

## Significant Event Audit Case Example: Administration of the wrong drug

### 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 that 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.**

A patient received a dose of sedation instead of a dose of local anaesthetic.

#### 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 veterinary surgeon involved with the patient, the owner, and the team members involved in using drugs at the clinic.

#### 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 members 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.**

New protocols and re-iteration of existing drug storage protocols needed to be put in place.

#### 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.**

The incident was discussed with the rest of the team who were committed to ensuring the changes happened and were maintained. Protocols were drawn up and distributed at a team meeting.

#### **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.**

Further audits will be required on the new protocols to ensure compliance.

**Significant Event Audit Case example: Administration of the wrong drug**

Section B: Case example on the significant event audit after the administration of the wrong drug

**QI Vets**

PATIENT OUTCOMES FIRST

<b>Title:</b>	Significant event audit for the administration of the wrong drug
<b>Date of significant event:</b>	02/12/2019
<b>Date of meeting:</b>	09/12/2019
<b>Meeting lead:</b>	Stefan
<b>Team members present</b>	The whole practice team; Vets, RVNs, ACAs & Receptionists

**What happened?**

Stefan had a call to visit Mrs Bartlett, an equine client, first thing in the morning. It was a client he knew well so he was looking forward to a good cup of tea and a natter. Neuf was a sport horse gelding whose owner liked to do the occasional show jumping, but had recently suffered from a left front leg lameness. Stefan loaded up his car with the kit he needed for a lameness workup to include mepivacaine for nerve blocks. The palmar digital nerve block was negative so an abaxial sesamoid nerve block was done. This was also negative but after 10-15 minutes, Stefan and Mrs Bartlett noticed that Neuf was starting to look sedated. It was then noticed that instead of using mepivacaine for the nerve block, Stefan had injected detomidine. Stefan apologised for the mistake and the lameness workup was postponed until the sedation wore off. Stefan was still offered a cup of tea while he waited to ensure that Neuf was going to recover ok.

**At the SEA meeting we found out the following**

The bottles for mepivacaine and detomidine were similar in appearance and kept in the same place in the visit box. Stefan had picked up the detomidine, believing it was mepivacaine. Mrs Bartlett was very understanding of the mistake, however wants to make sure it does not happen again.

## Why did it happen?

- |                               |   |
|-------------------------------|---|
| <b>System factors:</b>        | <ul style="list-style-type: none"><li>· No system in place to keep different drugs separated.</li><li>· The bottles were very similar in appearance.</li></ul>                                    |
| <b>Human factors:</b>         | <ul style="list-style-type: none"><li>· The name of the drug was not double checked before administration.</li><li>· Stefan was not focused on differentiating between the two bottles.</li></ul> |
| <b>Patient factors:</b>       | <ul style="list-style-type: none"><li>· None</li></ul>  |
| <b>Owner factors:</b>         | <ul style="list-style-type: none"><li>· None</li></ul>  |
| <b>Communication factors:</b> | <ul style="list-style-type: none"><li>· None</li></ul>  |
| <b>Other:</b>                 | <ul style="list-style-type: none"><li>· None</li></ul>  |

## What has been learned?

Upon reviewing the event with the team, it was found that Stefan had picked up the wrong bottle and instead of using mepivacaine for the nerve block, used detomidine by mistake. The two bottles, both 10 ml in size, look similar and were kept in the same visit box. The total injected subcutaneously was approximately 5 ml, which was enough to cause sedation. Detomidine is an expensive drug, so it was a costly mistake, but thankfully Neuf did not suffer any long-term effects and the client was understanding.

The team had found that keeping drugs of similar appearance in separate places within the practice had helped to prevent comparable events in the past. It was felt that keeping sedative drugs in a smaller, separate container within the visit box would help to keep these drugs from being confused in the future. The importance of taking a moment to double check the drug before administering it was also discussed.

## What has been changed?

- |  |  |
|--|--|
| <b>CPD/training required:</b>                          | <ul style="list-style-type: none"><li>· No official training required, however discussion of the learnings with the team took place.</li></ul>   |
| <b>New or updated protocols/checklists/guidelines:</b> | <ul style="list-style-type: none"><li>· New protocol for the storage of certain drugs within the visit box.</li><li>· Protocol on the storage of drugs with a similar appearance in practice was reiterated to all team members.</li></ul> |
| <b>Further audit required?</b>                         | <ul style="list-style-type: none"><li>· Audit of the visit box to ensure drugs are being separated as per the new protocol.</li></ul>  |
| <b>Other:</b>  | <ul style="list-style-type: none"><li>· None</li></ul>   |

## Follow-up date

**Today's date:** 09/12/2019

**Review date:** 09/02/2020

**Signature:**



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