Health and Disability Commissioner
Te Toihau Hauora, Hauātanga

Reducing prescribing errors

An issue that has arisen in complaints to HDC is a failure to be aware of patient allergies when prescribing medication despite the presence of multiple systems intended to be safeguards. These errors have the potential to cause significant patient harm.

In Case 14HDC00157 an elderly woman was administered trimethoprim, despite her severe allergy having been recorded in her records in multiple places, and her wearing a medical alert bracelet and being acutely aware of the risks posed by her allergies.

In a recent case, 20HDC01979, a similar situation occurred. An 80-year-old woman had a severe allergy to penicillin. Despite her documented allergy, she was inappropriately prescribed and administered Augmentin and suffered a severe anaphylactic reaction and died.

The allergy was documented on the national patient medical warning system, and in her admission documentation. She wore a medic alert necklace that said, 'penicillin anaphylactic shock'. She was very aware of the risks of penicillin and her family reported that she would always ask clinicians whether medication she was being prescribed contained penicillin.

The woman had surgery and two weeks later she became unwell. She presented to the emergency department (ED). Her allergy to penicillin was recorded in the ED care summary and ED triage assessment. The national Patient Medical Warning System also recorded a warning note of severe allergy to penicillin. The ED house officer assessed the woman and recorded the allergy on an ED admission note, Concerto, and the front page of the eight-day National Medication Chart (NMC) but did not complete the subsequent pages of the chart in relation to allergy status.

It was thought the woman had an infection related to the surgery. She was placed on the sepsis pathway and prescribed IV antibiotics (cefuroxime and ertapenem). Subsequently, it was thought she was suffering from urosepsis unrelated to her earlier surgery, so she was transferred to the general medicine ward, where she was reviewed by a general medicine registrar who was aware of the penicillin allergy and documented that the woman was to continue on IV cefuroxime for now.

The general medicine consultant and his team reviewed the woman the next morning and saw that test results showed that the bacteria present was of intermediate sensitivity to cefuroxime, but fully sensitive to Augmentin, a penicillin-type antibiotic. The consultant decided to change the woman's antibiotic to IV Augmentin. He did not check whether she had an allergy before instructing the house officer to prescribe the

medication. He said that at the time he decided to change the antibiotics they had left the woman's bedside to use a ward computer to access the laboratory results, and they did not have the opportunity to go back to her to discuss the medication changes.

The house officer, who had worked 59.5 hours over the previous seven days, charted the medication. He did not see the penicillin allergy on the front of the woman's medication chart and did not discuss the change with the woman.

A registered nurse was told during handover that the woman was to be given Augmentin at 6pm, but the handover sheet did not include any patient allergy history. The nurse checked the medication chart quickly and confirmed with the nurse who was handing over care that the woman had been given her regular medications. However, the on-coming nurse did not read the entire medical records. When she administered the Augmentin, she checked the front cover of the medication chart again but does not remember seeing any documentation of allergic reaction despite it being recorded there. The nurse said that she asked the woman whether she had any allergies, which she allegedly denied. The Commissioner concluded that if the woman had been asked directly, she would have disclosed her allergy, which suggested that if the nurse asked about allergies, she did so in such a way that the woman did not understand, or the woman was not sufficiently alert to be able to answer. Halfway through the administration of Augmentin, the woman showed signs of anaphylaxis and, despite resuscitation continuing for over two hours, sadly, the woman died.

The Commissioner acknowledged that the consumer's death had a devastating impact on her family. She also noted that this was a human error by clinical staff who were also clearly affected by the outcome. The Commissioner commented:

> 'In reality, clinical practice in a busy acute admitting hospital will mean that there is potential for distraction and interruption, for shortcuts and lack of adherence to process, so the system and its processes must be sufficiently robust to protect patients at such times. However, it is also important to recognise that individuals have professional responsibility in their practice, and that it is appropriate to hold individuals to account for departures from the expected standard of care. This is not intended to be punitive but to reflect the rights to which consumers are entitled, and to identify breaches of those rights where appropriate.'

Accordingly, the Commissioner found the individual health professionals involved in the prescribing and administration of the Augmentin in breach of Right 4(1) of the Code for failing to check the allergy status of the woman adequately.

Throughout the woman's admission, there were several points at which safeguards in the system failed, leading to her being administered a medication to which she was allergic. Systems issues identified included a lack of policies and procedures; a lack of adherence by multiple staff to existing procedures; a lack of flexibility in staffing provision during a busy period with a number of high acuity patients; a handover process that did not support sharing of important information; and a lack of continuity of care across different areas of the hospital. The Commissioner therefore found the district in breach of Right 4(1) of the Code.

The district accepted that systemic factors contributed to the error and agreed that electronic prescribing is a key safeguard in preventing medication errors. Both international and national studies have shown that the use of electronic systems can reduce medication errors and improve patient safety. The Commissioner recommended that Te Whatu Ora (national office) liaise with the district in respect of how it can be supported to implement electronic prescribing.

Resource limitations also contributed to the error. The district noted that over the weekend this event occurred there was an unprecedented number of high acuity patients, leading to insufficient staffing levels and placing pressure on the professionals caring for the woman. This case is a salutary reminder of the potential for patient harm where there are inadequate staffing levels to meet service demand. It also highlights the importance, in such circumstances, for robust systems and tools to support clinical decision-making and continuity of care.

Health and Disability Commissioner Morag McDowell
New Zealand Doctor, November 2023