Stefan groaned as he emphatically closed his laptop and rested his head on the desk in the physician office.

“What’s this all about?!” chuckled Meredith. “You looking at your bank account statements?”

“No… worse,” sighed Stefan. “I’ve been scheduled to present M&M rounds in 2 months. After what happened with Ron’s case, I’ve just been feeling sick about the thought of having to present in front of our group. How do I spin my case in such a way that I avoid the disaster that ensued after his presentation?”

Stefan was relatively new to the department and had attended his first M&M session last month when Ron, a mid-career emergency physician, presented a fairly serious adverse clinical outcome in a patient he had treated. He had outlined a case in which a known drug seeker’s back pain was not thoroughly investigated and led to a missed spinal epidural abscess with subsequent neurologic deficits.

Stefan had attended the rounds and had thought to himself, “This is a great case. I could have easily missed this diagnosis as well. We’re all human and humans make mistakes. We often tend to downplay the symptoms of our frequent flyers and drug seekers.” He was waiting for a constructive discussion from the group and instead witnessed a scenario akin to a firing squad in which the senior physicians took their turns shooting bullets at their vulnerable colleague who had just unloaded the most uncomfortable details of a case he inevitably already lost sleep over.

Questions for Discussion

1. As a new staff to the department, should Stefan speak up about his M&M concerns? How should he go about it?

2. Realizing that the culture is a little outdated at his new site, how can Stefan initiate movement towards positive change and help champion a new process of M&M case review?

3. How can we make M&M rounds less threatening so as to encourage faculty to present their difficult cases?
Competencies

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<th>ACGME</th>
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Intended Objectives of Case

1. Discuss strategies for sharing new ideas for improving educational programming as a junior faculty member.
2. Describe 1-2 key changes that can help to improve the process of morbidity and mortality (M&M) rounds.
3. List specific facets of non-judgmental M&M rounds and/or debriefing that could be useful in this case.
Expert Response

The OM3 Model: Building a Reliable and Resilient M&M System
by Shawn Mondoux MD, MSc, FRCPC, Edmund Kwok MD, MHA, MSc, FRCPC, & Lisa Calder MD, MSc, FRCPC

Speaking Out and Creating Positive Change

The “old school shame and blame culture” of M&M rounds is not as outdated as 1 would think. Similar to Stefan’s situation, the culture surrounding many current M&M formats is not attuned to learning from adverse events or encouraging an environment of psychological safety. Ingrained cultures are difficult to change but certainly not impossible if approached with adequate preparation and finesse. Stefan could start by determining who is tasked with scheduling and facilitating the M&M rounds, and setting up a meeting to discuss his concerns with this individual. In preparation, he may even consider conducting a quick informal poll of his colleagues to get some feedback on current perceptions of how effective M&M rounds are (our suspicion is that they would echo Stefan’s gut feelings about it). Presenting collective thoughts rather than 1 opinion will strengthen his cause. At the meeting, Stefan can report on the current gaps identified by his colleagues, and propose the idea of re-framing the focus of his own M&M rounds; specifically, highlighting potentially preventable issues that can ultimately improve quality of care and patient safety in his department. A simple example Stefan could use is James Reason’s famous swiss cheese model (See Figure 1 below – which implies that most adverse events are the result of small holes in every layer of the system which occasionally line up to let a mistake through.

Stefan should “pitch” his innovative idea of presenting his M&M case through a systems-lens, with the goal of coming up with ideas on how to improve their current clinical environment to help prevent future adverse events, regardless of practitioner.

Existing M&M Models - The Ottawa M&M Model

Various frameworks have been published to help guide the creation of new processes for M&M review so there is no need to re-invent the wheel! Stefan can turn to the literature to help provide a framework for moving his cause forward and creating a more positive M&M environment for his department. One example is the Ottawa M&M Model (OM3) [1], which provides recommendations on case selection & analysis; how to present and facilitate the actual rounds; and potential methods on disseminating lessons learned, educational material and ensuring follow-up of action items.

Expert Response

To help with engagement, Stefan can show his group that this model was successfully scaled across multiple different specialties at a tertiary academic teaching center (and even taught to residents!). The model is accessible for clinicians and tools are available to assist with adoption. If appropriately applied, it has the potential to raise a significant number of safety and quality issues within a specific clinical area, specialty or institution. Building on this framework, Stefan might even consider taking additional quality improvement and/or patient safety courses to help solidify his own expertise in the area, and consider taking on a formal role within his group to help champion these changes going forward.

Ensuring Success and Encouraging Participation

Having a blame-free culture is critical to success. The first step is to explicitly state the purpose of M&M rounds: to identify and address preventable issues that can lead to improved quality of care and patient safety for the patient. By providing a structured framework like the OM3, presenters and participants are equipped with the proper language around which to discuss cases with adverse events; for example, instead of threatening statements like “you made that mistake!”, the same issues can be discussed around relevant cognitive biases and system gaps. It is also helpful to explicitly state the confidentiality nature of the discussion - no identifying patient information should be shared, and specific comments and discussions within the rounds stay in the room. Ensure participants that only high-level learning points will be disseminated, with specific actionable items to be forwarded to the appropriate quality lead(s). We also found that having a dedicated facilitator (ideally someone who has interest and/or training in quality and patient safety) to moderate the M&M rounds can be extremely effective at redirecting discussions and providing a more balanced and blame-free environment. Remember, the focus of M&M Rounds should be on building a reliable and resilient system whereby adverse events are minimized and the impacts are mitigated.

References


About the Experts

Dr. Shawn Mondoux (@DrShawnQI) is an Assistant Professor at McMaster University, an Emergency Physician, and a Quality Improvement Specialist at Hamilton Health Sciences. His interests include education in quality improvement, ED flow improvement, and building capacity for greater improvement. He is, above all, a health system optimist.

Dr. Edmund Kwok (@edddeestyle) is an FRCP(C) Emergency Physician, Assistant Professor at the University of Ottawa, Director of Quality Improvement within the Department of Emergency Medicine at The Ottawa Hospital, and Clinician Investigator at the Ottawa Hospital Research Institute. His interests include quality and patient safety and change management.

Dr. Lisa Calder (@dr_lisa_calder) is an emergency physician who undertook her 5-year residency at the University of Ottawa. She has also completed a fellowship in patient safety in EEM from the Society for Academic Emergency Medicine and the EM Patient Safety Foundation, and the American Hospital Association’s fellowship in patient safety leadership. Dr. Calder is also an affiliate investigator in the Emergency Medicine Research Department of the Ottawa Hospital Research Institute’s Clinical Epidemiology Program. She is an Associate Professor at the University of Ottawa’s Department of Emergency Medicine. She currently is the Canadian Medical Protective Agency’s Director of Medical Care Analytics.
Expert Response

To Name or Not to Name, that is the Question: Anonymity in M&M
by Jeremiah Schuur MD, MHS, FACEP

The Morbidity & Mortality rounds (M&M) described in the case hopefully differs from that at your department, but the core tensions that Stefan feels will always be present when discussing cases with negative outcomes among our peers: taking personal responsibility for the care we deliver versus our desire to feel perceived as competent and of value among our tribe (other physicians). There are several ways we can improve M&M conference to address these tensions; one core question I will address is, who should present M&M conference and should M&M be anonymous or should physicians be identified?

A Brief M&M History Lesson
It is worth understanding the history of M&M conferences, in order to consider how to improve them in their current iteration. Before the mid 20th century, it was not routine to systematically review the results of medical care, and physicians were neither routinely interested nor held accountable for adverse events and errors. What we now know as M&M conference is largely credited to Ernest Armory Codman, MD, a Boston-based physician of the early 20th century who introduced many tenets of the modern quality movement (1). Dr. Codman believed that physicians should track their outcomes, acknowledge errors, and that this information should be made public so patients could better choose their care. At the time these ideas were revolutionary, and heretical to many in the profession.

While at Massachusetts General Hospital (MGH) in the early 1900s, Dr. Codman began the first M&M conferences, with surgeons presenting their cases and complications in front of their peers. He also developed a simple system of tracking the patients he operated on to identify errors and complications, in order to improve care. He kept “End Results Cards” on each patient he treated (2). These index cards included the original diagnosis, the treatments (often operations) and the results - followed for at least a year. Codman’s system was a radical change in the definition of professionalism, which previously was based on reputation and seniority. After confrontations with hospital leadership, he left MGH to start his own hospital based on his “end results” system. While his ideas were not fully appreciated at the time, the concept of measuring outcomes and accountability for care has become an integral part of professionalism in medicine and Dr. Codman’s ideas led to the organization that has become “The Joint Commission”.

Blame and Shame Culture
Fast-forward to recent times, and physicians in the U.S. and some other countries are familiar with M&M conferences, which have been required of training programs by the ACGME since the 1980s. In the U.S. M&Ms of the late 20th century routinely had the physician responsible for the care presenting in front of peers, and then getting grilled about their decisions and actions, in what has been called a “blame and shame” approach. As programs have tried to modernize M&M they have addressed questions including:

- How do we present cases and get feedback from involved parties without shaming individuals?
- Should M&Ms be anonymous?
- How do we balance discussions of adverse events with cases that may identify patient safety issues, regardless of outcome (near misses)?
- How do we balance education about the clinical condition involved with discussing systems of care and potential systems improvements that can prevent future cases?

Of all of these, practices around identifying providers and whether providers present their own cases is probably the most controversial. Many physicians feel that taking responsibility for one’s care is a key tenet of professionalism. Additionally, in order to accurately review and discuss a case it is important to understand the medical decision-making of those involved; how can this be done accurately without having the physician present the case or comment on it? Conversely, others point out that presenting errors in front of peers is humiliating, and is unlikely to help adult learners to engage in critical thinking as they will be more focused on deflecting blame and avoiding shame. There is also the concern that audience members may not fully engage as it is possible to think “that wouldn’t happen to me”. Furthermore, any format that focuses on blame and negativity is at odds with the idea of a culture of safety that encourages reporting errors in a non-punitive manner in order to address and fix the underlying causes.
Current Practice
Currently about half of EM residencies report anonymity at their M&M conferences while about a quarter of residents reported that anonymity was maintained at conference. A national survey of U.S. academic programs we conducted in 2013 found that 56% of institutions have anonymous case submission, with 10% maintaining complete anonymity of providers during the presentation and 21% maintaining partial anonymity, specifically, the resident involved is not named (3). About half of academic M&M conferences featured case presentation by the resident or faculty physician involved in the case (41% resident, 5% faculty) while 54% were presented by a resident or faculty not involved in the patient’s care. In a 2015 follow-up survey of residents at 33 U.S. EM residencies, we explore residents’ views of the M&M process (4). Overall, the view of M&Ms was positive: 87% felt that M&M was a valuable educational didactic session, and 78% believed that M&M contributes to a culture of safety in their institution. We were surprised to find that very few residents found M&M punitive (10% agreed that M&M feels punitive, while 17% were neutral and 72% disagreed). Interestingly, 24% of residents described anonymous case presentation, meaning that involved residents are neither named nor asked to comment. We did not find a strong correlation between anonymity and the feeling that M&M was punitive.

In our own department we have experimented with anonymity. In a recent research project, we trialed having anonymous presentations over the course of one year – we did not identify physicians involved although they could comment and identify themselves if they wanted. While we found slight increases in resident ratings of the conference, they were not clinically meaningful. Anecdotally, we also found that faculty attendance declined, and we had several cases where the attending involved was not present, leaving a gap in the discussion that they would generally complete (e.g. why a critical decision was made). When we reviewed the data with residency and departmental leaders who oversee quality, safety, and the M&M process, most of us had not changed our views – some wanted anonymity others did not. We settled on not identifying interns, but continuing to identify other physicians. We have also actively worked with our attendings to model professionalism by ensuring the attending physicians are in attendance when their cases are presented and encouraging active participation and ownership of their cases, so that residents aren’t left feeling to blame.

Back to the Case
I would encourage Stefan to approach his Departmental Chair and suggest some modifications for M&M. As discussed above, there are various approaches to M&M presentations that can positively impact the experience and enhance psychological safety of the presenter. Stefan could suggest an approach of anonymous presenting whereby a physician who was not directly involved in the case would present the conference so as to protect the faculty involved; he could volunteer to lead the charge with this new format and then have it rotate among the faculty, hopefully creating a more positive environment. Additionally, this could increase case reporting, a goal of most departments and hospitals.

Stefan could also suggest that the Chair set an example by explicitly announcing that the conference is going to focus on teachable events and systems issues, rather than trying to identify and assign blame for past events. A facilitator, whether it be the departmental Chair or a member of an M&M committee, will be helpful in guiding the discussion and ensuring the questions are focused on the right issues. Another helpful suggestion Stefan could make would be the formation of action items from the case itself. These action items or suggestions from M&M conference could be given to the department’s operations or safety committee or a specific M&M committee who could work to create systems-level changes based on the cases presented and then report back to the department on how issues were addressed and what changes have been made. This will reinforce the importance of M&M conference and will help shift the focus from a blame/shame culture to a more positive culture where the group learns from errors or near-misses and acts to correct them to improve patient care.

Finally, Stefan could suggest that departmental leadership or M&M committee members debrief with faculty after their cases are reviewed and offer peer support. If done poorly, the stress and negative feelings from M&M will contribute to burnout. If providers are presenting their own cases, conference needs to be a safe space and the discussion needs to be constructive and supportive. If M&M is anonymous, it is critical that the presenter thoroughly review the case with all participants, particularly around critical decisions, so they can answer questions that will arise.

If he were alive today, Ernest Codman would be pleased to see physicians reviewing our cases in order to improve care, and would support ongoing improvements to advance our safety culture.
Expert Response

References


About the Expert

Dr. Jeremiah (Jay) Schuur (@JSchuurMD) is a practicing emergency physician with a research focus on health care quality and policy. He is the Chief of the Division of Health Policy Translation and the Vice Chair of Clinical Affairs for the Department of Emergency Medicine at the Brigham and Women’s Hospital.
Disclosing mistakes is never easy, particularly in medicine. We are left feeling vulnerable when we expose ourselves to criticism and worry that we may harm our professional reputations. In this month’s case we touched on these exact insecurities as we explored the rising culture of patient safety and the role of departmental M&M rounds. Stefan, a new staff physician, was left agonizing over his upcoming M&M rounds case presentation, particularly since the preceding M&M presenter was aggressively criticized and shamed by the senior physicians within the group. Despite an opportunity to debrief with his colleagues, Stefan was left dreading his fate as the next victim of M&M “shame game”.

Our readers aptly identified several key strategies and resources that can help transition M&M rounds from a primarily shame based culture to one that encourages learning from errors with a focus on quality improvement and patient safety. Suggested strategies and resources included:

- Owning one’s mistakes and focusing on system issues
- Utilizing a pre-brief (see our previous discussion on sim debrief here as well!)
- Finding senior staff to chair the discussion and drive a top-down cultural change
- Trialling the Ottawa M&M Model

Scott Schofield suggested that presenters take time to ensure they have processed and reflected on the case before considering presenting at M&M rounds. Once reflection has occurred, M&M rounds provide an opportunity to own one’s mistakes and drive quality improvement. They should not be used as a forum to shame and ridicule our colleagues. Aidan Baron shared his perspectives from his work in industry. He described how various companies create a toxic culture by shaming mistakes. Anecdotally, during a presentations in which he was directly involved, he felt as if his colleague and superiors were betraying his trust. Rather, he suggests that industries work towards a culture that humanizes error and works to improve the process.

Interestingly, two of our simulation educators, Suneth Jayasekara and Damian Roland suggested that we use simulation based pre-briefing strategies to begin M&M rounds. Akin to the simulation pre-brief, ground rules should be laid out specifically emphasizing that rounds are a safe, non-judgmental space and that they are being held to encourage discussion around learning and system improvement. Audiences should be reminded that hindsight bias will color their impression of the case and the presenter. The goal is not to find blame but rather to find ways to improve the system. Scott Schofield emphasized that having clear terms of reference and a general structure provide safeguards that ensure the rounds run appropriately. Gannon Sungar added that all M&M rounds at his institution begin with the same mantra: “We do not learn much by asking why the way a practitioner [sic] framed a problem turned out to be wrong. We do learn when we discover why that framing seemed so reasonable at the time.”

M&M rounds are plagued by hierarchical complexities, blame, and shame. Much like Stefan, junior members are asked to present and feel the pressure of the firing squad. Many of our readers suggested that having senior members involved in the process would push a top-down culture change. Ben Symon stressed the importance of having a senior team member present the case along side residents or more junior faculty. As he eloquently stated, “we work in teams and our actions have a shared risk and reward.” Interestingly, some institutions have a third party present the case. The team involved with the case may add details but they are not on centre stage to receive all the blame. Several respondents felt that a presenter who was directly involved with the case runs a high risk of being unsafe and so a third party may be beneficial. Others felt that it may be difficult to “own” the case and respond to questions if not presented by the physician directly involved in the case.

Readers also suggested that a senior team member should facilitate all M&M sessions. This senior member can outline terms of reference, screen inappropriate questions, and promote a culture of psychological safety. Todd Fraser emphasized that even though junior staff are encourage to
drive change, for true cultural change to take place, it needs to begin at the top so getting senior staff involved early in the process is a must.

Our readers suggested two helpful tools to aid in the implementation of M&M rounds. Scott Schofield suggested that presenters provide a fishbone diagram to help get to the root of system issues. Heather Murray suggested readers also take a look at the M&M model from Ottawa. Additionally, readers felt the incorporation of the following four criteria will improve the efficacy of M&M rounds:

1. Physician training on case selection and analysis
2. Engaging interprofessional members
3. Disseminating lessons learned
4. Creating an administrative pathway for acting on issues identified through the M&M rounds

The public sharing of medical errors, mishaps, and unexpected outcomes at M&M rounds, along with in depth discussion of cognitive and systems level changes provide an invaluable learning opportunity for residents and staff alike. The only way to foster such creative discussion is to create an environment free of blame and in which psychological safety is preserved. Various tools and frameworks exist for structuring such M&M rounds and I would highly suggest researching these various publications to find a method that will suite the needs of your department. A rigorously studied and widely implemented model, the OM3 model out of Ottawa, Canada, is a great example and you can find the reference below.

Thanks again to all of our readers and contributors for sharing your expertise and adding to the rich discussion surrounding this case. We are always deeply humbled by the collective wisdom of our online community of practice!

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The Medical Education In Cases (MEdIC) series puts difficult medical education cases under a microscope. We pose a challenging hypothetical dilemma, moderate a discussion on potential approaches, and recruit medical education experts to provide their insights. The community comments are also similarly curated into a document for reference.

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