospital framework
- Empowers clinicians to report any concerning issues to Trust management

Potential important factors for success of M&M meetings:

- A formal meeting structure, a formal proforma and Case Facilitation by an experienced clinician / moderator
- The meeting should be run as an aid to encourage and direct discussion (as opposed to a paper exercise)
- Consider asking a colleague not involved with patient to present the case
- Regular identification of issues related to M&M through incident reporting
- Mandatory incorporation into Hospital / Trust governance processes
- Mandatory department member’s attendance
- An atmosphere that encourages audience participation and openness, decreases defensiveness and does not apportion blame
- Use of slides to improve the efficacy of case presentations
- Use of radiographic images
- Focused analysis of error
- Integration of evidence-based literature into the M&M discussion
- Providing educational points related to the complication
- Invite colleagues from other disciplines where appropriate (eg neurosurgery, radiology, neurophysiology, medicine, emergency medicine, etc)
- Allow/encourage medical students attendance to these meetings
- Allowing for a consensus to be met with respect to the analysis of cases presented
• M&M meetings need to be incorporated into the hospital governance process with a formal reporting structure, to increase organisational learning and accountability

The ABN recommends that:
• All UK Neuroscience Centres are involved in regular M&M and have a designated clinical lead for M&M.
• All deaths in hospital under neurological care should be presented at a M&M meeting
• All cases with significant morbidity or important governance issues should be presented at a M&M meeting
• M&M meeting attendance should be considered mandatory for all junior and senior neurological medical staff with the exception of the on call team and those on leave – the hospital / Trust management should recognize the importance of M&M attendance versus non-emergency clinical commitments
• A summary of each anonymised case presented should be made freely available to all Trust medical and allied health professional staff
• M&M meetings are held frequently, at least every 2-3 months
• All appropriate cases are discussed
• The process used should engender open discussion and critical review of management and processes to encourage all staff to feel they can speak openly about individual, process or system errors
• There is a robust reporting system for M&M submissions to Trust Board on a regular basis

SBAR-standardised format of presentations:
• Situation
• Background
• Assessment and analysis
• Review of literature
• Recommendations
## Situation

**Statement of the problem**

<table>
<thead>
<tr>
<th>ADMISSION DIAGNOSIS:</th>
<th>INTERVENTION / PROCEDURES PERFORMED:</th>
</tr>
</thead>
<tbody>
<tr>
<td>STATEMENT OF ADVERSE OUTCOME:</td>
<td></td>
</tr>
<tr>
<td>DATE OF ADMISSION:</td>
<td></td>
</tr>
<tr>
<td>DATE OF MORTALITY / ADVERSE EVENT / MORBIDITY (WHERE APPLICABLE):</td>
<td></td>
</tr>
<tr>
<td>If mortality, cause of death (as per death certificate):</td>
<td>1A</td>
</tr>
<tr>
<td></td>
<td>1B</td>
</tr>
<tr>
<td></td>
<td>1C</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td>POST MORTEM:</td>
<td>yes/no</td>
</tr>
<tr>
<td>POST MORTEM RESULTS:</td>
<td></td>
</tr>
<tr>
<td>If patient died, was death avoidable:</td>
<td>yes/no</td>
</tr>
</tbody>
</table>

## Background

**Relevant clinical information pertinent to adverse outcome**

<table>
<thead>
<tr>
<th>PATIENT HISTORY:</th>
</tr>
</thead>
<tbody>
<tr>
<td>History of present illness / episode</td>
</tr>
<tr>
<td>PMH and comorbidities</td>
</tr>
<tr>
<td>Rx history (past relevant and current)</td>
</tr>
</tbody>
</table>

**INDICATION FOR ADMISSION OR INTERVENTION:**

Describe reason for admission or intervention

*List if palliative or death expected (in case of mortality)*

**LAB and IMAGING STUDIES:**

Present studies / results relevant to outcome

**HOSPITAL COURSE:**

Present non-procedural events relevant to outcome

**RECOGNITION OF COMPLICATION:**

State how / when complication was recognized

**MANAGEMENT OF THE COMPLICATION:**

Describe how the complication was managed

## Assessment and analysis

**Evaluation of what happened and why it happened**

**WHAT HAPPENED?**

Describe sequence of events leading to adverse outcome

**IF ERROR OCCURRED OR ADVERSE OUTCOME, WHY DID IT OCCUR?**

**ROOT CAUSE ANALYSIS:**

Provide description of fundamental causes of the adverse outcome in relation to:

1. Human errors
<table>
<thead>
<tr>
<th>Errors in diagnosis, management, judgement, communication, other</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Systems errors</td>
</tr>
<tr>
<td>Errors / problems in care system / organization (eg poor supervision /</td>
</tr>
<tr>
<td>low staffing, inadequate co-ordination of care, etc)</td>
</tr>
<tr>
<td>3. Patient-related factors</td>
</tr>
<tr>
<td>Patient disease or non-compliance</td>
</tr>
</tbody>
</table>

**NOTE:**

INCLUDE CONTRIBUTING FACTORS, eg

A. *Documentation (eg missed results, poor communication in clinical records)*

B. *Unanticipated complication of procedure or treatment*

C. *Delay in prescription or treatment*

D. *Delay in procedure*

E. *Delay in transfer from referring hospital or within hospital*

F. *Delay in clinical review or actions*

G. *Delay in / lack of senior review*

H. *Issues re communication (eg handover, doctor-nurse, nurse-nurse etc)*

I. *Drug errors – prescription*

J. *Drug errors – administration*

K. *Failure to act appropriately in case of deterioration*

L. *Health care-associated infection*

M. *Problems following hospital protocol*

N. *Training issues*

O. *Resource issues*
**Review of literature**
Evidence-based practice

**PRESENT LITERATURE PERTINENT TO THE COMPLICATION, EG RELATED TO...**
1. Identification of complication
2. Management of complication
3. Prevention of complication

**Recommendations**
Proposed actions to prevent future similar problem

**IDENTIFY HOW PROBLEM COULD HAVE BEEN PREVENTED OR BETTER MANAGED**

**IDENTIFY LEARNING POINTS FROM CASE**

**ACTIONS TO BE TAKEN FORWARD: “what, who and when”**
- What action?
- Who is responsible?
- Time frame?

---

**APPENDIX**

Higginson et al, BMJ Quality and Safety First, 2012

Mortality and morbidity meetings: an untapped resource for improving the governance of patient safety
- Regular review of deaths and complications
- Provide accountability
- Allow necessary improvement measures to ensure patient safety
- Support professional learning
- Improve system and process variations
- Incorporate into governance processes of hospital – make mandatory
- Individual failures and system or process failures
- Need formal meeting structure
- Need for formal reporting structure

Important to share knowledge from M&Ms with other professions or across the wider hospital governance framework

M&M meetings need to be incorporated into hospital governance process, as to increase organizational learning and accountability.

(NCS Likewise at ABN, we need to share learning experiences to increase overall professional learning and accountability.)

Process should engender open discussion and critical review of management and processes to make individuals less reluctant to speak openly about errors in meetings.

NCS – new structures should be open to audit to ensure we evolve as professional organization.
NCS – may be less applicable in volume compared with surgical specialties but we often work in conjunction with neuroradiology / neurosurgery and other colleagues in managing patients with neurological conditions and we must have mechanism in place to ensure we learn from our mistakes or less than optimal interventions.

NCS by having a proforma this allows standardization and allows all complications to be dealt with in similar and standardized way.

Allows capacity to formalize organizational memory., especially where issues and complications occur rarely.

Empowers clinicians to report any concerning issues to Trust management.

The meeting must be an aid to direct discussion as opposed to a paper exercise.

** invite all types of health

References:
Higginson et al, BMJ Quality and Safety First, 2012
Mortality and morbidity meetings: an untapped resource for improving the governance of patient safety

SAFF anaesthesia liaison group = anaesthesia M&M meetings – a practical toolkit for improvement