



Guidelines for Conducting and Reporting Morbidity and Mortality/Clinical Review Meetings



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Glossary

Human Factors	Also known as Ergonomics is a scientific discipline focused on understanding the interaction between people and their environments
Just Culture	A culture where staff can raise issues of safety without fear of retribution, even if it is errors, they themselves have made. A culture where people are not blamed for mistakes
Safety 1	A traditional approach to safety management with a focus on learning from clinical incidents or what went wrong and often uses a cause and effect methodology
Safety 2	An understanding of safety management with a focus on positive outcomes including understanding of systems that support good outcomes despite high complexity. An understanding of what went right and why
Systems thinking	Refers to the interacting dynamics between; self, team, environment and patient and how they work together to contribute to outcomes. Based on the concept that a system, not any one individual, is responsible for both good and bad outcomes. A system's function is more than the sum of its parts (of which people are just one part); it's the product of its interactions
Multidisciplinary	Includes clinicians from across disciplines including; nursing, midwifery, medical, allied health and pharmacy

Acronyms

IIMS	Incident Information Management System
ims+	Incident Management System
QIDS	Quality Improvement Data System
LHD	Local Health District
TOR	Terms of Reference
DMS	Director of Medical Services
DoNM	Directors of Nursing and Midwifery
SCIDUA	Special Committee Investigating Deaths Under Anaesthesia
CHASM	Collaborative Hospitals' Audit of Surgical Mortality Maternal and Perinatal Mortality Review Committee
RCA	Root Cause Analysis

Introduction

Morbidity and Mortality meetings (M&Ms) or clinical review meetings allow departments/ specialties/ facilities to review the quality of the care that is being provided to their patients and to identify any opportunities for improvement. M&Ms have an established history and culture and are an invaluable tool for engaging the significant expertise of clinicians at the point of care. However, patient care is delivered in complex interactive systems and clinical review of care needs to reflect an understanding of systems versus individual factors to ensure comprehensive recommendations for change and clinical improvement.

In addition to the review of adverse clinical incidents and outcomes, there is a growing trend in M&Ms to identify how resilience within complex systems enables positive outcomes in the face of challenges and uncertainty which are inherent within healthcare delivery. Lastly, M&Ms are often a key opportunity for clinical staff to engage in the processes of patient safety and quality improvement and therefore represent an important opportunity for education regarding these processes as well as for senior staff to model appropriate professional behaviour.

Purpose and scope

This document follows on from the previous guidelines developed by the Clinical Excellence Commission (2016) (CEC) and provides a methodology for M&Ms using 6 core principles, guided by Human Factors and systems thinking to support comprehensive discussion from a diversity of clinical perspectives and generate system improvement opportunities.

The guidelines support an evolution in clinical review processes away from linear cause-effect models centred on the individual most proximal to the adverse outcome, to more complex systems analyses that incorporate consideration of the organisational factors that both support and constrain individual practitioners. They also reflect a shift from an isolated focus on the absence of negative events (Safety 1 view) to the incorporation of understanding how things more often go right despite varying conditions (Safety 2 view).

The core principles explore the interaction of identified key structures, process/ procedures and relationships/ people. Each principle also includes characteristics of what the minimum standard and the gold standard M&M would look like with examples of how this has been implemented across Local Health Districts (LHDs) within NSW Health.

CEC Quality Improvement Data System M&M meeting module

A core theme throughout the guidelines is access to meaningful patient level data to support the M&M processes. The CEC has various systems available for clinicians to use including the Quality Audit Reporting System (QARS), the Death Review database and, more recently, the Quality Improvement Data System (QIDS). QIDS has been developed to support learning and identify improvement opportunities using available data. For example: QIDS presents Hospital Acquired Complication (HAC) data from the Health Information Exchange (HIE), IIMS & ims+, hand hygiene and other sources. Analysis of HAC rates at LHD, hospital and ward levels is easily performed and offers multiple options for identifying opportunities for improvement by seeing trends and patterns.

An M&M module has been developed in QIDS to further support and enhance the implementation of these guidelines and will include key templates and resources. Access to QIDS and the M&M meeting module can be arranged through the Clinical Governance/ Patient Safety unit within each LHD.

Core Principles

The six core principles were identified through a literature review and have been further developed in consultation with key stakeholders across NSW Health.

Each of the principles is outlined in the document with some brief points in relation to the minimum and “gold standard” requirements to meet these principles.



1. **Safety:** a safe space for **learning**



2. **Multidisciplinary:** enhancing **active participation** across the disciplines



3. **Meeting Framework:** systematic agenda selection process with support from clinical analytics



4. **Comprehensive discussions:** to generate actionable learning and/ or system improvement



5. **Lessons Learned:** **documentation** of lessons learned and dissemination of **recommendations** to ensure action



6. **Governance:** **pathways** for reporting to support **learning** and **recommendations**



1. Safety

A Safe space for learning

Minimum standard	Gold Standard
Safe, blame-free environment focusing on discussion for learning not for judgement and recognising the influence of hindsight, outcome, and other biases	Meeting atmosphere that is conducive to open discussion with a focus on “Just Culture” with an emphasis on the system not on individuals
Established pattern in meeting occurrence and duration depending on the facility	Regular monthly meeting
Written terms of reference: updated annually and given to all committee members	Shared understanding and accountability enabling a positive team culture
Meeting agenda and cases to be presented to be disseminated prior to the meeting	Early identification of emerging themes to allow opportunities for discussion and learning
Staff feel they have ‘permission’ to attend.	Staff are encouraged to attend and feel their contributions are valued.

1.1 Structure

Shifting from a linear, attribution-focused perspective towards a systems perspective enables individual actions to be placed within the context of the systems in which the incidents occurred. The systems approach considers the interacting dynamics between human factors, the team(s), the environment and the patient. M&M reviews consider these complex, interactive systems and reflect on clinical outcomes from this perspective, recognizing that individual incidents may in fact reflect symptoms of a wider drift away from safety within local systems and/ or processes.

1.2 Process/ procedures

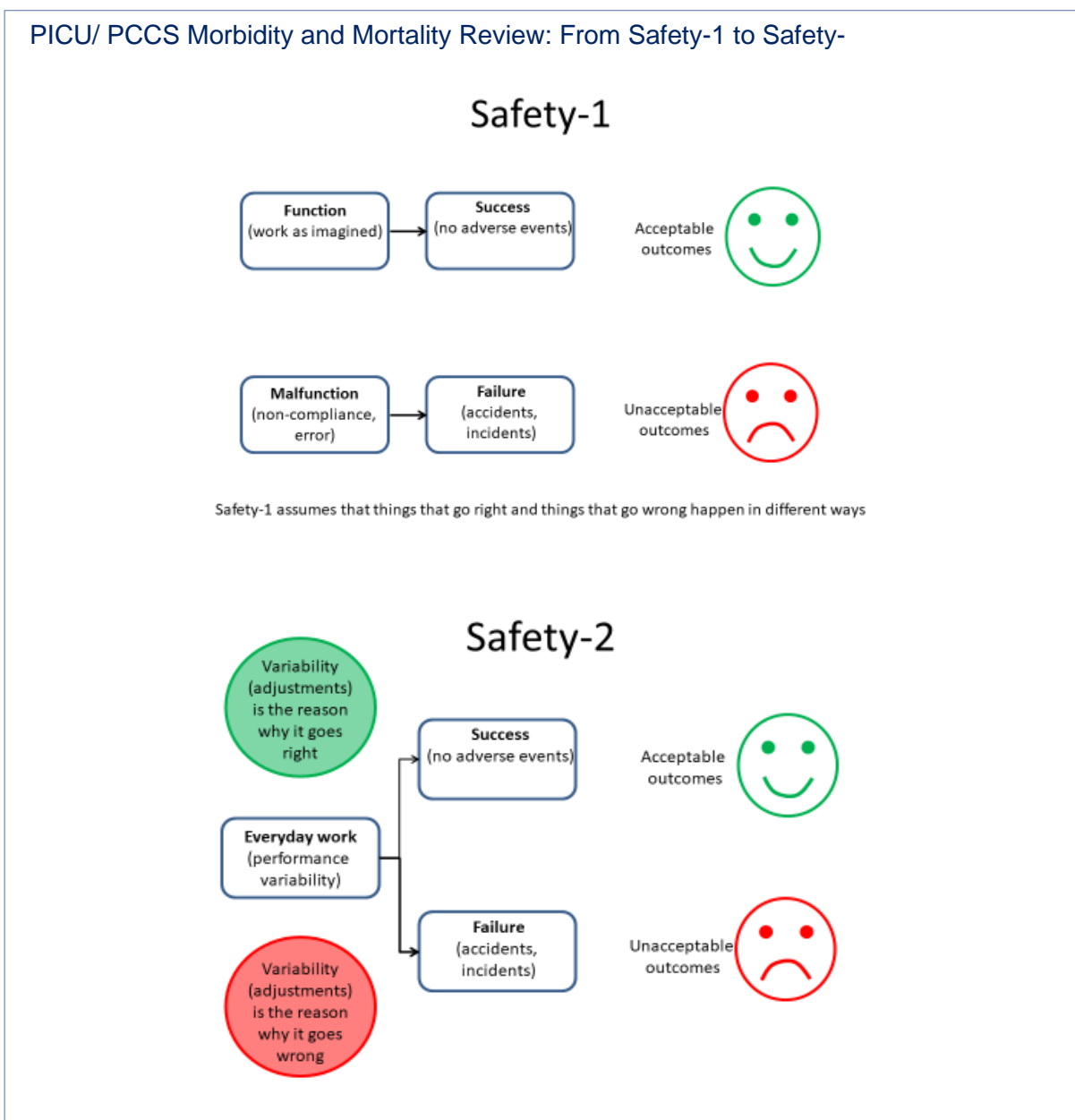
- Meetings are held on a regular basis as required and specified by the relevant local governance process
- The Chairperson is responsible for creating an atmosphere that is conducive to open discussion and should ensure all members have an opportunity to contribute
- The Chairperson is responsible for ensuring that discussions are used for educational and system improvement purposes and not for apportioning blame to individuals
- Terms of Reference (TOR) are developed and a copy made available to all committee members. TOR are to be updated annually (an example is attached in Appendix A)
- Discussions are guided by principles of “Just Culture” which is about achieving accountability
- Any possible performance issues identified are not to be discussed within the M&M but rather are referred to the relevant performance management processes in accordance

with policies around Managing Complaints and Concerns about Clinicians and Managing for Performance

1.3 Relationships/ people

Relationships and collaboration in teams is critical in establishing a safe culture for learning. A positive team culture with shared understanding and accountability enables constructive clinical reviews without assignment of blame. This is critical when cases are presented whereby clinicians are directly involved in the case and may feel some vulnerability in relation to their contribution. Shifting the focus from the individual enables a safe conversation with shared accountability from a systems perspective.

Local example: Reframing the discussion The Paediatric Intensive Care Unit (PICU) at the Children's Hospital Westmead (CHW) introduce the notion of Safety 1 and Safety 2 as part of their M&M meeting. At the beginning of each meeting these slides are used as a reminder of reframing the discussion from Safety 1 to focus on Safety 2





2. Multidisciplinary

Enhancing active participation across the disciplines

Minimum Standard	Gold Standard
Multidisciplinary attendance, including clinicians from nursing, midwifery, medical, allied health and pharmacy (if available, as not all facilities have pharmacists)	Discussions lead across the disciplines and specialties to reflect the diversity and complexity of interacting systems
M&M participation is identified by the appointed clinical department head as a 'core' activity for all clinicians	Multidisciplinary clinicians from outside the team/ department are invited to attend when they have played a significant role in the patient's care to give their perspective of events
A Chairperson is appointed by the senior governing body of the LHD in consultation with governance and managers responsible for providing leadership/ oversight	Rotation of Chairperson across disciplines to reflect different methodologies and models of care that impact on the delivery of patient care
Appointment of meeting secretariat with clearly defined role of coordination and documentation associated with the meeting, including a meeting report	Engaging the expertise of patient safety and improvement specialists within the local settings is encouraged as they provide support in human factors' and systems thinking

2.1 Structure

Multidisciplinary participation in M&Ms is crucial as it parallels models of care and enables a diversity of perspectives based on the experiences of clinicians. Active participation across the disciplines and specialties reflects the diversity and complexity of interacting systems. Multidisciplinary perspectives enhance reflective practice from a systems perspective and a shift from a linear attribution-focused model. An atmosphere within meetings aiming to flatten the perceived hierarchy between disciplines should be encouraged to facilitate open and equitable discussion.

2.2 Process/ procedures

- Meetings are multidisciplinary, including clinicians from nursing, midwifery, medical, allied health and pharmacy
- In determining membership, consideration should be given to clinicians from related specialties with whom the department frequently interacts
- Participation in M&M meetings is a 'core' activity for all clinicians. The responsibility for ensuring this occurs resides with the duly appointed clinical department head
- A Chairperson is appointed by the senior governing body of the LHD in consultation with governance and managers responsible to provide leadership/ oversight
- Rotation of Chairperson across disciplines is also suggested to reflect different methodologies and models of care that impact on the delivery of patient care

- Establish trust in appointment process including engagement and consultation with senior clinical leaders including Directors of Medical Services (DMS), Directors of Nursing and Midwifery (DoNM) and Department Heads/ Managers
- Establish process for documentation associated with the meeting (See Appendix B example). QIDS M&M module may also be used for this purpose
- Where cases are identified for presentation, clinicians from outside the department who played a significant role in the patient's care are invited to attend
- Consider opportunities for linking small and/ or remote services/ departments with larger ones to enhance learning opportunities and strengthen clinical networks

2.3 Relationships/ people

Building relationships across the diversity of disciplines and roles enables dynamic meetings and allows input that reflects the unique skills, perspectives and expertise that each group brings. Engaging the expertise of patient safety and improvement specialists within the local settings is encouraged as they provide support in human factors' and systems thinking.

Local example: NSW Clinical Leadership M&M Forum - Friday 14 June 2019

This forum was attended by over 100 clinicians from a diversity of disciplines from across all LHDs. The forum focused on the role of M&Ms in improving safety and quality and included interactive workshops and panel discussions from international and interstate perspectives, empirical evidence and local examples. The Forum's workshop highlighted the significance of multidisciplinary attendance and contributions including the following messages from participants across the LHDs:

Learning and working together

An ideal M&M includes:

"Culture of professional respect where all views are considered including: Nursing, Medical (beyond own department where relevant), Management and Administration (senior decision-maker) as well as a diversity of experience levels from senior to junior"

"If you don't involve all teams, you end up judging them - M&M facilitators of each silo should approach the other teams involved to obtain their view; hence the solutions will be more comprehensive"

"M&M committee is a group of multidisciplinary members trying to learn from each other with examples in a grown-up discussion"

"Culture of engagement across departments and developing a quality improvement culture with a safe space to learn and trust, to speak up with no blame"

"Finding ways to include the voice of patients and families including a patient/consumer representatives at M&Ms or sharing their perspectives in the M&M presentations where appropriate"

NSW Clinical Leadership M&M Forum 2019

Link to full forum summary <http://www.cec.health.nsw.gov.au/improve-quality/Clinical-Leadership-and-Engagement/medical-and-clinical-forums-2019>



3. A Meeting Framework

Systematic agenda setting with support from clinical analytics

Minimum Standard	Gold Standard
Consistent, structured meeting format and agenda informed by key triggers and criteria developed for each meeting	Structured meeting format which reflects relevant issues in the clinical context and triangulated with other data sets
<p>Key identifiable triggers and criteria include:</p> <ul style="list-style-type: none"> ♦ Complex presentations with multiple risk factors with positive outcomes ♦ Clinical indicators which reflect performance ♦ Adverse events (including serious morbidity) ♦ Selected deaths and sentinel event ♦ Patient Safety Incidents notified in IIMS & ims+ (e.g. Incident type Clinical Management) ♦ Consumer or family/ carer feedback ♦ Cases requiring Open Disclosure ♦ Themes from Risk Register (at least annually) 	Identifiable triggers and criteria to emphasise positive outcomes to enhance learning from what is done well
<p>Access to automated processes that identify relevant themes and triggers that support a systematic case selection including:</p> <ul style="list-style-type: none"> ♦ Quality Improvement Data System (QIDS) ♦ National Surgical Quality Improvement Program (NSQIP) ♦ CEC Death Review database ♦ Consumer or family/ carer feedback 	<p>Incorporation of objective analysis using available data, to place cases and outcomes within the broader context of overall performance and to reduce the impact of cognitive biases inherent in retrospective case consideration and discussion. Such analysis may include:</p> <ul style="list-style-type: none"> ♦ A literature review of available evidence ♦ Statistical indicators of performance against agreed benchmarks, taking into account case-mix and local factors
Emphasis on themes identified rather than specifics of individual cases: looking for patterns across outcomes that can be translated into learning opportunities rather than for causes of individual outcomes	Establishing relationships with identified clinical analytics experts in local settings to enable access to meaningful and relevant data to enhance systematic processes
Reference to best practice, peer reviewed clinical guidelines, standards	Focused systematic or narrative reviews of the clinical literature and the evidence base for best practice, including the patient safety literature

3.1 Structure

M&Ms that focus on a systems perspective review with all the care delivered to maximise learning and improvement opportunities. This includes expanding from a focus solely on 'case selection' which can limit the context for discussions, towards the inclusion of wider analysis including available data and learning from positive outcomes. Limiting the emphasis on death and adverse outcomes and reviewing all the care delivered from a systems perspective maximises learning and improvement opportunities. Safety 2 emphasises the strength of human factors as a resourceful and adaptive part of the system. There are significant opportunities for learning from how clinicians are adaptive to the complex systems that they work in and make adjustments to enable the system to work.

3.2 Process/ procedures

Systematic agenda setting is achieved using clear criteria and utilising key performance makers informed by clinical analytics. Establishing clear criteria and key markers is critical to maximising the opportunity to identify both adverse and positive patient outcomes and to highlight strength/ resilience within the system. This includes the following areas:

- Clinical indicators which reflect performance
- Positive outcomes despite high complexity and risks
- Selected deaths and sentinel events
- Adverse events (including serious morbidity)
- Patient Safety Incident notified in IIMS & ims+ (particularly clinical management incidents)
- Patient feedback
- Cases requiring Open Disclosure
- Themes identified from Risk Register

Restricting discussion to 'things that go wrong' limits consideration to only a fraction of the data of the most infrequent occurrences and restricts learning to that which results from a handful of opinions based on analysis where the outcome is known. Inclusion of the above criteria enables consideration of the broader context of the complex and adaptive systems that clinicians work in.

3.3 Relationships/ people

Case discussion has limitations if it is not considered in the broader systems perspective and needs to be reflected in a clinical context and triangulated with other data sets. Clinical analytics tools in local settings and across NSW Health are rapidly developing and enable automated processes that identify relevant themes and triggers that support a systematic case selection. To fully understand how the system works it is important to look for patterns and themes identified across events, rather than for causes of individual events. Establishing relationships with identified clinical analytics experts in local settings can also enable access to meaningful and relevant data to enhance systematic processes.

Review of deaths

A common practice is for a nominated clinician to review all deaths prior to the meeting and, in conjunction with the Chairperson, decide which cases will benefit from detailed presentation and discussion. Where this happens, the opportunity must still exist for clinicians to raise concerns about any other deaths that have not been presented in detail.

To support this process the CEC has developed an [Admitted Patient Death Screening Tool](#). Death screen data includes an admission profile, cause of death, end of life management, screening criteria, outcomes of screening and referrals for further review.

The Admitted Patient Death Screening Tool aims to:

- standardise measures of death review
- provide local evidence of compliance with numerous NSW Health policy directives
- provide Statewide information to drive improvement
- provide evidence of compliance with actions in National Safety and Quality Health Service Standards

A web-based intranet online database (workflow management, data collection and analysis) supports the recommended standard of medical record screening. This provides a means to improve medical management and examine adverse events, complications, and errors that have led to illness or death in patients. The database has been rolled out to all LHDs and the data can be accessed to support case review in the M&M meeting.

Some deaths must be reported to external bodies For example: Coroner, Special Committee Investigating Deaths Under Anaesthesia (SCIDUA), Collaborative Hospitals' Audit of Surgical Mortality Maternal and Perinatal Mortality Review Committee (CHASM). The fact that an external report has occurred should not be a reason for dispensing with local review and identifying opportunities for system improvements.

End of Life Management

When reviewing a patient's death include a review of the patient's last days of life management i.e. the how and not only the why. This should include:

- Was there an opportunity to commence end of life discussions earlier with the patient? For example: was the patient hospitalised more than 3 times in the 12 months prior to dying?
- Did the patient have a clinical review call or rapid response in the 24 hours prior to dying?
- Could the treating team have identified that the patient was at risk of dying during the episode of care despite treatment?
- If appropriate, was there an opportunity for the treating team to commence earlier end of life management planning that included identifying the patient's wishes?
- Were the person's family or nominated carers involved in end of life planning discussions, and were bereavement risks and supports considered including social, spiritual and cultural needs?

Local example: Case Review Checklist

Sydney LHD's Department of Cardiothoracic Surgery at Royal Prince Alfred Hospital (RPAH) developed a case review checklist to provide a structure to guide discussion and review of a case brought to an M&M. Privacy principles need to be maintained in the collection, use, storage and security of any information documented in this checklist.

Morbidity and Mortality Case Review Checklist – Surgery		
Date of meeting _____		
Patient: Initials _____ Date of Admission _____ MRN _____ Date of Procedure _____ Age _____ DO Death/Discharge _____ Surgeon(s) _____ LOS (days) _____ Procedure _____ Elective / Emergency _____		
Source of case: Surgeon / Chairperson / IIMS / Other _____		
Indication for discussion: Safety 1: Death / Complication (Claven-Dindo grade 3-4) / Re-intervention / Readmission Grade 5 = Death Grade 4 = Life-threatening complication requiring ICU (single/multi-organ) Grade 3 = Requiring surgical / endoscopic / radiological intervention (+/- GA) Safety 2: Positive outcome despite unexpected conditions, indicating system resilience. Near miss / Exceptional care / Positive feedback / Important lessons		
Critical identification of factors that may have contributed to the outcome		
Systems Staffing eg. anaesthetic, surgical, nursing, ICU Training Equipment / Technology Access – ICU / ward beds, theatre Other		
Processes Protocols / policies / checklists available? usable? followed? Standardisation of important procedures? Clinical priority category correct? Waiting time appropriate? Theatre time of day appropriate? Other		
Individuals & Teams Patient factors Elective / emergency admission? ASA? Risk factors for outcome Other relevant factors Clinical risk score available? used? Other Surgical team factors Appropriate? Experience? Preparation? Culture? Communication? Escalation? Other		
Non-Surgical team factors e.g. anaesthetic, nursing, ICU, other medical Pre-operative e.g. work-up, optimisation Post-operative management? ICU stay?		
Proceduralist factors Delegation / supervision appropriate? OT Indication – diagnostic delay? error? Guidelines used? MDT? Case preparation? High risk? Choice of operation correct? Intra-operative management? Post-operative management? Clinical decision making: Plan creation appropriate? Plan communication achieved? Plan continuation/amendment appropriate in the face of new information? Contextual factors – environment? fatigue?		
Critical appraisal of opportunities for quality improvement		
Objective analysis: Literature review of published evidence for this procedure / outcome • Identified opportunity for improvement? <input type="checkbox"/> Statistical indicators of performance against agreed benchmarks (consider case-mix) • In-range? Out-of-range? Management plan? <input type="checkbox"/>		
Subjective analysis Before conducting the subjective analysis, first list some other outcomes (positive and negative) they may have resulted if minor changes in events had occurred: Safety 1: • Was the outcome judged to be preventable? Definitely / probably / probably not / definitely not <input type="checkbox"/> • Could / should care have been better at that point in time, in that environment, and when the outcome was not yet known to those involved? <input type="checkbox"/> • If your opinion = yes, then what factors can you identify that may have led the team / individual to choose that course of action at that time? <input type="checkbox"/> Safety 2: • How were other similar incidents managed / outcomes avoided? <input type="checkbox"/> • Is there a gap between procedures (work imagined) and practice (work done)? <input type="checkbox"/> • If there is a gap, are the procedures appropriate? <input type="checkbox"/> • If the procedures are appropriate, why has practice drifted? <input type="checkbox"/> What strategies could be developed to minimise risk and create safety for other patients, other surgical teams, and other organisations?		
<small>Cognitive biases considered: 1 Anchoring bias, Exposure bias; 2 Confirmation bias (mental simulation activates counterfactual mindset); 3 Attribution bias; 4 Outcome bias, Hindsight bias; 5 Explores local rationality</small>		
Recommendations and Actions		
Second victim support given? – EAP, psychological first aid, debriefing, follow-up	By whom	By when
Internal actions – Reflective practice, literature review, audit, policy amendment		
External actions – IIMS, RCA, Quality & Safety Committee, other external escalation		



4. Comprehensive discussions

To generate actionable learning and/ or system improvement

Minimum Standard	Gold Standard
Consistent, structured case presentation from a systems perspective	<ul style="list-style-type: none"> Utilisation of a checklist or similar document to ensure routine systematic consideration of all factors involved in care delivery Using Safety 2 by exploring how things usually go right in order to understand how things sometimes go wrong
Meetings critically analyse the circumstances surrounding outcomes of care for the purpose of identifying opportunities for improvement	Meeting facilitation guided by human factors and/ or quality improvement methodology to enhance learning for improvement
Case discussion to focus on the systems and processes of care and not on individuals who provided the care, while recognising the influence of cognitive biases when forming opinions where the outcome is known	Systems-focus is informed by Safety 2 methodology, exploring the context of working in a system that more often enables positive outcomes in the face of complexity and variation
All information should be de-identified	Linkage to established M&M databases to ensure dissemination of learnings achieved

4.1 Structure

Cases at M&Ms should be presented in a manner to facilitate comprehensive discussions with an opportunity to engage the expertise in the meeting. Depending on the area of speciality there may be a diversity of methodologies that clinicians use to formulate a case presentation and facilitate a discussion. Case discussions can be very problem-saturated, and it is critical to balance the different perspectives while providing an opportunity to consider what went well despite the complexities and high risks identified and any potential positive outcomes. Case discussions structured this way emphasise key learnings and identify an opportunity for improvement or changes that are less case-specific, but instead can be applied more widely across differing environments and systems.

4.2 Process/ procedures


- Meetings critically analyse the circumstances surrounding outcomes of care, for the purpose of identifying opportunities for improvement
- Focus on the systems and processes of care and not on individuals who provided the care. Routine consideration of all factors that may contribute to outcomes including procedure, environment, equipment, people, policy, or other
- All information should be de-identified (that is, patients should not be referred to by name) and record-keeping from the meeting should document key themes and learnings rather than specific case details
- Safety 2 provides an emphasis on human factors as a resource with opportunities to learn from positive as well as adverse outcomes. It emphasises:
 - Positive outcomes: what went well and how can this be replicated?
 - Adverse outcomes: how do we mostly get this right and what contributed to the adverse outcome this time?

4.3 Relationships/ people

Comprehensive case discussions are reliant on good facilitation and leadership from the M&M meeting Chairperson, who should be a senior member of the Department. Chairperson should be provided with opportunities to receive education in human factors' and/or quality improvement methodology. This role requires establishing good relationships across the system to enable learning from the significant clinical expertise and roles and responsibilities relating to patients' care. Relationships with a diversity of stakeholders outside of direct patient care are also critical and should include connections with Patient Safety and Improvement Leaders who have expertise in coaching and facilitation and can provide support to generate learning into improvement and recommendations for the system.

Local example: Template guide for M&M discussions

Justice Health and Forensic Mental Health Network have developed this template guide for their M&M discussions to ensure all aspects of patient care are considered in the discussions. This includes some guiding questions to prompt further discussion.

 Health Justice Health and Forensic Mental Health Network
Justice Health and Forensic Mental Health Network Morbidity & Mortality Clinical Review Meetings
Case/Issue for discussion
Patient ID: XX
Patient admission date: Long Bay Hospital 29/9/2017 from Metro Remand Centre
Source of case /issue (Department/Stream, Clinical Governance, CE, other):
Case nominated for discussion by Integrated Care
Indication for discussion of case/issue:
Safety I – Death/Complication/SAC 1, 2
Safety II – <u>Exceptional Care/Near Miss/positive feedback/important lesson</u>
De-identified description of case/issue (use ISBAR):
Introduction
• Patient:
• Age:
• Status:
Situation Describe the current circumstances and the issues identified
Background Provide medical history and current diagnosis
Assessment Include current assessment and formulation
Recommendation Identify any recommendations made and current plans or actions for patient care
Some discussion points – all of these are incorporated in the systems issues table below, with some proposed recommendations and actions:
Include questions to guide the discussion and explore areas that should be considered for example: Have you considered? Should we be looking at? Considering this current situation what other options can we consider?
<small>Justice Health and Forensic Mental Health Network ABN 70 194 595 506 PO Box 150 Matraville NSW 2036 Tel: (+61 2) 9700 3400 Fax: (+61 2) 9700 3744 Website: www.justicehealth.nsw.gov.au</small>



Examples of Case Discussion Themes to Consider

Delegation and Supervision of Clinical Care

Safe clinical care requires that care was provided either directly by experienced, skilled staff, or by inexperienced staff under a level of supervision that is appropriate for the patient's illness and circumstances, and to the level of competence of the staff member performing care. When required, escalation of care to other clinicians should be timely and responded to appropriately. M&M supervision discussions can consider the following areas:

- Clinical care was delegated appropriately
- Supervision of clinical staff was provided when necessary
- Supervision provided by clinicians at the point of care was appropriate for the level of expertise of the clinicians involved
- Supervision was structured to allow clinicians to be trained without compromising patient care
- Identification of escalation opportunities that were missed

Diagnostic Error

Diagnostic error refers to a diagnosis that is missed, incorrect or delayed as detected by subsequent definitive information. Errors range in severity from 'near misses', with little or no impact on overall patient outcomes, to serious incidents with significant adverse outcomes for patients. The absence of an accurate diagnosis may lead to delays in initiating the optimal treatment and subsequently lead to an increased length of stay and poorer patient outcomes. The opportunity to discuss diagnostic error in the M&M meeting provides an important aspect of learning and developing as a team to prevent the same mistakes from recurring in the future. A Cognitive Autopsy is a self-reflection exercise that provides meaningful and realistic feedback following the recognition of diagnostic error. This self-reflection process encourages reflective learning, the development of insight and a change in clinical cognition that reduces the likelihood of the error being repeated. (Appendix D - Cognitive Autopsy Guide) <http://www.cec.health.nsw.gov.au/improve-quality/diagnostic-error/education>



5. Lessons Learned

Documentation of lessons learned and dissemination of recommendations to ensure action

Minimum Standard	Gold Standard
Designated person to take notes of key findings at each meeting, which will assist in the compilation of a Meeting Report	Recommendations from M&Ms reflect clinical practice improvement ideas including the potential prevention of future adverse outcomes
Assigning an individual/ group to carry out recommendations for improvement within a designated timeline	Ongoing report feedback mechanisms including progress and outcomes of recommendations
Where actions recommended by the M&M meeting cannot be implemented, this must be specifically escalated to the Department Director/ Facility Manager	Communication of lessons learned from M&Ms are framed as an opportunity to reflect the significant expertise of clinicians at the point of care
Meeting reports should be distributed within the Department; all information should be de-identified	Clinicians trust that their reports and recommendations will be used to support change and improvement and not be used as a judgement tool
A quarterly report must be submitted to the Facility Manager/ Patient Safety and Quality Committee	Ensuring recommendations for individual/ systems improvement are made for each case

5.1 Structure

Documentation is structured in an engaging and purposeful way to address the challenges of a reporting culture which is often perceived as onerous and punitive. Communication of lessons learned from M&Ms is framed as an opportunity to reflect the significant expertise of clinicians at the point of care. Recommendations from M&Ms reflect clinical practice improvement ideas including potential prevention of future adverse outcomes. An important structure in the documentation of M&Ms is to consider effective feedback mechanisms whereby clinicians have examples of how their recommendations from M&Ms build the understanding of the system of areas of high risk to the patient.

5.2 Process/procedures

- Designated person to take notes of key findings at each meeting, which will assist in the compilation of a Meeting Report (Appendix B)
- A brief Meeting Report is compiled after each meeting, which identifies cases discussed (identified either by MRN or by initials and date of death), the actions that must be taken as a result of the review, noting who is responsible and a due date
- Report should focus on themes and systems opportunities rather than specific cases
- The report is distributed within the Department
- A quarterly report is submitted to the Facility Manager/ Patient Safety and Quality Committee (A suggested reporting format is provided in Appendix C)
- Where actions recommended by the M&M meeting cannot be implemented, this is specifically escalated to the Facility Manager/ Patient Safety and Quality Committee

5.3 Relationships/ people

Clinicians need to feel empowered in their role of influencing system improvement. This includes establishing open and transparent communication mechanisms whereby clinicians trust that their reports and recommendations will be used for systems improvement and not as a judgement tool. Establishing effective relationships across reporting pathways is critical to ensure ongoing feedback mechanisms including progress and outcomes of recommendations.

Local example: Taxonomy of emerging system issues and themes

Use of a taxonomy such as the DECS framework by Raj Behal is a contributory factor analysis tool and provides a useful template to identify systems issues generated from M&M reviews. As a local example of this methodology South Eastern Sydney LHD have developed a unique classification system to capture the core systems issues that are identified in M&M discussions.

SESLHD Adverse Event Classification System <small>Instructions: Indicate any options that you believe impacted on the reviewed adverse event. Updated: April 2019</small>			
1	Access to Service	<input type="checkbox"/>	
1.1	Not available	<input type="checkbox"/>	
1.2	Delay	<input type="checkbox"/>	
1.3	Inappropriate	<input type="checkbox"/>	
2	Assessment	<input type="checkbox"/>	
2.1	Inadequate	<input type="checkbox"/>	
2.2	Inappropriate	<input type="checkbox"/>	
2.3	Delay	<input type="checkbox"/>	
2.4	Incorrect	<input type="checkbox"/>	
3	Investigations	<input type="checkbox"/>	
3.1	Not requested	<input type="checkbox"/>	
3.2	Delay	<input type="checkbox"/>	
3.3	Inappropriate	<input type="checkbox"/>	
3.4	Results not reviewed	<input type="checkbox"/>	
3.5	Results not acted on	<input type="checkbox"/>	
4	Diagnosis	<input type="checkbox"/>	
4.1	Delay	<input type="checkbox"/>	
4.2	Incorrect	<input type="checkbox"/>	
4.3	Missed	<input type="checkbox"/>	
5	Treatment	<input type="checkbox"/>	
5.1	Delay	<input type="checkbox"/>	
5.2	Incorrect	<input type="checkbox"/>	
5.3	Inadequate	<input type="checkbox"/>	
5.4	Unavailable	<input type="checkbox"/>	
6	Observations	<input type="checkbox"/>	
6.1	Not recorded	<input type="checkbox"/>	
6.2	Missed /not done	<input type="checkbox"/>	
6.3	Significance not recognised	<input type="checkbox"/>	
6.4	Altered criteria inappropriate	<input type="checkbox"/>	
7	Death	<input type="checkbox"/>	
7.1	Unexpected – refer to coroner	<input type="checkbox"/>	
8	Escalation	<input type="checkbox"/>	
8.1	Not escalated to senior staff member	<input type="checkbox"/>	
8.2	Delay	<input type="checkbox"/>	
8.3	Inadequate escalation	<input type="checkbox"/>	
8.4	PACE not activated	<input type="checkbox"/>	
8.5	T1 activation with T2 criteria	<input type="checkbox"/>	
8.6	Response inadequate	<input type="checkbox"/>	
8.7	REACH call made	<input type="checkbox"/>	
8.8	Patient/Family not aware of REACH	<input type="checkbox"/>	
9	Communication	<input type="checkbox"/>	
9.1	Documentation inadequate/incomplete	<input type="checkbox"/>	
9.2	Inadequate between care providers	<input type="checkbox"/>	
9.3	Inadequate to patient/family /carers	<input type="checkbox"/>	
9.4	Interpreter required but not utilised	<input type="checkbox"/>	
9.5	Poor health literacy of patient/carer	<input type="checkbox"/>	
9.6	Informed consent not obtained	<input type="checkbox"/>	
10	Care Planning	<input type="checkbox"/>	
10.1	Care continuity failure	<input type="checkbox"/>	
10.2	Care coordination poor	<input type="checkbox"/>	
10.3	Patient/family/carer not included	<input type="checkbox"/>	
10.4	Inadequate	<input type="checkbox"/>	
10.5	Inappropriate	<input type="checkbox"/>	
10.6	No plan evident	<input type="checkbox"/>	
11	Distress	<input type="checkbox"/>	
11.1	To patient	<input type="checkbox"/>	
11.2	To family /carers	<input type="checkbox"/>	
11.3	To staff	<input type="checkbox"/>	
12	Hospital Acquired Complications (HACs)	<input type="checkbox"/>	
12.1	Pressure Injury	<input type="checkbox"/>	
12.2	Fall and fracture	<input type="checkbox"/>	
12.3	HAI	<input type="checkbox"/>	
12.4	VTE	<input type="checkbox"/>	
12.5	Renal failure	<input type="checkbox"/>	
12.6	Unplanned ICU admission	<input type="checkbox"/>	
12.7	Surgical complication	<input type="checkbox"/>	
12.8	GI bleed	<input type="checkbox"/>	
12.9	Respiratory complication	<input type="checkbox"/>	
12.10	Delirium	<input type="checkbox"/>	
12.11	Cardiac complication	<input type="checkbox"/>	
12.12	Malnutrition	<input type="checkbox"/>	
12.13	Persistent incontinence	<input type="checkbox"/>	
12.14	Other complication	<input type="checkbox"/>	
13	Medication	<input type="checkbox"/>	
13.1	Prescribing error	<input type="checkbox"/>	
13.2	Administration error	<input type="checkbox"/>	
13.3	Reconciliation error	<input type="checkbox"/>	
13.4	Dispensing error	<input type="checkbox"/>	
13.5	Labelling error	<input type="checkbox"/>	
13.6	Not available	<input type="checkbox"/>	
14	Transfer of Care	<input type="checkbox"/>	
14.1	Delay	<input type="checkbox"/>	
14.2	Setting inappropriate	<input type="checkbox"/>	
14.3	Failed discharge	<input type="checkbox"/>	
14.4	Inadequate stabilisation	<input type="checkbox"/>	
14.5	No D/C summary /handover	<input type="checkbox"/>	
15	Harm	<input type="checkbox"/>	
15.1	To patient	<input type="checkbox"/>	
15.2	To family /carers	<input type="checkbox"/>	
15.3	To staff	<input type="checkbox"/>	
16	Equipment	<input type="checkbox"/>	
16.1	Not available	<input type="checkbox"/>	
16.2	Delay	<input type="checkbox"/>	
16.3	Available but not used	<input type="checkbox"/>	
16.4	Failed/not working	<input type="checkbox"/>	
16.5	Used incorrectly	<input type="checkbox"/>	
16.6	Wrong equipment used	<input type="checkbox"/>	
17	Environment	<input type="checkbox"/>	
17.1	Inappropriate	<input type="checkbox"/>	
17.2	Access to means of self harm	<input type="checkbox"/>	
18	End of Life Care	<input type="checkbox"/>	
18.1	NFR/not for CPR not documented	<input type="checkbox"/>	
18.2	No EOL plan documented	<input type="checkbox"/>	
18.3	EOL plan documented but not followed	<input type="checkbox"/>	
18.4	Patient/family not consulted	<input type="checkbox"/>	
18.5	Invasive procedure at EOL	<input type="checkbox"/>	
19	Clinical Handover	<input type="checkbox"/>	
19.1	Did not occur	<input type="checkbox"/>	
19.2	Inadequate /ineffective	<input type="checkbox"/>	
19.3	Delay	<input type="checkbox"/>	
20	Policy / Guidelines	<input type="checkbox"/>	
20.1	Not available /not existing	<input type="checkbox"/>	
20.2	Not known by staff	<input type="checkbox"/>	
20.3	Not followed by staff	<input type="checkbox"/>	
20.4	Unclear /unworkable	<input type="checkbox"/>	
21	Complaint	<input type="checkbox"/>	
21.1	From patient	<input type="checkbox"/>	
21.2	From family /carer	<input type="checkbox"/>	
21.3	From staff	<input type="checkbox"/>	
22	Supervision	<input type="checkbox"/>	
22.1	Registrar not available	<input type="checkbox"/>	
22.2	Registrar not responding	<input type="checkbox"/>	
22.3	Consultant not available	<input type="checkbox"/>	
22.4	Consultant not responding	<input type="checkbox"/>	
22.5	Senior staff member not available	<input type="checkbox"/>	
22.6	Senior staff member not responding	<input type="checkbox"/>	
22.7	Inappropriate delegation	<input type="checkbox"/>	
22.8	Support inadequate	<input type="checkbox"/>	
23	Teamwork	<input type="checkbox"/>	
23.1	Roles unclear	<input type="checkbox"/>	
23.2	No clear leader	<input type="checkbox"/>	
23.3	Team not working together	<input type="checkbox"/>	
24	Workforce	<input type="checkbox"/>	
24.1	Scope of practice /credentialing issue	<input type="checkbox"/>	
24.2	Inadequate number of staff	<input type="checkbox"/>	
24.3	Orientation / induction inadequate	<input type="checkbox"/>	
24.4	Skill mix inappropriate	<input type="checkbox"/>	
24.5	Training /education inadequate	<input type="checkbox"/>	
24.6	Individual Performance issue identified	<input type="checkbox"/>	
24.7	Unexpected demand on service	<input type="checkbox"/>	
24.8	After hours demand	<input type="checkbox"/>	
Comments:			



6. Governance

Reporting pathways to support learning and recommendations

Minimum Standard	Gold Standard
Defined, agreed and documented governance structure	M&M meetings are integrated into existing quality and safety governance to support and enhance alignment across the system
Clarity of roles and responsibilities in the context of actions, recommendations and due dates	Engagement and effective relationships between clinical departments and clinical governance units to enhance integration of M&Ms
Agreement at the level of the institution and within individual departments on the escalation and reporting pathways that are most appropriate for that institution and department	Escalation and reporting steps that can be initiated within the meeting, such as use of IIMS & ims+ and Death Registry and Reporting via CHASM

6.1 Structure

An established governance structure is essential in supporting the learnings and recommendations from M&Ms. It is critical that M&M meetings are integrated into existing quality and safety processes to support and enhance alignment across the system. Clear pathways of communication and escalation enhance the understanding of the various risk management and patient safety and quality structures across the system. Integration of the diversity of clinical review processes across the systems strengthens the accuracy and integrity of incident data in the NSW health system to one that is reflective of adverse events across the spectrum of severity and complications.

6.2 Process/ procedures

- Defined, agreed and documented governance structure
- Clarity of roles and responsibilities in the context of actions and recommendations
- Agreement at the level of the institution and within individual departments on the escalation and reporting pathways that are most appropriate for that institution and department
- Escalation and reporting steps that can be initiated within the meeting, such as use of IIMS & ims+ and Death Registry and Reporting via CHASM

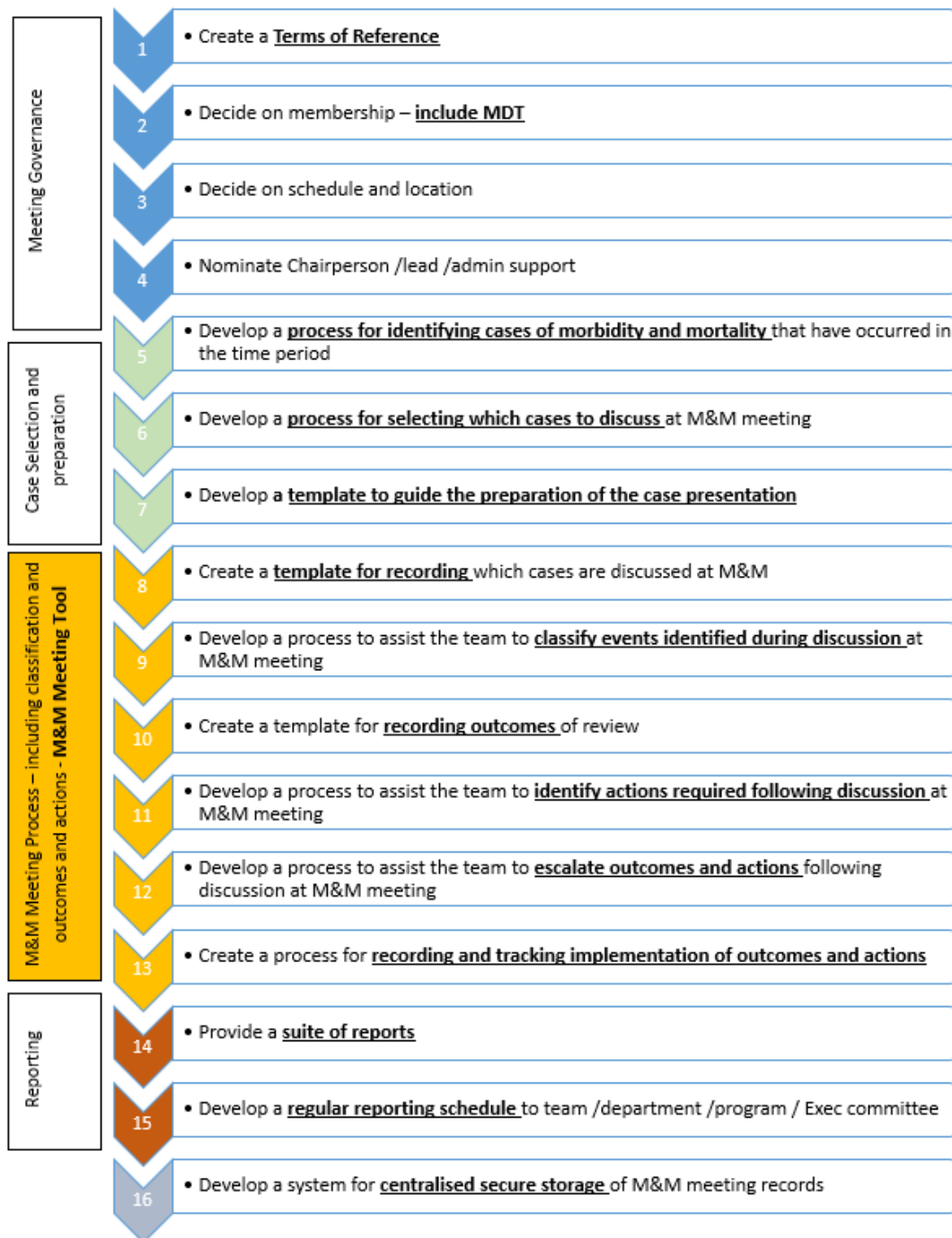
6.3 Relationships/ people

Quality patient care is reliant on effective relationships including those between clinical departments and clinical governance. Clinical Governance Units bring a wealth of knowledge and expertise in quality and safety and can support clinicians at the point of care to share their experiences and inform the system through their learning.

Local example: M&M Governance Package

South Eastern Sydney LHD have drafted a governance package to support and guide M&M processes. This template provides prompts for each of the elements of an M&M to support and enhance consistent and structured processes.

Morbidity and Mortality Meetings POWH Governance Package



NSW Legislation

Serious incidents identified in M&M/ clinical review meetings

NSW Health supports an open culture of reporting, using incidents to learn and taking action to reduce the risk of recurrence. Incidents must be notified in the incident management system.

Reportable incidents require escalation to the Ministry of Health (MoH) via a Reportable Incident Brief (RIB). Reportable incidents include the Australian Sentinel Events (ASEs) and deaths unrelated to the natural course of illness and differing from the immediate expected outcome of the patient's management.

Legislative changes

Recent legislative changes to serious incident management include:

- Undertaking a preliminary risk assessment after a serious incident to identify immediate risks for action and to make sure patients, carers, families and staff are safe and supported
- Separation of findings and recommendations
- An opportunity to add experts to the review team to develop a recommendation
- Introduction of alternate methods of review along with root cause analysis (RCA)
- State-wide learnings will be shared to improve safety across NSW Health

Link to new legislation:

<http://www.cec.health.nsw.gov.au/Review-incidents>

Intersection of RCAs and M&Ms

- An RCA or an alternate approved review must be undertaken for reportable incidents
- Reportable incidents are usually identified close to the time of incident, notified into the incident management system and an RCA initiated by Clinical Governance
- If a death is discussed at an M&M and identified as a clinical incident, it should be entered into the incident management system and Clinical Governance notified as soon as possible
- Typically an RCA or review will be underway by the time the case is being considered at an M&M/ clinical review meeting. Consideration should be given as to the timing of this discussion at M&M
- The M&M/ clinical review meeting should table the RCA findings and recommendations when available and discuss any additional local actions which could be initiated

Qualified privilege

M&M committees can apply for Qualified Privilege (QP). Quality Assurance Legislation under Health Administration Act 1982 Division 6B aims to encourage health care professionals to participate in quality assurance activities by providing for:

- confidentiality of documents and proceedings of M&Ms
- the protection of those documents and proceedings from being used in legal actions

Please see link for application process

<https://www.health.nsw.gov.au/factsheets/Factsheets/qualified-privledge.pdf>

Appendix A: Example of M&M/ clinical review meeting Terms of Reference

Purpose

To contribute to improved clinical quality and patient safety through:

- Critical analysis by a multidisciplinary group of clinicians of the circumstances surrounding the outcomes of care. These outcomes will include selected deaths, serious morbidity and significant aspects of regular clinical practice
- Making recommendations which focus on measures that can prevent similar incidents or adverse outcomes, or for improving the processes of care provided to this group of patients. Recommendations will avoid apportioning blame to individuals
- Initiating action on these recommendations and overseeing the implementation of these actions
- Reporting on implementation of these actions to the Facility Patient Safety and Quality Committee

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

- All deaths associated with a health care intervention and which are not an expected manifestation of the disease process
- Individual or aggregate data regarding adverse outcomes or clinical events which are agreed by the committee as providing useful insight into the quality of care provided
- Statistical indicators of the department's performance against agreed benchmarks
- Clinical incidents notified in IIMS & ims+
- Patient feedback notified in IIMS & ims+
- Open Disclosure cases involving major adverse events
- The committee will consider whether any issue raised needs to be recorded and maintained on a Facility or Departmental Risk Register

Membership

- All senior medical staff appointed to the Department
- All junior medical staff appointed or allocated on rotation to the Department
- All CNCs, CNSs or CNEs related to the Department's activity
- Nursing and midwifery staff associated with the Department's dedicated wards
- Allied health and pharmacy staff dedicated to the Department's activity
- Clinicians from other Departments with which there is frequent interaction

Meeting Operating Procedures

- The meeting will occur monthly
- The schedule of meetings will be published well in advance
- The meeting will elect a Chairperson. This election will be ratified by the Department Head
- The office of Chairperson will be reviewed annually but may be extended
- An agenda will be circulated in advance of the meeting
- Actions notes will be kept and circulated to members after the meeting
- The Chairperson will conduct the meeting to ensure that it focuses on health care service improvement and not on individual blame
- Performance issues identified are referred to performance management processes in accordance with

Managing Complaints and Concerns about Clinicians:

https://www1.health.nsw.gov.au/pds/ActivePDSDocuments/PD2018_032.pdf

[Managing for Performance:](#)

https://www1.health.nsw.gov.au/pds/ActivePDSDocuments/PD2016_040.pdf

Reporting Lines

The committee reports directly to the Facility Manager and will submit minutes and an annual report to the Facility Patient Safety and Quality Committee, and relevant Facility managers.

Appendix B: Example of Morbidity and Mortality Meeting Report

Department: _____

Facility: _____

Date: _____ Time: _____ to _____ hours

Venue: _____

Attendees (name & designation)

1. Actions from Previous Meeting:

Action	Outcome to Date	Person Responsible	Keep on Agenda?

2. Case Reviews

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

3. Recommendations and Actions from this month's Case Reviews:

Recommendation	Action Required	Person Responsible	Timeframe

4. Referrals *(Includes the cases to be referred to other departments and bodies external to the committee)*

SAC 1 Referrals (any case determined to be SAC 1 & not previously assessed as such – identify by MRN or IMS and ims+ id)

Specific Issues - (any issue which needs to be highlighted to the Facility Patient Safety and Quality Committee)

Additions to Risk Register

5. Attachments *(attach any list of de-identified cases presented to the committee for review)*

Distribution of M&M/ clinical review Meeting Report

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

Name of doctor completing:

Print _____

Date ____/____/____

Signature _____

Designation _____

Appendix C: Example of Quarterly Morbidity and Mortality Summary Report

For: _____ department/service

Date from: ____ / ____ / _____ to : ____ / ____ / _____

GENERAL MORBIDITY & MORTALITY INFORMATION	
What were the number of:	
Cases reviewed: _____	Medication incidents: _____
Cases unresolved: _____	Infection control incidents: _____
Communication incidents: _____	Cases referred to other departments _____
Coroner's reports: _____	Delegation/ Supervision incidents: _____
Summary of Key Issues Identified from Morbidity & Mortality Reviews	
Outstanding Issues from other Departments	
Outstanding Issues to other Departments	
Recommendations to Clinical Review Committee for Clinical Practice Changes	
Actions from Previous CRC Recommendations	
Key Risk and Mitigation Strategies	
Morbidity & Mortality Case Presentation Summary	

Name of doctor completing report: Print _____ Signature _____ Designation _____ Date ____ / ____ / ____



Appendix D: Cognitive Autopsy Guideline

Benefits

Performing a Cognitive Autopsy following the recognition of diagnostic error is a self-reflection exercise that provides meaningful and realistic feedback. The self-reflection process encourages reflective learning, the development of insight and a change in clinical cognition that reduces the likelihood of the error being repeated.

Sharing the information learned from a Cognitive Autopsy and generating discussion with team members in forums (such as M&M meetings) promotes a team approach to the key learning in order to improve recognition of the cognitive factors involved in the decision making process and encourages recognition and discussion of the system factors that may have contributed.

When

A Cognitive Autopsy is often performed as an individual process and should be conducted as soon as possible after a diagnostic error has been realised. The self-reflection process encourages reflective learning, the development of insight and a change in clinical cognition that reduces the likelihood of the error being repeated. The principles can also be used as part of a team discussion to identify and prevent future diagnostic errors.

Cognitive Autopsy Guidelines

1. Conduct as soon as possible after event
2. Avoid discussion with others
3. Be well-rested and have an adequate amount of sleep
4. Find a secluded place, free of interruptions with enough time to consider the events in detail
5. Start with the beginning of the day or shift and work through towards the event
6. Consider the event in detail keeping an open mind about events, thoughts and feelings
7. Pay close attention to ambient conditions
8. Write down everything, however trivial
9. Discuss with others and record their comments and observations
10. Consider the cognitive biases involved and their respective impacts

Action

The opportunity to discuss the outcomes of a Cognitive Autopsy during M&M meetings is one that should not be missed. This is an important aspect of learning and developing as a team to prevent the same mistakes from recurring in the future. These meetings need to be structured in a way that enables and promotes discussion and analysis of the thinking processes in a non-judgemental manner for this to be an effective, open and honest discussion that leads to the identification of system solutions.

Considerations during a Cognitive Autopsy

Cognitive Autopsy Steps	Considerations and Rationale			
1. Conduct as soon as possible	<ul style="list-style-type: none"> ▪ The recall of information deteriorates rapidly over time ▪ As it is important to reflect on every possible aspect of the situation, a detailed reflection as soon as possible allows the best opportunity for learning from the event 			
2. Avoid discussion with others initially	<ul style="list-style-type: none"> ▪ Discussing the situation with others before reflecting individually creates the potential to distort perceptions and recollections 			
3. Work through the day from the beginning of the shift through to the event	<ul style="list-style-type: none"> ▪ Write down a detailed account of the shift providing as much objective detail as possible ▪ Develop a timeline that outlines key points or events throughout the day that could have contributed to an error ▪ Use the timeline to identify the critical decision points for the case under review ▪ Reflect on the decision points to identify key cues and decision goals (Be aware of hindsight bias) 			
4. Consider the event in detail keeping an open mind about events, thoughts and feelings	<p>While reflecting on the event consider the following stages of decision making:</p> <p>Plan</p> <ul style="list-style-type: none"> ▪ Do I feel comfortable with my judgement? ▪ Was the patient comfortable with my judgement? <p>Reflect</p> <ul style="list-style-type: none"> ▪ Does it make clinical sense? ▪ Did I put in enough effort thinking about the case? ▪ Did I have biases when thinking about the case? <p>Manage</p> <ul style="list-style-type: none"> ▪ Do I need more information or skills to manage this case better? 			
5. Consider the ambient conditions	<ul style="list-style-type: none"> ▪ Was it a busy shift, lots of pages, other clinical priorities to manage? ▪ What else was going on around me such as new procedures, organisational changes, different environment or different colleagues? ▪ Were there other things on my mind that day such as a conflict at home or an unwell family member? 			
6. Consider the cognitive biases involved and their respective impacts on the decision making process in this case	<p>Common biases related to diagnosis and clinical decision making include:</p> <table border="1" data-bbox="544 1599 1398 1727"> <tbody> <tr> <td data-bbox="544 1599 868 1727"> <ul style="list-style-type: none"> ▪ Anchoring ▪ Framing ▪ Availability </td> <td data-bbox="868 1599 1398 1727"> <ul style="list-style-type: none"> ▪ Confirmation ▪ Overconfidence ▪ Attribution error </td> </tr> </tbody> </table>		<ul style="list-style-type: none"> ▪ Anchoring ▪ Framing ▪ Availability 	<ul style="list-style-type: none"> ▪ Confirmation ▪ Overconfidence ▪ Attribution error
<ul style="list-style-type: none"> ▪ Anchoring ▪ Framing ▪ Availability 	<ul style="list-style-type: none"> ▪ Confirmation ▪ Overconfidence ▪ Attribution error 			

References:

Croskerry, P, Singhal, G and Mamede, S. 2013. *Cognitive debiasing 1: origins of bias and theory of debiasing*: Published online first, *BMJ Quality and Safety*, Vol. 0, pp. 1-7.

Croskerry, P. 2003. *The importance of cognitive errors in diagnosis and strategies to minimize them*. *Acad med*; 78: 775-80.

Croskerry, P. 2002. *Achieving quality in clinical decision making: cognitive strategies and detection of bias*. *Acad Emerg Med*; 9(11): 1184-204

References and Relevant links

Suggested readings

- Dekker, S. (2011). Just culture: Balancing safety and accountability.
- Dekker, S. (2014). A Field guide to understanding 'human error'. Third edition.
- EUROCONTROL (2013). From Safety-I to Safety-II: A White Paper. EUROCONTROL.
- EUROCONTROL (2014). Systems Thinking for Safety: Ten Principles: A White Paper. EUROCONTROL.
- Hollnagel, E. (2013). A Tale of two safeties. Nuclear Safety and Simulation Vol 4 No 1
- Hollnagel, E., Wears, R.L & Brathwaite, J. (2015). From Safety I to Safety II: A White Paper. The Resilient Health Care Net: Published simultaneously by University of Southern Denmark, University of Florida, USA and Macquarie University Australia

Suggested readings and links for M&M Chairperson

- Dekker, S. online short course: 'understanding human error'
- Dekker, S. online short course: Just Culture
- Dekker, S. (2014). A Field guide to understanding 'human error'. Third edition. Audiobook available
- Dekker, S. (2011). Just culture: Balancing safety and accountability. Audiobook available
- EUROCONTROL (2014): System Thinking learning cards. Towards Safety-II

Useful Links

- SKY brary tool kit on systems thinking:
https://www.skybrary.aero/index.php/Toolkit:Systems_Thinking_for_Safety:_Ten_Principles
- NSW Clinical Leadership Forum on Morbidity and Mortality (M&M) Meetings Friday 14 June 2019:
<http://www.cec.health.nsw.gov.au/improve-quality/Clinical-Leadership-and-Engagement/medical-and-clinical-forums-2019>
- National Safety and Quality Health Service (NSQHS) Standards. Below are the relevant links to the NSQHS that relate to strengthening M&M processes:
Action 1.28
<https://www.safetyandquality.gov.au/standards/nsqhs-standards/clinical-governance-standard/clinical-performance-and-effectiveness/action-128>
- Mortality as an indicator:
<https://www.safetyandquality.gov.au/our-work/indicators/core-hospital-based-outcome-indicators>
- Healthcare variation
<https://www.safetyandquality.gov.au/our-work/healthcare-variation>
- Additional supporting document for the comprehensive care standards which references different sources for improvement including M&Ms (measuring outcomes section)
<https://www.safetyandquality.gov.au/publications-and-resources/resource-library/implementing-comprehensive-care-standard-review-and-improve-comprehensive-care-delivery>



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