

Incident 1 - Near-miss/paediatric emergency

From the perspective of the doctor in training at ST6 in paediatrics, called to the emergency department of a teaching hospital.

This shows how reflection might occur following a serious incident, how the supervisor might help trainees develop meaningful reflective practice and how to record reflection in a safe manner.

Incident

A 4-year-old child with known epilepsy presented to A&E following a prolonged seizure and was subsequently admitted to the paediatric ICU following a respiratory arrest. The registrar on call that weekend arrived in A&E about mid-way between the child's arrival in A&E and their respiratory arrest.

In the course of the management of the child's seizure they received five doses of benzodiazepines. The child was then given a loading dose of intravenous phenytoin, which quickly stopped their seizure. The on-call consultant arrived as the child was being admitted to PICU.

It was not until the child had arrested that the number of doses of benzodiazepines that the child had already received was clarified to all the staff managing her care. These had been given by different staff in different places during the episode: at home from the family, in the ambulance from paramedics, in A&E from Emergency Medicine medical and nursing staff and again by the attending paediatrician.

The likely cause of the respiratory arrest was the number of doses of benzodiazepine received.

The child needed a short period of intubation and ventilation but fortunately made a full recovery.

Immediate actions

The paediatric consultant discussed with the paediatric registrar and together they discussed with colleagues in A&E and the paediatric unit. It was flagged as a "near miss" incident through the hospital safety reporting system.

As part of duty of candour, the registrar, supported by her consultant explained to the family what had happened, where there had been errors and why this had resulted in the respiratory arrest. The discussion included an apology and an explanation of the incident reporting system.

How might you reflect?

Reflection may be personal, facilitated in discussion with others or more formal and written. In this case, the ST6 reflected personally and then met with her educational supervisor to reflect.

The following templates are examples of how the ST6 might have reflected both personally and in a discussion with her supervisor. Doctors in training may need support to complete reflection with action points, while developing the skills to do this.

Reflective templates on this incident

Personal reflection can help doctors consider the difference between what you were thinking at the time and your learning looking back after the event in order to help you think differently if something similar happens in the future.

A. Reflection based on Schon

Reflection-in-action – thinking ahead, analysing, experiencing, critically responding (in the moment)
What were you thinking at the time?

I was on call with a relatively junior ST1 and was aware that I needed to lead the management of status epilepticus, I was focusing on the protocol but had not clarified the events before I arrived. When the child had the respiratory arrest, I realised it might be secondary to benzodiazepine use. When the team confirmed that five doses had been given I felt dreadful and that I should have made sure this hadn't happened. I continued with management of the respiratory arrest while the parents were watching and I was pleased that the team worked well together at that point and the child was safely intubated without any dangerous period of hypoxia.

However, I was very aware that the parents could hear the discussion about the benzodiazepines. I thought how hard it was for the parents to understand what had happened because they were still anxious and although I feel bad admitting it, I was worrying about how to discuss it with the family and how the mistake might be managed.

What was influencing that thinking?

I want to provide the best care for children. I thought we had a good safety record in the hospital, I have recently completed my APLS and I was commended on the course for my team leadership, I have been supporting a friend in distress recently and that heightened my awareness of the family's feelings.

Reflection-on-action – thinking through subsequent to the situation, discussing, reflective journal

What is your thinking about the event now? Having time to think, discuss, review information etc

This was a near miss. I am glad that my consultant supported me to talk to the family and can see the importance of a prompt apology and of escalating through the reporting system.

Looking back, I think I was very focused on my role as team leader once I arrived but I didn't get a good handover. It was not clear who was leading the resuscitation before my arrival, I could have used my ST1 to gather information. It is difficult when so many people are involved and I would like to look at how we can manage better processes and communication between parents, paramedics, the ED and paediatric staff.

For me it has re-emphasised the importance of team work, and I think there is an opportunity to use this for focused team learning.

I am sure this will result in me changing my practice to focus on asking the right questions eg. about medication in the "heat of the moment".

I will feel better looking back on the incident if I can help to make improvements as a result.

(With the help of the supervisor and further discussion).

Going forward, I would like to revise the emergency management of status epilepticus and I could organise and lead a multi-professional simulation based on this case to highlight team working and

communication issues. I think we should look at the information we give to families about rescue medication and ensure the protocols are robust and clear about the number of doses given and how to record them.

Reflection can help manage the emotional impact of professional life. This can be personal or shared with a colleague/ trainer/ appraiser the next 3 examples illustrate a professional approach to managing your emotional health and personal development.

B. Reflection - The what, why, how approach

What do you want to reflect on?

An incident involving a child.

Why do you want to reflect on it?

This was a near miss, so there is a need for personal reflection to see if a different action on my part could have helped. There is also a need for team review to improve care in our hospital.

The team review occurred and is being acted on. I personally want to reflect because of the discomfort I felt in the discussion with the frightened parents.

How did you and how will you learn from this?

Personal reading helped me feel confident that I was up to date on management, the MDT discussion re-emphasised the need for good communication and I will personally take more ownership for checking on medication administered prior to hospital presentation when dealing with acute situations.

How have you been affected by this?

This episode really brought home how easily things can go wrong. I think I was more sensitive to this at the time as my friend had just lost her sister so I could really empathise with the parents' fear.

I feel more content now that I have put in place changes which decrease the chances of this happening again.

C. Reflection based on Rolfe et al.

What? – (a description of the event)

What happened? What did I do? What did others do? **What did I think or feel?** What was I trying to achieve? What were the results? What was good or bad about the experience?

A child with epilepsy was admitted through A&E and had a respiratory arrest.

It became apparent later that the medicines received had been incorrectly dosed. In the urgent situation neither I, nor anybody else, had fully appreciated this.

The child recovered fully.

I discussed what had happened with the family, and with colleagues in A&E and the paediatric unit. I flagged this as a “near miss” incident in our hospital safety reporting system.

So what? – (An analysis of the event)

So what is the importance of this? So what more do I need to know about this? So what have I learned about this? So what does this imply for me? What do I feel about this?

I want to check my knowledge was up-to-date and consider what I/we might have done differently. This was a near miss so there is a need for review to improve care.

It was hard taking the parents through what had occurred.

Looking back on the event, I wish to ensure that multi-professional staff and parents are all aware of the protocols and it would be helpful to revisit how we ensure we think clearly in acute situations.

Now what? – (Proposes a way forwards following the event, guided by supervisor)

Now what could I do? Now what should I do? Now what would be the best thing to do? Now what will I do differently next time?

I have reviewed the latest literature.

I now plan an update on the protocol for the junior staff in the paediatric department and A&E, emphasising the correct doses, pathways of medication use and the importance of a timeline.

I have liaised with my nurse colleagues to review the parent-held “emergency care protocol” for children so that it was clear how many doses a child could have and families are asked to give a copy of this protocol to the ambulance crew if necessary, and they are planning to take this forward.

We are reviewing the communication pathway, how information is gathered on medication and recorded in an acute paediatric “resus” setting in a joint meeting between the paediatric and A&E consultants.

Next time I will ensure I have checked on the info I have about medication given before presentation at A&E

D. Reflection based on Gibbs reflective cycle.

To fully learn from a situation, *what else could I have done* is a vital component. How this is recorded is a source of anxiety. In discussion in appraisal/supervision.

Description – what happened?

A child with epilepsy was admitted through A&E and had a respiratory arrest.

It became apparent later that the medicines received had been incorrectly dosed. In the urgent situation neither I, nor anybody else, had fully appreciated this.

The child recovered fully.

My consultant and I discussed what had happened with the family, and with colleagues in A&E and the paediatric unit. I flagged this as a “near miss” incident in our hospital safety reporting system.

Feelings – what were you thinking and feeling?

I was focussed on seeing how quickly we could stop the child fitting. The department was busy, and the A&E staff wanted paediatric support to stabilise the child. I could see the parents were scared and the emergency department staff were concerned that their initial treatment hadn't been effective. Despite this I was confident that we could manage the situation. I stopped to evaluate the situation more when the child had a respiratory arrest.

Evaluation – what was good and bad about the experience? What went well and what went badly?

The child fully recovered and the parents were confident about how they will manage any further fits once they understood what had happened. We dealt with the respiratory arrest effectively.

The actions now undertaken should decrease the likelihood of any similar episodes and there has been learning across both the paediatric and A&E departments.

There was inadequate transfer of information, and in the busy department with an acutely unwell child, the pressure of the acute situation resulted in people not taking time to check the medication history to mitigate this.

Analysis – what sense can you make of the situation?

There is a need for clear communication along the patient pathway in acute situations, especially with children. Better information for children and use of protocols can help in acute situations where there is greater pressure on clinicians.

Conclusion – what else could you have done?

I could have asked about the medication history and whether we were confident that we had all the information. I could have used my ST1 colleague to establish the immediate history. I was relying on effective information transfer, which had not occurred.

It is important for clinicians to remain aware of the possibility of errors and failure to transfer information and to try to mitigate the risks.

Action plan – if it arose again, what would you do?

The measures put in place should ensure that we have more accurate information. The paramedic, A&E and paediatric staff have all been recently updated and will check on medication, but I would also personally check that this has happened.

Gibbs, G. (1988) *Learning by doing. A guide to teaching and learning methods*. Oxford Polytechnic: Oxford

Actions following initial reflection:

Helped by discussion and reflection facilitated by the trainee's supervisor, the ST6 put into practice the action points.

The ST6 trainee reviewed the literature on the management of status epilepticus to ensure her knowledge was up-to-date. She also ran a teaching session to update junior staff in both A&E and the paediatric unit on the status epilepticus protocol, emphasising the correct doses, pathways of medication use and the importance of a timeline.

She liaised with nursing colleagues to review the patient-held "emergency care protocol" for children with epilepsy on emergency buccal midazolam to ensure it was clear how many doses of benzodiazepine a child could have and explain to families they should give a copy of this protocol to the ambulance crew, if necessary.

The trainee coordinated an MDT review of the communication pathway, how information is gathered on medication and recorded in an acute paediatric "resus" setting to ensure this was more robust.

Over the next six months, the hospital plans to audit the number of doses of benzodiazepines children receive in total from community through to hospital should a child be admitted with a prolonged epileptic seizure.

The lead consultant for epilepsy has planned a simulation exercise for the departments to test the knowledge of the team and see how well the status epilepticus protocol works. The trainee will be part of the simulation.

The family, although frightened during the arrest, are now confident about how they should manage their child, and what would happen if she needed future admission. They are reassured that appropriate actions were taken as a result of their daughter's experience.

The trainee now personally makes more stringent enquiries about the number and quantity of doses children have received.

The case has been presented at the joint paediatric/ ED clinical meeting so that learning can be shared with the wider team.

Further reflection took place at a later date, this was also an opportunity to record the reflection formally in the portfolio.

More detailed recording of reflection can help ensure you learn all the lessons from events, both positive and negative. This might be used for the trainee to enter a written reflection on the portfolio. Added detail can help you remember the incident but is not necessary to demonstrate reflection.

E. Reflection: what happened, what did you do, what have you learnt, What next?

What's the issue you reflected on?

An incident/situation/feeling that gave you cause for reflection

A child with epilepsy admitted to the paediatric ICU through A&E and a respiratory arrest

What made you stop and think?

It became apparent later that the medicines received had been incorrectly dosed.

In the urgent situation neither I, nor anybody else, had fully appreciated this

There are many ways to reflect -how did you do it?

I discussed this with colleagues in A&E and the paediatric unit.

I reviewed the literature *on the management of status epilepticus independently.*

What did you do?

I flagged this as a "near miss" incident in our hospital safety reporting system.

I reviewed the latest literature on the management of the condition.

I ran an update on the protocol for the junior staff in the paediatric department and A&E, *emphasising the correct doses, pathways of medication use and the importance of a timeline.*

I liaised with my nurse colleagues to review the parent-held "emergency care protocol" for children *with epilepsy so that it was clear how many doses a child could have and families are asked to give a copy of this protocol to the ambulance crew if necessary.*

We reviewed the communication pathway, how information is gathered on medication and recorded in an acute paediatric "resus" setting.

Tell us what you took away or learned from this experience?

I could have personally checked on the information available.

I felt that I could have made more stringent enquiries about the number of doses and quantity of doses of benzodiazepine she had already received.

This emphasised the importance of teamwork in this acute setting.

It also emphasised the importance of good communication between parents, ambulance staff, A&E clinicians and paediatricians in an acute, high pressure situation.

How did it change your thinking or practice?

I took away the importance of asking the right questions in the “heat of the moment”. *I ensured junior staff know the appropriate management of status epilepticus.*

What have been the effects of your changes?

Has it improved your practice and outcomes?

I have changed the emphasis I place on checking out the medication history.

The hospital has updated the patient information.

Over the next six months, we will audit the number of doses a child receives from community through to hospital *should a child be admitted with a prolonged epileptic seizure.*

Written reflections also provide evidence of reflective practice

F. Reflection for appraisal/ portfolio based on AoMRC Template

Outline skills, activity or event

Involvement in a high pressure acute situation in which the clinical picture changed and worsened due to overmedication. Early treatment had been given by several people in different settings, which the paediatric team managing the acute deteriorating situation were not fully aware of.

What is **the most important thing you have learned** from this experience?

The importance of good communication along the patient pathway, when care can be provided by different people in different settings.

How has this influenced your practice?

Personally, I now check that I ascertain I have accurate information on prior dosing of medication in an acute setting, by remaining aware of where else in the patient pathway, treatment could have been administered.

Looking forward, **what are your next steps?**

Providing a teaching session to junior staff to ensure they are aware of the updated protocol and working with the nursing team to ensure that patient held information and records are updated.