Morbidity and Mortality Rounds

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RCVS Knowledge's mission is to advance the quality of veterinary care for the benefit of animals, the public, and society.

We meet this mission by championing the use of an evidence-based approach to veterinary medicine, inspiring a culture of continuous quality improvement in practice, and making our resources available to the profession and wider public.

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Why do M and M rounds?
RCVS Code of Professional Conduct

- In case of any critical event e.g. unexpected medical or surgical complications, serious complaint, accident or anaesthetic death, hold a no-blame meeting of all staff involved as soon as possible after the incident and record all the details
- At the critical event meeting consider what, if anything, could have been done to avoid this incident, and what changes can be made in procedure as a result.
- Communicate changes in procedure to the whole practice team.
- Organise regular clinical discussion meetings for the practice team, record minutes, and review any action points at future meetings. All clinical staff should be encouraged to participate and input items onto the agenda.
- Follow up any clinical issues arising from clinical discussion meetings.
- Make appropriate changes as a result of clinical discussion meetings and monitor these changes to ensure they are effective.

Which cases should be in M and M rounds?

- All deaths
- Never events (e.g. wrong surgery site)
- Safety incidents resulting in moderate harm
- Patients whose discharge delayed due to complications
- Unplanned patient re-admissions
- Returns to theatre within same admission
- Severe intra-operative complications
- Near misses

- Monthly meetings

Structure

- Moderator
  - Authority to establish desired tone
    - Open, collaborative, supportive discussion without minimizing or magnifying error
  - Knowledge of M and M rounds format
- Presenter
  - Clinician directly involved in case
- Attendees
  - Multidisciplinary
  - Include care staff – fosters open safety culture
- Root cause analysis
- Follow-up
  - Clinical audit

Examples

	Additional information
	Catheter bung found to be detached in the morning, replaced, no adverse effects seen. Cardiac ausc and physical exam normal.
	Patient broke the first SPL placed in the lower lid. A replacement SPL was placed routinely in the upper eyelid. After ~36hours, the upper eyelid became extremely swollen and the patient developed mucopurulent discharge. The SPL was removed and replaced to its' original position and the horse was started on IV flunixin and PO TMPS. The horse responded well and this complication did not impede healing of the corneal lesion.
	Severe colic signs and colonic displacement post anaesthesia for prepucial melanoma removal. Horse administered IV fluids, sedation, rolled and cast itself following which colic signs resolved in recovery. No further colic noted through hospitalisation.
	Orosinus fistula upon extraction of 209. Treated sinoscopically and via laser. Prolonged hospital stay .
	nasal infection post 24h indwelling nasogastric tube
	Post anaesthetic myopathy: 12 hours post operatively weight shifting and mild signs of discomfort. Surgery OOH previous night and under GA for approximately 3.5 hours, then 2 hours to recover. Biochemitry identified a CK of 3800. Treated with 10L IVFT, 60mg of morphine and no further signs of discomfort or myopathy seen during hospitalisation. Did not extend hospital stay.
	Large ulcerated masses along length of tail. Amputation at tail base only viable option. Owner elected for euthanasia based on costs and risks associated with the procedure and horse was lame in front.

- Not all cases require discussion
- Need to monitor for trends

Trust – What does it mean in M and M rounds

To speak up open and honestly you need to trust your colleagues; know they:

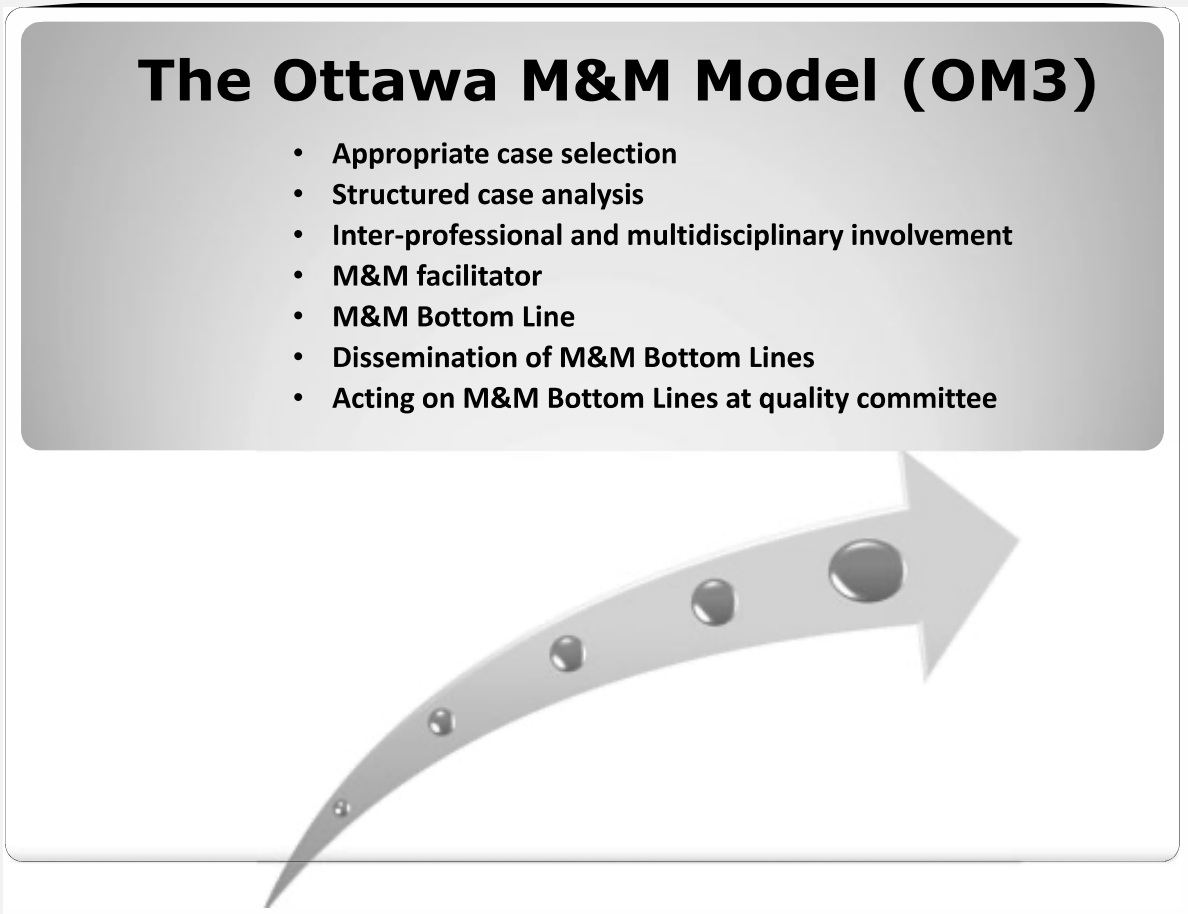
- They care about you
- They are competent – if you ask for help they can do what they promise

Structure – know that is what M and M rounds are for.

Not just a tick-box exercise – a LEARNING exercise

All team members attend

Enhancing the quality of M and M rounds – The Ottawa model



Case selection

- Secure incident reporting system (e.g. Vet Safe)
- Decide what to discuss
- Not always the 'weird' cases

Care delivery problems

- Unexpected outcome
- Error or omission by staff member
- Identify what active failure contributed directly or indirectly to the result – **Root Cause analysis**
- Identify the **human error**
  - Cognitive issue
- Also the **system factors** which contributed

Root Cause Analysis: System factors

- Patient
- Individual staff
- Task
- Communication
- Team and Social
- Equipment and resource
- Environmental/working conditions
- Strategic/organisational

- People
- Process
- Environment
- Equipment

Structured case analysis

- People
- Process
- Environment
- Equipment

1. Identify the problem
2. Discuss possible major causes
3. Discuss each major category
4. Broken down further into contributing factors

➢ Not ‘who’ made the mistake but ‘why’ did it happen (5 whys!)

➢ This can be put into VetSafe – litigation privilege

In depth investigation? SBAR

Situation Statement of the problem	**Background** Clinical information relevant to adverse outcome	**Assessment and analysis** What happened and Why?	**Evidence** Review of the literature	**Recommendation** Actions to prevent future similar situations
Reason for admission Procedure carried out Adverse outcome	History Reason for intervention Lab and imaging results Details relating to complication Recognition of complication Management of complication	Error analysis Sequence of events Root cause analysis: 1. People 2. Process 3. Environment 4. Equipment	Literature relevant to adverse outcome Evidence based practice	How could problem have been prevented or better managed Learning points from the case

SBAR example 1

Situation
Statement of the problem

- Colic
- Exploratory celiotomy
- Owner unaware of limitations for mortality claim
- Complaint

Background
Clinical information relevant to adverse outcome

- History: Acute colic
- Reason for intervention: Ultrasonographic identification of distended small intestine
- Up to 15-20 ft of small intestine identified for potential resection and anastomosis
- Prognosis of 60-80% survival given; owner elected to euthanase pony (insurance up to £2000)
- Owner contacted RVC approximately 1 month following euthanasia to obtain confirmation that horse was euthanased under BEVA guidelines
- Explained: not euthanased under BEVA guidelines

Assessment and analysis
What happened and why?

- Error analysis
  - Did not discuss impact of the decision of the owners on mortality claim as unaware of mortality insurance and owner limited knowledge about this aspect
- Root cause analysis
  - human factors: Wrong assumption
  - system factors: Not detailed on record whether mortality insurance is in place
  - patient factors: N/A

Evidence
Review of literature

- *www.**beva**.org.uk/_uploads/.../1ARM**Guidelines**proof6May08*
- Injury or disease that is so severe as to warrant immediate destruction to relieve incurable and excessive pain and that no other options of treatment are available
  - Post-mortem examination should be carried out
- Chronic illness or lameness where horse's condition is deteriorating to the point at which euthanasia will be required,
  - essential to keep insurers informed cases may require a second opinion
- Horse poses a significant danger to its handlers and/or members of the general public as a direct result of an injury/illness, and it is impossible to control the horse even with sedation or pain relief

Recommendation
Actions to prevent similar future problems

- Identify how the problem could have been prevented or better managed
  - Ask owner about mortality insurance prior to euthanasia
  - Explain BEVA guidelines

- Identify the learning points from the case
  - Always ensure owners understand implications of euthanasia on insurance claim
  - Laminated checklist in theatre

SBAR example 2

Situation
Statement of the problem

- Reason for admission:
  - Acute, mild colic

- Procedure carried out
  - Colic assessment
  - Gastroscopy and duodenal biopsies
  - Repeated abdominocenteses

- Adverse outcome/complication
  - Caecal rupture secondary to caecal impaction
  - Euthanasia

Background
Clinical information relevant to adverse outcome

- History
  - Previous colic and investigations for failure to gain weight
- Diagnosis and lab results
  - Pelvic flexure impaction based on rectal palpation - resolved
  - Peritonitis based on peritoneal fluid analysis - resolved
  - Possible IBD based on duodenal biopsies – not addressed
- Details relating to complication
  - Mild colic signs on Day 9 of hospitalization (intended day of discharge)
  - Repeated colic requiring repeated administration of analgesia
- Recognition of complication
  - Surgical exploration on Day 11 found rupture of caecal impaction
- Management of complication: Euthanasia

Assessment and analysis
What happened and why?

- Error analysis
  - Failure to recognise and treat caecal impaction
  - Delay in surgical exploration
- Root cause analysis
  - Human factors:
    - Financial situation of owner delayed clinician's decision for surgery by 12h
    - History of possible IBD clouded clinical judgement
  - System factors:
    - More than one clinician involved (weekends)
  - Patient factors:
    - Required sedation to perform rectal exam

Evidence
Review of literature

1. Recognition of caecal impaction
2. Treatment of caecal impaction

Evidence
Review of literature

- Recognition of caecal impaction (CI)
  - Risk factors
    - Older horses
    - General anaesthesia
    - Orthopaedic surgery
      - Mean time from orthopaedic surgery to CI surgery: 3.6 days
    - Colic surgery
      - Mean time from colic surgery to CI surgery: 7.5 days
    - Ocular conditions
    - Orthopaedic surgery + NSAIDs in foals 1-6 months old
    - Mares after foaling and in late gestation
  - 29% diagnosed on rectal exam by admitting veterinarian
  - 82% on rectal exam in referral hospital

Evidence
Review of literature

Treatment of caecal impaction

- 25-57% rupture

- Medical management
  - 81% discharged from hospital
- Surgical management
  - 24% rupture on table
  - 71% discharged
  - 5% died/euthanased after surgery
  - No difference between bypass or typhlotomy

Recommendation
Actions to prevent similar future problems

- Vigilance
- Awareness of risk factors – communicate to team and owner

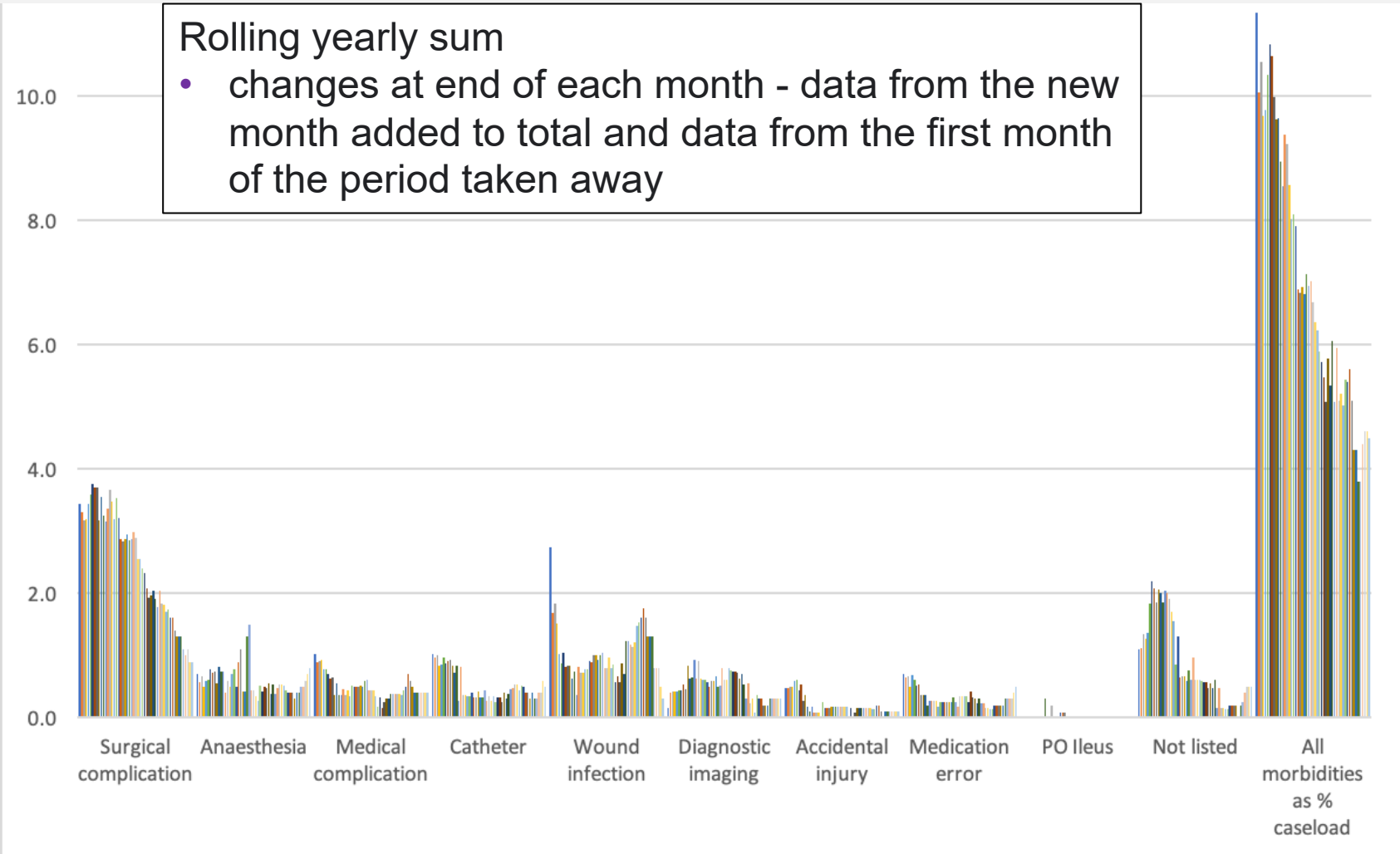
- Normal physical exam findings, absence of abnormality on rectal palpation do not rule out significant intestinal lesion
- Patient record system to alert clinician when faecal output below 2 dropping between 8pm-8am

- Early celiotomy as diagnostic/therapeutic procedure

Moving annual totals – assess for trends

Rolling yearly sum

- changes at end of each month - data from the new month added to total and data from the first month of the period taken away



’Second victim’ syndrome

- First victim is patient
- Second victim is the clinician

- Effect of error and subsequent blame culture on medical staff
- Clinician is traumatized by the event
  - Feel like they’ve failed their patient
  - Second guess their clinical skills, knowledge base and career choice
  - Feelings of guilt, anger, frustration, psychological distress and fear
  - Difficulty sleeping
  - Crisis in confidence

Second victim phenomenon: Is ‘just culture’ a reality? An integrative review

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Second victims' perceptions of the current ‘just culture’ included:

- fear of repercussions of reporting medical errors as a barrier
- supportive safety leadership is central to reducing fear of error reporting
- improve education on adverse event reporting
- develop positive feedback when adverse events are reported

- Just culture is hard work to truly achieve – the “can of worms”

Restorative vs Retributive Just Culture

Restorative

- All parties discuss, collaboratively decide on what needs to be done
- Who is hurt?
- What do they need?
- How will they move forward?
  - Honest account
  - Contribute to learning
  - See positive outcome to event

Retributive

- What rule is broken?
- How bad is the breach?
- What should consequences be

- Plays out between ‘offender’ and employer—excluding voices of colleagues
- Linked with hiding incidents and an unwillingness to report and learn
- Doesn’t identify systemic contributions to the incident, thus inviting repetition.

M and M Rounds outcomes

- Make changes to clinical practice
- Report to clinical governance meeting
  - Clinical audit?
- Provide a just, restorative culture
- Maintain public's trust in the profession

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