Significant Event Audit Case Example: Overdose of Meloxicam

Section A: Case example on the six stages of a significant event audit

A Significant Event Audit (SEA) is a quality improvement technique. It is a retrospective audit, which looks at one case in detail from beginning to end to either increase the likelihood of repeating outcomes that went well or to decrease the likelihood of repeating outcomes that went badly. SEAs may result in further development of guidelines, protocols or checklists and may result in the need for additional clinical audits (process/ structure or outcome). SEAs are conducted by bringing your team and the relevant case notes together to discuss the event. It is important that the event is discussed without any blame – allowing team members to provide honest and constructive feedback on how they contributed to the care process. An SEA is completed in 6 stages. The following points will take you through the steps that this practice took to put an SEA into practise.

1. Identify the significant event

Create a brief description of the event, context and outcome to be discussed in the meeting.
At a patients post-operative check it was discovered that the owner had been giving a 45kg dose of meloxicam instead of the prescribed 4.5kg dose.

2. Collect all the relevant information

Gather all relevant information, such as case files and staff accounts etc., which contribute to the case.
A significant event audit was completed. Information was collected from the team members involved with the patient; the team members working on site; the veterinary surgeon involved and the owner.

3. The meeting and analysis

In a team discussion regarding the event, analyse the event and its causes to suggest where changes can be made. Indicate changes that could aid in achieving the desired outcome. It is important to ensure this meeting provides an environment where all staff members are encouraged to speak freely and honestly, for example by using The 5 whys strategy or root cause analysis, plus identifying contributory factors. Any discussion should be kind and constructive.
A meeting was led by the veterinary surgeon involved. The results of the meeting were split into factors that affected the overall results. These were system, human, patient, owner, communication and other. This helps to create a blame-free meeting, looking at all contributions and getting input from all member of the team.

4. Decide what changes need to be made

Confirm which changes should be made, and make a prediction on the effect this will have. It may be that no change is required or there is only a need to disseminate the findings. Where changes are made, they could be in the form of checklists, guidelines or protocols. Following the meeting, a final report detailing the key points raised in stages 1-4 should be written.
A new dispensing protocol was required that included double checking of medication. Communication needed to be improved to allow conversation about the medication.

5. Implement the changes

Develop an action plan. What needs to be done by whom, when and how? Ensure the whole practice team is aware of the changes and what role they play in implementing them. Monitor the changes once implemented and set a time to review them. The length of time required for monitoring will be dependent on the event.

A dispensing protocol was developed.

6. Review the changes

The team should sit down together to review the changes and discuss what went well and what didn't. You could also share what you have found with clients and the profession. Further audit may be required to monitor the change.

A process audit for dispensing protocol and the Meloxicam waiting to be collected.

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Section B: Case example on the significant event audit

QI Vets
PATIENT OUTCOMES FIRST

Title:	Significant event audit for a meloxicam overdose
Date of significant event:	01/02/2020
Date of meeting:	10/02/2020
Meeting lead:	Nicola
Team members present	The whole practice team; Vets, RVNs, ACAs & Receptionists

What happened?

Dash, the Dachshund, underwent routine neutering and the veterinary surgeon, Nicola, prescribed a short course of oral Meloxicam for port operative pain relief. The surgical nurse, Adam, dispensed the medication and placed it on Dash's kennel so it would be sent home with him.
When Mr. Campbell arrived to collect Dash, the nurses were busy with patient and the vet was in afternoon consults, so Dash was discharged to Mr Campbell by Andrew, the receptionist, who handed over the medication, booked at recheck appointment and took payment.
Mr. Campbell brought Dash back a few days later for his post-op check and reported that Dash had bloody diarrhoea. During the consultation it was discovered that Mr. Campbell had been administering a 45kg dose of Meloxicam, instead of the prescribed 4.5kg dose.
Dash was hospitalised and treated successfully with IV fluids and supportive care.
Mr. Campbell stated that he thought that the amount he was giving him 'seemed like a lot for Dash' and that 'he better go get his eyes checked' as the 4.5 on the label looked like 45 to him.

<u>At the SEA meeting we found out the following</u>

Andrew blamed himself for Mr Campbell's confusion. It had been a busy afternoon with several clients waiting at reception and he felt rushed off his feet. He stated that he 'usually goes over the medication with the client, but felt he couldn't due to time pressures'.
The nurses felt bad as they thought that they should have found some way to help Andrew with the discharge appointment.

When checking the dispensed medication it was found that:

- The instructions on the prescription label were correct
- Both the small and large syringes were left in the box
- The SPC (summary of Product Characteristics) was included in the box.

Why did it happen?

System factors:
- No dispensing protocol was available.
- No double-checking system of medicines in place.
- Both small and large syringes were in the box.

Human factors:
- Staff unable to focus on task due to a busy day.
- Help was unavailable as staff were tied up with other tasks.

Patient factors:
- None.

Owner factors:
- Owner misread instructions.

Communication factors:
- Medications were not reviewed with the owner.
- Owner did not communicate with the practice when unsure about the dose.

Other:
- None.

What has been learned?

Andrew initially put the blame on himself but was relieved when, during the team meeting, he realised there were several factors that had contributed to the event. No one was to blame, it was that there was no system in place that could have reduced the likelihood of this event occurring.

It was generally felt by all staff that a dispensing protocol would be the appropriate solution and input was given by everyone involved. The necessity of encouraging owners to ask questions was also realised and the team discussed several ways to facilitate this.

The staff did feel good that they had all pulled together to care for Dash. He was doing well and Mr. Campbell was happy with the outcome.

What has been changed?

CPD/training required:
- Training and communication to be given on the new dispensing protocol and audit.

New or updated protocols/checklists/guidelines:
- A dispensing protocol was developed and included the following procedures for meloxicam:
  - When the vet prescribes Meloxicam, numbers will be followed by the written number in brackets, e.g. 45 (forty- five)
  - When dispensing the medication, the nurse will double check that the dose corresponds with the weight of the patient and remove the inappropriate syringe.
  - The appropriate syringe will again be checked by the person that hands over the medication.
  - The dose to be given will be demonstrated to the owner, with a mark (white tape) put on the syringe at the appropriate level.

Further audit required?
- An audit of Meloxicam waiting to be collected, to include the following:
  - Dose is not more than the weight of the patient
  - The inappropriate syringe has been removed
  - The appropriate syringe has been marked at dose level
  - SPC is contained in the box

Other:
- None.

Follow-up date

Today's date: 10/02/2020

Review date: 09/07/2020

Signature: