Incident 2 – Reflections on a prescribing error

Incident and resulting actions

A 75-year-old man with pulmonary fibrosis, admitted with an infective exacerbation of his respiratory disease, was reviewed on a ward round led by the respiratory specialist registrar (ST6) and accompanied by a year one core medical trainee (CT1). The patient improved following a course of antibiotics and an increase in steroid dose. Discharge was planned later that day. At the time of admission, the patient experienced an attack of acute gout in his foot, which had settled with colchicine and steroids. He had also experienced at least 6 episodes of acute gout in the preceding months. The ST6recommended prescription of allopurinol 100mg daily increasing by 100mg increments every two weeks until reaching 300mg daily, with colchicine 500mcg bd concurrently for six months. The CT1 doctor prescribed the medication and completed a take home prescription for this medication incorporating instructions for the patient's GP. Other medication included furosemide, nifedipine, aspirin and azathioprine (taken for his lung disease). These medications had previously been requested on a separate form as part of discharge planning, so the CT1 did not rewrite them on the on the latest form. The medication was issued by pharmacy who failed to notice that this was a second TTH script for the patient. The patient was discharged home as planned.

Two weeks later the patient's GP contacted the respiratory consultant responsible for the patient's inpatient care. On attempting to issue a prescription for the higher dose of allopurinol, the primary care prescribing system flagged a serious interaction between allopurinol and azathioprine with the potential for severe bone marrow suppression. The prescription was not issued, and the patient was advised to stop the allopurinol immediately. An urgent blood count was normal.

The GP informed the patient of the error and potential consequences and that she would be referring the matter back to the hospital for further investigation. The patient was satisfied with this and did not want to take matters further. The consultant met with the ST6and CT1 doctors to explain the error, instruct them to notify it as a 'near miss' in the hospital reporting system and advise them to reflect on their involvement.

The incident triggered a formal hospital investigation exploring the operational links between pharmacy, ward staff and primary care, concluding with several recommendations aimed at reducing errors for inpatient, outpatient and take-home prescribing. The event formed the basis of teaching sessions in the medical and the pharmacy department. A letter of apology was sent to the patient on behalf of the Chief Executive explaining what had happened and what had been done to prevent a recurrence.

Reflective templates on this incident (the CT1 doctor)

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?

When I learned of the incident I was embarrassed by my involvement in a potentially serious error, but enormously relieved that no harm had come to the patient. I initially felt somewhat frustrated that whilst I had signed the prescription I was only doing what the STR had instructed me to do and was anxious about what an investigation would involve and its implications for me and my career.

What was influencing that thinking?

My thinking was influenced by a combination of concern for the patient, frustration with systems and the pressures in which I work, which increase the risk of error and a fear of consequences for myself.

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

I remain immensely relieved that no harm came to the patient and also that the investigation has been carried out in a fair manner without apportioning all the blame to me. I now have more confidence in the near-miss reporting process.

Having reflected on the incident I realise that I have learned some important lessons. Firstly, how important it is to be obsessive about all prescriptions and ensure that all medication is included on any TTH script.

Secondly, I realise that simply to do as a senior colleague instructs you to do without considering the appropriateness of those instructions is not professional behaviour and I will change my approach in future to adopt a more questioning approach.

Reflection can help manage the emotional impact of professional life. This can be personal or shared with a colleague/ trainer/ appraiser.

The next three 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?

A prescribing error, which could have caused significant harm

Why do you want to reflect on it?

Personal involvement in a near miss.

Several systemic factors involved

Unpleasant experience but hugely beneficial learning experience in hindsight

How did you and how will you learn from this?

Read up on drug interactions and safe prescribing practice.

Be obsessive when prescribing - check and double check.

Reflecting on the incident made me appreciate how easy it is for prescription errors to occur and the potentially fatal consequences.

Prescribing systems in primary care have a better safety net than we do in secondary care in terms of flagging up such errors and I have fed this back as part of the investigation.

Learned about and understood human factors and how easy it is to stop thinking and questioning when working within a hierarchical structure.

Mustn't assume the pharmacy staff can provide a complete safety net to pick up errors.

How have you been affected by this?

Initially disappointed that one of my actions might have harmed someone.

Convinced myself my career was over for several days after hearing about the incident.

Felt anxious and unable to discuss it openly with anyone.

My consultant was calm and reassuring and a subsequent chat when he discussed some of the incidents he'd been involved in, really helped me regain perspective.

Now feel reassured and have a much better understanding of the process and importance of ensuring everyone learns from near misses.

Realised how important collaborative practice with other health professionals is and I am now determined to improve my own contribution to this area.

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?

Prescription of a medication with the potential for severe interaction with existing medication. My involvement was to write the prescription on the inpatient chart and the TTH, but I only included the new medication on the TTH without listing other medication so potential interaction was not noticed in pharmacy. The error was picked up two weeks later when the GP systems picked up the potential for a drug interaction and informed the hospital. No harm came to the patient who was fully informed. I reported the incident and fully co-operated with subsequent investigations.

The prescribing error was triggered by my STR asking me to prescribe the medication on the ward round because of the patient's symptoms. I did so focussing on my own efficiency in completing the

task rather than considering the appropriateness. I initially considered it was all the STR's fault but on reflection realise that simply doing as one is told without considering the request is not working to the required standard expected of a doctor.

The result of the error was a near miss, which could have had serious consequences if not detected at the point it was.

The bad bits of this experience were how I felt and the fact that a patient could have been harmed. The fact that even today our systems have potential holes in them allowing errors to slip through was disconcerting. The good bits include a personal reassurance that I did feel as bad about it as I did and how much learning I achieved as a result, which means I must care. Reassured by the investigation process and particularly pleased to see how well I was supported by my consultant.

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?

This event illustrates the potential for errors and that these are usually a combination of individual and systemic factors. It has been an upsetting but useful experience and one which will change my behaviour and hopefully make me more resilient in dealing with errors in the future. Whilst disappointed to be involved in this I am now feeling positive, better educated and more prepared.

Now what? (Proposes a way forwards following the event)

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 read lots of information about prescribing errors and drug interactions and it has been an eyeopener. I will personally take much greater care and responsibility for every prescription I issue whether at my own or someone else's behest and will use the BNF much more consistently. I will never complete a TTH form without being clear about all the medication a patient is taking even if that results in a delay for the patient.

I will be more proactive about encouraging reporting of near misses given my experience and also endeavour to support much better inter-professional education and collaborative practice between pharmacists and medical staff.

D. Reflection based on Gibbs reflective cycle...

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

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 patient on long term azathioprine was admitted and treated for a chest infection. At the point of discharge, it was noted that he needed treatment for gout and was started on allopurinol by myself at the instruction of the STR, without recognition of the potential for interaction with azathioprine. The error was picked up two weeks later by the GP and no harm came to the patient. An

investigation was carried out which highlighted individual and systemic failings and changes have been implemented to reduce the risk of future repetition.

Feelings – what were you thinking and feeling?

Once the error had been identified and I realised my part in it I felt disappointed in myself, angry at my STR, frustrated that the systems hadn't been able to pick this up sooner, frightened by potential consequences and immensely relieved that no harm had come to the patient.

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

No harm came to the patient who accepted the explanations, apology and actions and did not want to make a formal complaint. The way I felt personally was horrible and had me questioning my own ability to handle a career in medicine. The fact that such an error can occur and remain undetected for a couple of weeks highlighted weaknesses in the system and some of these have now been addressed. Personally, I have learned a lot from the experience in terms of process, factual knowledge and prescribing skills. I now feel privileged to have experienced what I did without any harm coming to a patient. It will significantly change my future behaviour. I now recognise the importance of clinical incident reporting and ensuring systems promote individual and collective learning. My experience increased my overall confidence that investigations can happen in a constructive no-blame manner. However, I wonder whether that would be the case had the patient died.

Analysis – what sense can you make of the situation?

This incident made me realise how easy it is for serious errors to occur and potentially cause patient harm when working in systems as complex and pressurised as the NHS. The importance of interprofessional communication, personal responsibility, and a supportive environment were all highlighted.

Conclusion – what else could you have done?

I could have taken more care when prescribing rather than just accepting the instructions given to me. This could have avoided the subsequent chain of events. I should also have included all medication on the TTH which would have made it likely that pharmacy would have picked up the problem.

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

I will not rush prescriptions whatever pressure I feel under and if in doubt I will check for interactions. I will not allow myself to carry out instructions of others without considering them in full as an independent professional.

More detailed recording of reflection can help ensure you learn all the lessons from events, both positive and negative.

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

Added detail can help you remember the incident but is not necessary to demonstrate reflection What's the issue you reflected on?

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

A prescribing error in an elderly man which caused no harm but had potentially fatal consequences.

What made you stop and think?

The incident being reported by the GP and realizing that I had contributed to it by prescribing the drug and not completing the TTH adequately.

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

Initially personal reflection and lots of thinking about the incident and contributory factors. As my anxiety reduced I discussed with my consultant who was very supportive and helped transform this into a learning experience.

What did you do?

Once informed of the event by my consultant I flagged it as a "near miss" incident in our hospital safety reporting system.

I read about the drugs involved and also about drug interactions and prescribing in general to improve my knowledge.

I participated in the hospital investigation and contributed to a teaching session in medical and pharmacy departments and am now involved in a collaborative project with pharmacists to identify and collate drug errors from inpatient charts as a source of education for all doctors in the department.

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

I have gained an increased sense of personal responsibility and accountability for my own actions particularly when I sign my name to something like a prescription.

An increased sense of responsibility for reporting and learning collectively from near misses. Motivation to collaborate in interprofessional education to promote collaborative practice and try to improve patient outcomes.

How did it change your thinking or practice?

It's changed both. I have become more mature in my thinking and more diligent in my prescribing practice.

What have been the effects of your changes?

An increased personal awareness of risks in healthcare and the dangers of hierarchical or deferential behaviour. I hope there will also be wider benefits resulting from my determination to be involved in systems to avoid such errors and the negative emotions experienced by all involved.

Has it improved your practice and outcomes?

Completely changed my approach to prescribing- I double check everything but am conscious of avoiding falling into the trap of becoming overly cautious or avoiding doing things for fear of error. So far that has not happened.

Written reflections also provide evidence of reflective practice.

F. Reflection for appraisal based on AoMRC Template

Outline skills, activity or event

A prescribing error with potential for serious drug interaction and patient harm

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

Describe how this activity contributed to the development of your knowledge, skills or professional behaviours.

Improved my insight into clinical risk around prescribing and potential mechanisms for reducing this personally and systemically. Improved knowledge on pharmacology and prescribing because of reading undertaken. The fright has completely changed my behaviour and vigilance around prescribing.

You may wish to link this learning to one or more of the GMC Good Medical Practice domains to demonstrate compliance with their principles and values, i.e.:

Knowledge, skills and performance

Improved knowledge about drug interactions, clinical risk and governance processes around incident reporting and investigations -

Safety and quality

Greater insight into clinical risk around prescribing with significant impact on personal behaviour and responsibility -

Communication, partnership and teamwork

Learned a lot about communication failings and the potential to just do as one is told without thinking when instructions come from someone senior. Highlighted the importance of teamwork and partnership in all aspects of care and made me reflect on the fact that we still all tend to work in silos. I have a much better understanding now about the potential value of interprofessional education particularly with pharmacy colleagues around prescribing.

Maintaining Trust.

The support and advice offered by my consultant was invaluable in me not losing faith in the system. He explained it was his responsibility as the consultant and reassured me encouraging me to learn. This really helped me maintain trust in the system as a whole. I also reflected on the importance of openness and transparency with patients even when no harm has resulted and reassuring to see that not every patient wants to take further action against doctors making mistakes

How has this influenced your practice?

How have your knowledge, skills and professional behaviours changed?

Prescribing skills improved - increased rigour and review.

More empathy for other doctors who have made mistakes.

Understanding principles of clinical risk, minimizing it but also developing the skills and support to living with it.

Have you identified any skills and knowledge gaps relating to your professional practice?

TTH prescriptions

Considering all requests/instructions from seniors before enacting them.

What changes to your professional behaviour were identified as desirable?

Improved awareness and management of clinical risk particularly around prescribing. Improved understanding of the importance of collaborative practice and communication.

How will this activity or event lead to improvements in patient care or safety?

Shared information with others to learned from this.

Likelihood of personal repetition of this is very low as I was really scared by the near miss and the harm I could have caused.

Systems changed to reduce risk.

How will your current practice change as a result?

All drugs included on TTH.

Consideration given to all decisions even when taken by others.

What aspects of your current practice were reinforced?

Desire to learn and improve Compassion and caring Honest

What changes in your team/department/organisation's working were identified as necessary?

Changes to systems in pharmacy so that computer check done for all TTHs to ensure not a second request.

Weekly presentation at teaching session of anonymised prescribing errors identified that week to be used as learning material - collaborative between pharmacy and medical team.

Looking forward, what are your next steps?

Outline any further learning or development needs identified (individual and team/organisation as needed)

Individual - to keep up to date with drug pharmacology. I will also make more use of electronic BNF Organisation - improved information sharing and training around TTHs and prescribing practice.

If further learning and development needs have been identified how do you intend to address these? Set SMART objectives for these (i.e. Specific, Measurable, Achievable, Relevant and Timebound)

Keeping up to date with drugs and interactions will form an integral part of my day-to-day practice I will read about each drug as I encounter it as part of ongoing CPD.

The weekly teaching session highlighting anonymised errors is already embedded within the teaching programme and will continue, as has high level support.

If changes in professional practice (individual or team/department) have been identified as necessary how do you intend to address these?

Individual practice change relates to behaviour and knowledge update. This error has led to recognition of the potential risk and a conscious change in behaviour, which I will reflect on regularly

Summary of discussion with Educational Supervisor or Appraiser.

The incident has been discussed fully with my educational supervisor and documented in the portfolio along with agreed learning and actions resulting from the experience.