

## Significant Event Audit Case Example: Fluid overload in a kitten

### 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.**

A patient received a large amount of fluids following the free flow of fluid from a giving set. The error was noticed when the patient had respiratory signs of dyspnoea and fluid leakage from the nares.

#### 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 hospital sheets and records and the veterinary surgeon directly involved.

#### 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.**

Further protocols needed to be in place for the servicing and maintenance of the fluid pumps. This protocol was to include what should be done with the equipment while waiting for it to be sent away for repair.

Protocols regarding the treatment of stray animals also needed to be created.

## **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 and it was enough of a near miss to ensure the team 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.

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### Section B: A significant event audit after fluid overload in a kitten



**QI Vets**

PATIENT OUTCOMES FIRST

<b>Title:</b>	Significant event audit after fluid overload in a kitten
<b>Date of significant event:</b>	25/04/2019
<b>Date of meeting:</b>	29/04/2019
<b>Meeting lead:</b>	Roxana
<b>Team members present:</b>	The whole practice team; Vets, RVNs, ACAs & Receptionists

#### What happened?

A stray kitten was admitted to the branch practice after being found in a garden, hypothermic and dehydrated. Roxana, the vet, gave the kitten a physical exam and ran some basic blood tests, and he appeared in good health. The nursing team named the kitten Logan, and he was placed on IV fluids as he was not initially interested in eating or drinking. The staff wanted to ensure a fluid pump was used to ensure his fluids were administered accurately. The team already had several pumps in use and were struggling to find the last one in the practice, eventually Jodie found it in a cupboard in the office – which caused a few jokes about why it had made its way in there! The rate of fluids was calculated by Roxana, the duty vet, and confirmed verbally with Meera, the duty nurse, and repeated back in an excellent example of closed loop communication, which the team had been practicing. 30 minutes after the fluids were started, Logan was checked over by Jodie, and all seemed to be in order, as it was when he was checked a couple of hours later. However, a few hours later, at the end of the day, Meera alerted to Roxana that Logan’s breathing seemed rapid and laboured and he was blowing bubbles from his nose. As they went to turn off the fluid pump they realised that the door was no longer closed properly and the fluids were freely flowing. At the commotion Jodie came over and wondered aloud if this was the pump that had ‘had a dodgy catch on the door for ages’. Roxana confirmed fluid overload from the symptoms and the amount of fluid that had been used out of the bag. Fortunately, with symptomatic treatment, Logan was fine, and went on to be rehomed successfully via the clinic.

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

The team felt under pressure to find a fluid pump to ensure the correct fluids were administered to the kitten. It was a busy day with inpatients and all of them were already in use. Jodie had found the pump in an unusual location, and the team had made a few jokes about the situation instead of pausing to critically analyse why the pump may have been placed there.

Amy, the head nurse, had placed the pump in the cupboard to send off for servicing and repair, however had not informed the rest of the team that the pump was not working properly.

The kitten was placed in isolation in case he had infectious diseases. Due to his stray status, a hospital sheet had not been filled out and he perhaps was not checked as regularly as the other patients in the hospital.

## Why did it happen?

- System factors:**
- No good system in place to alert the team of the broken fluid pump.
  - Shortage of fluid pumps compared to requirement.
  - No protocol on the treatment of stray animals and creation of clinical records for them.
  - Standard giving set had been used.
- Human factors:**
- Jodie found the pump in an unusual place.
  - The entire team failed to critically analyse why the pump was in this location.
  - A busy day, and pressure to find the equipment may have led to this.
  - Amy, the Head Nurse, was absent from the clinic that day.
- Patient factors:**
- The kitten was a stray and had been placed in isolation.
- Owner factors:**
- None as there were no owners in this case.
- Communication factors:**
- No communication from the Head Nurse about the broken pump, she was also absent that day, so couldn't identify it at the time.
  - Some staff members knew of the fault but didn't communicate this to others, or knew enough to be able to communicate this.
- Other:**
- None

## What has been learned?

The team were upset that their efforts to improve Logan's health had caused temporary deterioration, however they all agreed that without the quick work of Meera and Roxana, it may have had a worse outcome. The team also praised them on their initial closed loop communication regarding the fluid rate and care for Logan.

There was no current schedule for regular servicing and calibration of fluid pumps in place. When the other pumps were sent away the team realised that they were very overdue, and one of them was quite inaccurate. Any future faults were to be promptly communicated to the whole team, and any not suitable for use required clear labelling and to be locked away and/or sent for repair as soon as possible.

The team requested more fluid pumps to be ordered, as they found they required more. They also took this time to remind everyone that if a fluid pump was not available, then a burette giving set should be used for smaller patients.

A protocol about the treatment of stray animals was required, and should include an adequate level of monitoring for their condition and this should be recorded on a hospitalisation sheet and in the clinical notes.

## What has been changed?

- CPD/training required:** · No official training required, however discussion of the learnings the team took place.
- New or updated protocols/checklists/guidelines:** · New protocol for servicing, calibration and repair of equipment, including what to do with the broken equipment while waiting for it to be sent for repair.  
· To continue using closed loop communication to provide a sense check.
- Further audit required?** · Audit hospitalisation of stray animals to ensure that sheets and records are being filled out and sufficient monitoring is taking place.  
· Servicing and calibration should be checked regularly, and audit compliance with this.
- Other:** · None

#### Follow-up date

**Today's date:** 29/04/2019

**Review date:** 29/06/2019

**Signature:**



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