HEALTH & DISABILITY COMMISSIONER
TE TOIHAU HAUORA, HAUĀTANGA

Dispensing errors at pharmacy

1. The Health and Disability Commissioner (HDC) received a complaint from Mrs A about the care provided to her at […] Pharmacy (the Pharmacy), and a subsequent referral from the Pharmacy Council regarding the same matter. Mrs A, aged 76–77 years at the time of events, had a history of polymyalgia rheumatica,[1] hypertension (high blood pressure) and suspected giant cell arteritis (GCA).[2] During a clinic appointment at Health New Zealand | Te Whatu Ora (Health NZ) Te Pae Hauora o Ruahine o Tararua MidCentral on 27 February 2022, locum rheumatologist Dr B[3] prescribed Mrs A several medicines, including prednisone 20mg,[4] co-trimoxazole 960mg,[5] and bezafibrate 400mg SR.[6]

2. Mrs A is concerned that she experienced adverse health effects as a result of a dispensing error by the Pharmacy and the subsequent sudden dosage reduction of prednisone. In addition, she raised concerns about further incidents of dispensing errors at the Pharmacy. This report considers the standard of care provided to Mrs A by the Pharmacy, individual pharmacists, Health NZ, and Dr B.

Dispensing error 1 — incorrect labelling of prednisone

3. On 27 February 2022, Dr B wrote[7] the dosage instruction 'ii po qd' on Mrs A's prescription script for prednisone 20mg (which means take two tablets, by mouth, *once* daily).

4. On 28 February 2022, the prescription was incorrectly labelled at the Pharmacy with the instruction to take two 20mg prednisone tablets *four* times daily. Mrs A took the prednisone, as stated on the label, for 20 days. After becoming very unwell and experiencing significant swelling in her face and body, Mrs A visited her general practitioner (GP), who identified that she was taking an incorrect dosage of prednisone.[8]

5. On 29 March 2022, pharmacist/pharmacy manager/director Mr D was notified of the dispensing error by staff at the general practice.

[1] An inflammatory disorder that causes muscle pain and stiffness around the shoulders and hips.
[2] Also known as temporal arteritis. It is an inflammatory autoimmune disease that affects large blood vessels, particularly those in the head and neck, causing symptoms such as headaches, scalp tenderness, jaw pain, and potential vision problems.
[3] Dr B no longer works for Health NZ.
[4] A steroid used to treat and prevent conditions that cause inflammation.
[5] Also known as Trisul (brand name). It is an antibiotic used to treat bacterial infections.
[6] A sustained release (SR) medicine. It is used to lower raised cholesterol levels.
[7] Dr B stated that e-prescriptions were not available at Health NZ Midcentral at the time of events.
[8] The GP then advised Mrs A to reduce her prednisone dose by 5mg a day, until the targeted dose of 40mg (as initially intended) was reached.

Misinterpreted abbreviation

6. Pharmacist Ms C accepted that she misinterpreted the abbreviation of 'qd' (once daily) to mean 'qid' (four times daily) and entered the incorrect dosage into the Pharmacy's dispensing programme. The prescription was then dispensed by pharmacy technician Ms E. Ms E told the Health and Disability Commissioner (HDC) that she did not notice the error as she believed 'qd' meant four times daily.

7. Ms C stated that the dosage of prednisone 'var[ies] greatly between prescribing, especially on hospital prescriptions, and divided doses can be given'. However, she accepted that she failed to identify that the overall daily dose of 160mg was unusual. Mr D also acknowledged that 160mg of prednisone daily was an 'unusual dose' and should have been queried with the prescriber, Dr B. Health NZ stated that the use of Latin abbreviations is 'no longer well known or recognised by the pharmacy workforce' and that, at the time of events, it discussed the appropriate use of abbreviations on prescriptions with Dr B, with reference to Te Tāhū Hauora Health Quality & Safety Commission (HQSC) recommendations.[9] Health NZ stated: '[Dr B had a] positive approach and we are unlikely to see a repeat of the abbreviation he used in this incident.'

8. Dr B stated that he had 'no contact with Health NZ after this event' but noted that he approached the head pharmacist to complain about the dispensing error.[10] Dr B told HDC that he was forced to handwrite all prescriptions in the public hospital (as opposed to in his private practice, which had an electronic prescribing system) and stated that the use of Latin abbreviations remains widespread in public hospitals.[11] He further stated that the use of accepted Latin abbreviations at the time of events was 'inescapable' because of his workload (nine clinics per week) and patient demand for prescriptions.[12]

Checking stage

9. Mr D acknowledged that he failed to check Mrs A's prescription accurately on 28 February 2021. He told HDC that this incident occurred in the middle of a busy period and lunch time,[13] and an 'incredibly stressful time' generally, which included COVID-19,[14] high workloads, staffing changes[15] and vacancies, the poor roll-out of multiple new prescription generation systems, and underdeveloped internal systems to track prescriptions.[16] However, Mr D acknowledged that these factors did not justify the missing clinical insight that occurred in this case.

[9] HQSC discourages the use of some Latin abbreviations, including 'qd' for once daily, and recommends that prescribers write 'daily' or the intended time of administration.

[10] Dr B stated that, during this interaction, he was informed that new pharmacy graduates were not taught Latin abbreviations, which he said 'was a complete surprise' to him.

[11] Dr B stated that an example of this is the use of 'OD' for 'ocular dextra' (a Latin term referring to the right eye) in the eye wards in the hospital.

[12] Dr B stated that patients were demanding prescriptions from him instead of going to their GP.

[13] The Pharmacy stated that it dispensed 76 prescriptions between 12pm and 1pm.

[14] The Pharmacy stated that this involved requests for vaccinations, RAT tests, and vaccine passes.

[15] Mr D stated that key staff were absent for parental leave, and there were new and temporary staff. He said that in addition, at the time of this incident he was working part time.

[16] Mr D stated that the system for tracking consumers' prescriptions that had either arrived or were pending was 'not as developed as [it is] now'.

Follow-up with consumer

10. Mr D acknowledged that he failed to follow up with Mrs A appropriately following the dispensing error, as required by the Pharmacy's 'Dispensing Errors' Standard Operating Procedure (SOP). He noted that a verbal discussion with Mrs A did take place (after he was notified of the error on 29 March 2022), and an apology letter was drafted but not sent to Mrs A at the time of events.[17] However, Mr D accepted that 'Mrs A was left without the open communication and options she was entitled to'.

11. In addition, the Pharmacy acknowledged that its dispensing error procedure was 'not robust' at the time of events and said that this has since been updated (discussed further below).

Prednisone tapering advice and sudden dose reduction

12. On 29 March 2022, Mr D emailed Dr B and Health NZ for advice about reducing Mrs A's prednisone dosage. On the same day, Dr B advised the Pharmacy to reduce Mrs A's dosage of prednisone immediately from 160mg to 40mg.[18]

13. Mrs A told HDC that the sudden reduction of prednisone caused her issues with balance (leading to falls), weight, and pain and swelling (which has resulted in significant scarring on her body). In response, Dr B told HDC that he requested the sudden reduction because Mrs A had already been subjected to high doses of steroid, likely causing sarcopenia[19] and skin thinning, which Dr B submitted was the 'more likely' explanation for Mrs A's falls and bruising.

14. Dr B did not make a documented reduction plan. While Health NZ told HDC that the matter was 'likely going to [be] discussed at the next clinic [appointment] (aiming for one month follow-up)', this did not occur until 19 August 2022 (a delay of approximately five months). Health NZ stated that such delays are not uncommon in its public rheumatology service, and this is 'mostly due to resource constraints', which often will result in overdue patient follow-ups.

15. In response, Dr B told HDC that he was working almost nine clinics a week due to a lack of other clinical staff to cover him. Dr B stated that he 'rejects the position that [Health NZ] was not able to see [Mrs A]'. He submitted that, despite this high workload, he was still available to cover urgent cases and made this clear to booking and managerial staff at Health NZ. Dr B stated that, on this basis, he expected to see Mrs A within the month and therefore did not feel the need to create a steroid reduction plan.

16. Mr D stated that steroid reduction is a 'long process', and he acknowledged the failure to have a good system that tracked Mrs A's follow-up as intended.

[17] Mr D stated that a possible reason for this was an expectation of further interactions with Mrs A, which did not occur owing to his part-time role.

[18] In response, Dr B noted that his emails were part of the electronic clinical record and that writing in the physical records was discouraged.

[19] Age-related loss of muscle mass and strength.

Dispensing error 2 — incorrect quantity of co-trimoxazole

17. On 27 February 2022, Dr B wrote[20] '960mg' on the prescription script for co-trimoxazole. On 28 February 2022, the Pharmacy provided Mrs A with *one* 480mg tablet of co-trimoxazole (instead of 960mg). Ms C stated that when she processed the prescription into the dispensary programme,[21] she converted co-trimoxazole to Trisul (its brand name), but she failed to translate/calculate this accurately (to *two* 480mg tablets), as Trisul comes in only 480mg tablets.

18. The dispensing error was identified by Dr B when the Pharmacy contacted him for prednisone tapering advice on 29 March 2022 (as discussed above). Dr B told the Pharmacy that he should have been contacted if the double-strength tablet was not available, instead of the Pharmacy dispensing half the dose (480mg).

19. Mr D accepted that he did not raise this second dispensing error with Mrs A during their discussion on 29 March 2022. He stated that this omission 'was disappointing and highlights [the Pharmacy's] break in processes under pressure at this time'.

Dispensing error 3 — incorrect medication and labelling of bezafibrate

20. A third dispensing error occurred on 15 November 2022 when the Pharmacy provided Mrs A with Brufen 800mg SR[22] instead of bezafibrate 400mg SR (which was incorrectly labelled on the box as bezafibrate). Mrs A noticed the error and took the incorrect medication into the Pharmacy on 16 November 2022.[23] It is documented that Ms C apologised to Mrs A, re-dispensed the medication, and told Mrs A that the Pharmacy would conduct an investigation and provide her with a written apology.

21. On 21 November 2022, a letter of apology from pharmacist Mr C was sent to Mrs A. A further letter of apology from Mr D was sent to Mrs A on 20 February 2023, which apologised for the 'major prednisone overdosage' and the 'later selection incident'. Mrs A told HDC that she was unsatisfied with the Pharmacy's response, given her ongoing health issues (and financial costs) caused by the Pharmacy's repeated errors.

22. Mr C accepted full responsibility for the dispensing error, which occurred when he selected an incorrect box of medication from the pharmacy shelf.[24] He stated that as Mrs A's prescription was for original pack dispensing,[25] he opened the boxes to check the number of strips but did not identify that the incorrect medication had been dispensed.[26]

23. In addition, Mr C accepted that he failed to identify the error when conducting a final check of the prescription. He noted that at the time of events, he was working alone in the

[20] On review of the script, pharmacy technician Ms E told HDC that this was hard to read and could also be interpreted as 900mg.
[21] Ms C stated that co-trimoxazole did not exist in the Pharmacy's dispensary programme.
[22] A brand of ibuprofen. It is used to treat pain, inflammation, and fever.
[23] Mrs A did not take any of the incorrect medication.
[24] The Pharmacy stated that both medications were kept in different aisles, but at similar levels on the shelves.
[25] Dispensing for a whole number of packs, which may be more than the total quantity prescribed.
[26] Mr C stated that both medicines came in a white box of 30 tablets (three strips per box) and had a sustained-release formulation.

dispensary,[27] and Mrs A was waiting in store for her prescription. Therefore, Mr C was required to dispense medication, undertake other tasks, and then come back with 'fresh eyes' to complete the final check (as no other pharmacist had become available).

Independent clinical advice

24. Independent clinical advice was provided by rheumatologist Dr Keith Colvine (Appendix A), who identified the following departures from accepted practice:

a) The prednisone tapering advice provided by Dr B, namely sudden dosage reduction from 160mg to 40mg — **mild departure**.

b) The delay of five months for a follow-up consultation — **mild departure**.

Responses to provisional decision

Mrs A

25. Mrs A was provided with an opportunity to comment on the factual information in my provisional decision and had no further comment to make.

Ms C

26. Ms C was provided with an opportunity to comment on the provisional decision. She accepted the relevant finding and had no further comment to make.

Mr D

27. Mr D was provided with an opportunity to comment on the provisional decision. He accepted the relevant finding and had no further comment to make.

Mr C

28. Mr C was provided with an opportunity to comment on the provisional decision and had no further comment to make.

The Pharmacy

29. The Pharmacy was provided with an opportunity to comment on the provisional decision and had no further comment to make.

Health NZ

30. Health NZ was provided with an opportunity to comment on the provisional decision. Health NZ's comments have been incorporated into this report where relevant.

Dr B

31. Dr B was provided with an opportunity to comment on the provisional decision. His comments have been incorporated into this report where relevant.

[27] Mr C stated that the other pharmacist was undertaking a consultation with a patient, and other staff were unavailable (on a lunch break, with patients, or on the telephone). He also noted that there had been a significant increase in workload as a result of the COVID-19 pandemic.

Decision: Ms C — breach

32. In my view, Ms C breached Right 4(2) of the Code[28] by failing to assess and process Mrs A's prescription appropriately on 28 February 2022.

33. As a registered pharmacist, Ms C has an obligation and responsibility under the Pharmacy Competence Standards to '[a]pply knowledge in undertaking a clinical assessment of the prescription to ensure pharmaceutical and therapeutic appropriateness of the treatment and to determine whether any changes in prescribed medicines are warranted'.

34. I acknowledge Ms C's willingness to accept that she misinterpreted the abbreviation of 'qd' to mean 'qid' and entered the incorrect dosage frequency into the dispensing programme (which resulted in incorrect labelling instructions on Mrs A's prescription). While the use of Latin abbreviations on the script was a source of confusion in this case (addressed further below), I consider that Ms C failed to provide the necessary clinical insight for Mrs A's prednisone prescription, as required by the Competence Standards and the Pharmacy's SOPs. As noted by my advisor, Dr Colvine, a dosage of prednisone of 160mg daily for one month is atypical and should have led to the pharmacist questioning this.

35. In addition, I acknowledge Ms C's acceptance that she failed to translate and calculate co-trimoxazole 960mg to two 480mg Trisul tablets accurately. I note that under the Pharmacy Competence Standards, Ms C is required to maintain a 'safe, logical and disciplined dispensing procedure'. This involves ensuring that any calculation of dose and quantity are performed correctly, particularly when interchanging medications (in this case, from a generic medication to a brand-name medication).

36. I am therefore critical of Ms C's involvement in two dispensing errors on 28 February 2022 (incorrect label instruction on prednisone and incorrect quantity of co-trimoxazole provided). I remind Ms C of the importance of prescription accuracy for patient safety and efficacy of medicines, and for fostering trust between consumers and pharmacists.

Decision: Mr D — breach

37. In my view, Mr D breached Right 4(2) of the Code by failing to check Mrs A's prescription adequately on 28 February 2022 and by failing to provide appropriate follow-up advice.

38. As a registered pharmacist, Mr D has an obligation and responsibility under the Pharmacy Competence Standards to maintain a 'safe, logical and disciplined dispensing procedure'. I acknowledge Mr D's willingness to accept that he did not check Mrs A's prescription accurately as part of the 'final check'.

39. Nevertheless, in addition to the need for accurate prescription processing, the accuracy of the clinical check is also fundamental to patient safety and quality assurance. As stated in the Pharmacy's SOPs, Mr D was required to check the generated dispensary label against the original prescription to ensure that the correct instructions for use, formulation, strength and quantity of medicine were provided, and to recheck any calculations made. I am critical that

[28] Right 4(2) of the Code states: 'Every consumer has the right to have services provided that comply with legal, professional, ethical, and other relevant standards.'

this did not occur on 28 February 2022, as evidenced by the two errors (incorrect label instruction on prednisone and incorrect quantity of co-trimoxazole provided).

40. I acknowledge Mr D's willingness to accept that he did not follow up with Mrs A on the two dispensing errors that occurred on 28 February 2022. I note Mr D's submission that steps were taken to follow up with Mrs A (such as drafting a written apology) but were not completed, likely due to Mr D's part-time work.

41. However, I find the lack of follow-up with Mrs A particularly concerning given the seriousness of the dispensing error, namely the significant risk of serious harm posed to Mrs A by taking such a high dose of prednisone daily (160mg) for 20 days.

42. Further, I am highly critical that Mr D failed to disclose the second dispensing error (incorrect quantity of co-trimoxazole) during his conversation with Mrs A on 29 March 2022. Mr D submitted that he included this on the Pharmacy's incident form, but as this was a short course of treatment, Mrs A was continued on the 480mg three times a week dose by her GP.

43. I remind Mr D that there are clear mandatory requirements for pharmacists, including professionalism and ethical conduct, effective communication, and patient-centred care. To the latter point, this means that older persons are treated with respect and dignity and provided with relevant information (such as the occurrence of a dispensing error) to enable them to make informed decisions about their health. I note that for many older people, pharmacists are the health professionals seen most frequently, and therefore it is vitally important that this relationship is built on trust and ethical conduct.

Decision: Mr C — adverse comment

44. I am critical that Mr C failed to dispense and check Mrs A's prescription accurately on 15 November 2022. As outlined above, registered pharmacists are required to comply with the Pharmacy Competence Standards and the Pharmacy's SOPs.

45. However, I note that Mr C has accepted full responsibility for the errors on 15 November 2022. In addition, I acknowledge the systemic factors present at the time of events, which likely contributed to these errors, namely that the Pharmacy was under significant pressure (increased workload and workforce shortages), as evidenced by Mr C being the only pharmacist available, and that Brufen and bezafibrate were similar in packaging and location on the Pharmacy's shelves (which was changed following the events — see below). I also note Mr C's compliance with the Pharmacy's SOPs (such as the 'fresh eyes' step, incident reporting, and follow-up requirements) and consider that Mr C has made appropriate changes to practice his since this incident.

Decision: The Pharmacy — adverse comment

46. As outlined above, there were several systemic issues at the Pharmacy at the time of events, which likely contributed to the risk of dispensing errors occurring. While I acknowledge the impact of COVID-19 on healthcare providers, I do not consider that this absolved the Pharmacy of its responsibility to provide operational oversight — in particular, the need for sufficient staffing levels to cope with workload, appropriate internal systems, and up-to-date

SOPs (with clear guidance and strategies for risk management and harm minimisation[29]). I consider that these operational failings affected the overall standard of care provided to Mrs A, as evidenced by the lack of open communication and follow-up advice.

Decision: Health NZ — adverse comment

47. I am critical that Mrs A experienced a delay of approximately five months for a follow-up rheumatology clinic appointment. My advisor, Dr Colvine, noted that there was a reasonable expectation that a consumer with acute GCA would be reviewed one month after the initial assessment.

48. In addition, Dr Colvine advised that Health NZ MidCentral has a 'significantly lower' rate of rheumatologists.[30] While I remain concerned about the staffing levels of the rheumatology service in the MidCentral region, and the patient-safety implications for consumers, I note that Health NZ has made changes to staffing since events (discussed further below).

Decision: Dr B — educational comment

Use of Latin abbreviations

49. As outlined in this report, Dr B's use of Latin abbreviations on Mrs A's prescription on 27 February 2022 was a source of confusion for pharmacy staff and subsequently led to an incorrect dosage of prednisone being provided to Mrs A.

50. I accept Dr B's explanation that the use of Latin abbreviations remains commonplace in both primary and secondary care prescribing. However, I highlight the need for prescribers to ensure that their meaning is clear or written out in full. I note that the HQSC discourages the use of 'qd' for once daily and recommends that prescribers write 'daily' or the intended time of administration.

Prednisone tapering and sudden dose reduction

51. My advisor, Dr Colvine, considered that there should have been written and verbal advice from Dr B regarding the dosage reduction plan, including interval steps to reduce the dosage, and that doing so may have mitigated the Addisonian side effects[31] Mrs A experienced with the drop of prednisone dose.[32]

52. In response, Dr B told HDC that Addisonian symptoms were 'extremely unlikely' to occur in Mrs A's case as she was on a 'supraphysiological dose'[33] of prednisone 40mg daily. Dr B submitted that the more likely explanation for Mrs A 's falls and bruising was the high doses of prednisone that Mrs A had already taken.

[29] For example, a warning note being placed on Mrs A's profile to document the dispensing error, ensure appropriate follow-up and prevent future errors.
[30] Dr Colvine noted the Royal College of Physicians' recommendation of one rheumatologist per 86,000 people.
[31] Also known as adrenal insufficiency (when the body does not produce enough of certain hormones). Symptoms are non-specific and may include abdominal pain, fatigue, muscle weakness, low blood pressure, weight loss, headaches, and joint and muscle aches.
[32] If prednisone is stopped abruptly, the body may lack a necessary hormone (cortisol). This may cause symptoms of adrenal insufficiency.
[33] Doses that are greater than what is normally found in the body.

53. I note that Medsafe's data sheet on prednisone lists side effects including dizziness, weight gain, bruising and skin thinning and that the likelihood of experiencing adverse side effects increases as the dosage increases.[34] I therefore acknowledge the possibility that the cause of Mrs A's symptoms may have been the high dose of prednisone (160mg daily) she was taking for 20 days.

54. I also acknowledge that secondary adrenal insufficiency[35] is somewhat unlikely on a dose of prednisone 40mg daily. However, I note that an overlapping but distinct issue is glucocorticoid withdrawal syndrome, which is a group of symptoms[36] that occur because of the abrupt reduction in supraphysiologic glucocorticoid exposure (when a high dose of a steroid is stopped).[37] Symptoms of glucocorticoid withdrawal syndrome can occur at any stage in the tapering process (even when following accepted tapering regimens); it is also possible that this was relevant in Mrs A's case.

55. In addition to the above, Dr Colvine advised that 'there is no clear approach to cover the reduction of a dose of prednisone from 160mg once daily' but referenced Medsafe's prescriber update,[38] which stated that 'gradual prednisone withdrawal should be assessed on a case-by-case basis' and that '[g]enerally, dose tapering is required for patients who have… received more than 40mg of prednisone per day for more than one week'.

56. In response, Dr B told HDC that there is no guidance on the reduction of prednisone from an overdose of 160mg to 40mg and that, while tapered reductions are common, this case was in the context of uncertain disease activity (meaning that a slow reduction would allow for a quick response if a disease flare was detected).

57. I acknowledge that there does not appear to be a consensus or published guideline on the optimal tapering regimen after accidental supratherapeutic-dose prednisone dosing in GCA. I am therefore not critical of Dr B's tapering regimen as there is no accepted practice for managing such a situation. However, I note that recommendations are available (which appear to be taken from general principles of prednisone tapering and management of GCA), which generally advise for rapid initial tapering until the dose approaches the standard therapeutic range (in Mrs A's case that being 40–60mg daily), observing closely for any disease flare. I take this opportunity to remind prescribers that the potential significant adverse effects of remaining on very high-dose steroids needs to be considered.

Clinical documentation and communication with Mrs A

58. Dr Colvine advised that there was a lack of clinical documentation and a lack of direct communication with Mrs A. I accept this advice and remind Dr B that patients should be provided with the relevant information, such as an explanation of the health effect of the dispensing error and sudden dosage reduction, the associated risks and likely side effects, and follow-up advice.

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[34] Data Sheet

[35] When the pituitary gland does not produce enough of a specific hormone.

[36] Such as fatigue, malaise, myalgias, arthralgias, mood changes, and sleep disturbances.

[37] This may occur even when circulating cortisol levels are adequate for physiological needs (which would be expected if a patient remained on prednisone 40mg daily).

[38] Prednisone treatment – follow dosing recommendations.

Decision: The Pharmacy — educational comment

59. I consider that the occurrence of a third dispensing error in November 2022 was indicative of ongoing systemic issues at the Pharmacy.

60. However, I am satisfied with the changes the Pharmacy has made to its practice since the events, and I encourage it to continue to aim for quality improvement.

Changes made since events

Ms C

61. Ms C stated that she is 'deeply sorry' for her role in the dispensing error and for any distress and suffering experienced by Mrs A. Ms C said that she has had a 'hard look' at her practice and has made the following changes:

a) For each prescription she enters, she double checks the label printed against the prescription (using the same procedure as the final check).

b) She takes additional time on hospital prescriptions.

c) She does not answer telephone calls or retail assistant queries until she has completed her check on the prescription label.

d) She adds a sundry label on every prednisone prescription dispensed, which states the common maximum dose and to remind staff to double check the dose. This label is to be signed by the dispenser and checker as an additional check.

e) She takes proactive steps in following up any incidents involving her practice to ensure that these are resolved completely (including cases where she is not responsible for handling the complaint/error).

Mr D

62. Mr D stated that he has made the following changes to his practice:

a) He has increased his use of the New Zealand Formulary to check unusual dose regimens and unfamiliar treatments when evaluating prescriptions.

b) He communicates any dose-related concerns to the prescriber for clarification and documents this on the consumer's file.

c) He checks a prescriber's scope of practice on the Medical Council of New Zealand's register, which provides additional information that is helpful for a good clinical review.[39]

d) He engaged in continual professional development around incident reduction and courses from the Pharmacy Council of New Zealand to strengthen his practice.

Mr C

63. Mr C stated that he is sincerely apologetic for not having identified the error, and for the additional stress this may have caused Mrs A. He provided an apology to Mrs A. In addition, he stated that he has made the following changes to his practice:

[39] For example, Mr D stated that whether the prescriber is a rheumatologist or an oncologist can potentially indicate the dosage.

a) He does not check his own work, when possible. In instances where no other pharmacist is available, he puts the prescription further back in the queue to ensure that dispensing and checking are at least 10 minutes apart, and he considers asking a pharmacy technician to double check the prescription (in addition to his final check).

b) He has altered his checking process to include a double check, by taking medication strips out from original packing boxes and checking the medication name on the strips against the prescription.

c) He delegates tasks and responsibilities to other staff, if necessary.

The Pharmacy

64. The Pharmacy stated that it has made the following changes to its practice:

a) It terminated the Pharmacy's contract to provide services to rest homes (which had caused high demand in the afternoons).

b) It trained all dispensary staff to be aware of the risk of Latin abbreviations.

c) It deleted 'qd' from its dispensing programme to avoid any further incidents.

d) It created a sundry label[40] to be printed with every prednisone/prednisolone prescription dispensed, which the dispenser and checking pharmacist uses as an extra double check.

e) It hired a nurse vaccinator, who has taken over all vaccinations at the Pharmacy.

f) It increased the level of dispensary staff (from 5–5.5 to 6.5–7 staff present on most days).[41] However, the Pharmacy continues to have an advertised vacancy for another pharmacist.

g) It installed a dispensing machine, which has improved dispensary efficiency, workload, and accuracy.

h) It implemented a new dispensary layout, which has improved dispensary workflow and medication selection.[42]

i) It implemented an 'ongoing incident' folder, which helps the Pharmacy to keep track of any ongoing incidents to ensure that they are followed up and completed.

j) It updated the Pharmacy's Dispensing Error SOP, including the addition of a new procedure when a pharmacist is needed for a consultation (to prevent pharmacists from being interrupted while they are checking prescriptions).

Health NZ

65. Health NZ said that at the time of events, it corresponded with Dr B regarding the appropriate use of abbreviations on prescriptions, with reference to the HQSC's recommendations. Health NZ stated: '[Dr B had a] positive approach and we are unlikely to see a repeat of the abbreviation he used in this incident.' Health NZ stated that since the events, it has made the following changes:

[40] Which states, 'once daily' and 'maximum dose of 40mg but can be up to 60mg'.
[41] Mr C stated that there are now two technicians and one pharmacist at a minimum during lunch times.
[42] Mr C stated that Brufen and bezafibrate are now in different locations (height and facing), and the Pharmacy no longer has 'aisles' that could contribute to errors.

a) Dr B is no longer employed with Health NZ MidCentral.

b) The region now has a full-time, permanent rheumatologist.

c) An additional 0.5 FTE was allocated for a second rheumatologist in 2025, and it is actively recruiting to improve service capacity and reduce follow-up delays.

Dr B

66. Dr B stated that he has developed his own electronic prescribing system, which he has been using since these events to avoid further dispensing errors.

Recommendations

Ms C

67. In accordance with the recommendation in my provisional decision, Ms C has provided HDC with a formal written apology to Mrs A for the breach of Right 4(2) of the Code identified in this report. I consider that this recommendation has been completed.

68. I recommend that Ms C undertake further education/training on assessing and processing medications. This education/training should be in conjunction with, or endorsed by, the Pharmacy Council of New Zealand. Evidence of attendance, such as a certificate, is to be provided to HDC within three months of the date of this report.

Mr D

69. In accordance with the recommendation in my provisional decision, Mr D has provided HDC with a formal written apology to Mrs A for the breach of Right 4(2) of the Code identified in this report. I consider that this recommendation has been completed.

70. I recommend that Mr D:

a) Provide evidence of attendance, such as a certificate, at continuing professional development around incident reduction and courses from the Pharmacy Council of New Zealand. This is to be provided to HDC within one month of the date of this report.

b) Undertake further education/training on checking prescriptions, follow-up advice, and ethical and professional conduct. This education/training should be in conjunction with, or endorsed by, the Pharmacy Council of New Zealand. Evidence of attendance, such as a certificate, is to be provided to HDC within three months of the date of this report.

Mr C

71. I recommend that Mr C undertake further education/training on managing workplace pressures. This education/training should be in conjunction with, or endorsed by, the Pharmacy Council of New Zealand. Evidence of attendance, such as a certificate, is to be provided to HDC within three months of the date of this report.

The Pharmacy

72. I recommend that the Pharmacy:

a) Review all relevant SOPs to ensure that they are up to date and follow best practice (as outlined by the Pharmacy Council of New Zealand). This includes, but is not limited to, dispensing and checking prescriptions, dispensing errors, incident reporting, and the

complaints process. A summary of the SOPs that have been reviewed (including which SOPs are to be updated and the changes to be made) is to be sent to HDC within three months of the date of this report.

b) Undertake an audit of the past 50 medications processed in order to identify/determine the degree of compliance with the Pharmacy's SOPs. The summary of findings with corrective actions implemented is to be provided to HDC within three months of the date of this report.

Health NZ Te Pae Hauora o Ruahine o Tararua MidCentral

73. In accordance with the proposed recommendation in my provisional decision, Health NZ has provided HDC with an update on staffing levels in rheumatology services. I consider that this response was reasonable and have no further recommendations in respect of Health NZ.

Follow-up actions

74. A copy of this report with details identifying the parties removed, except the advisor on this case and Health NZ Te Pae Hauora o Ruahine o Tararua MidCentral, will be sent to the Pharmacy Council of New Zealand, and it will be advised of Ms C's, Mr D's, and Mr C's names.

75. A copy of this report with details identifying the parties removed, except the advisor on this case and Health NZ Te Pae Hauora o Ruahine o Tararua MidCentral, will be sent to the Medical Council of New Zealand, and it will be advised of Dr B's name.

76. A copy of this report with details identifying the parties removed, except the advisor on this case and Health NZ Te Pae Hauora o Ruahine o Tararua MidCentral, will be sent to Medsafe, Te Tāhū Hauora Health Quality & Safety Commission, and the New Zealand Rheumatology Association, and placed on the HDC website, www.hdc.org.nz, for educational purposes.

Dr Vanessa Caldwell
Deputy Health and Disability Commissioner

Appendix A: Independent clinical advice to Commissioner

'Complaint:	**[Mrs A]/Health New Zealand Te Whatu Ora MidCentral**
Our ref:	**23HDC00092**
Independent advisor:	**Dr Keith Colvine**

I have been asked to provide clinical advice to HDC on case number 23HDC00092. I have read and agree to follow HDC's Guidelines for Independent Advisors.

I am not aware of any personal or professional conflicts of interest with any of the parties involved in this complaint.

I am aware that my report should use simple and clear language and explain complex or technical medical terms.

Qualifications, training and experience relevant to the area of expertise involved:	Dr Keith Colvine Rheumatologist and General Physician MbCHb. FRACP
Documents provided by HDC:	1. Letter of complaint dated 8 January 2023 2. Health New Zealand Te Whatu Ora MidCentral's response dated 21 May 2024 3. Clinical records from Health New Zealand Te Whatu Ora MidCentral covering the period of January 2022 to September 2023. 4. Records of communication between Health New Zealand Te Whatu Ora MidCentral and [the] Pharmacy.
Referral instructions from HDC:	Dr Keith Colvine 1. The appropriateness of the prednisone tapering advice provided by Dr [B], in particular the immediate decrease from 160mg to 40mg. 2. Whether this tapering recommendation was supported by the information Dr [B] had available. 3. Any other matters in this case that you consider warrant comment.

Factual summary of clinical care provided complaint:

Brief summary of clinical events:	(1) The complainant — [Mrs A] — outlined the presentation of symptoms in a letter dated 9th January 2023. This was with severe pain in the head and face. There was a clinic appointment at [Health NZ] with Dr [B]. A script was taken to the [pharmacy], and she began 160mg of prednisone per day. After 3½ weeks the complainant returned to her General Practitioner and found the correct dose of prednisone should have been 40mg once daily. (2) The complainant stated on the advice via pharmacist, (under instruction of Dr [B]) was to drop the prednisone from 160mg once daily down to 40mg once daily. With the sudden dose reduction there were symptoms including balance problems and falls. (3) Te Whatu Ora MidCentral District responded on the letter dated 21st May 2024. This is from […], Acting Operations Executive, Planned Care with input from Dr […], Rheumatologist. There was no input mentioned in the response from Dr [B]. (4) The response does mention Dr [B] prescribing 40mg of prednisone for only one month. There was no documented reduction plan in the correspondence provided but that this was "likely going to be discussed at the next clinic (aiming for one month follow-up)." It is mentioned that there are delays to follow-up due to resource constraint. A further clinic review did occur in August 2022 and a prednisone-sparing medication, leflunomide, was introduced to assist with steroid reduction. (5) The response includes the clinic letter 27th February from Dr [B] — this documents an increase in prednisone from 5mg to 40mg in the context of the symptoms of Giant cell arteritis. Follow up requests was one month. The complainant's General Practitioner Dr […] wrote to Rheumatology clinic, [Health NZ] on 20th July 2022 — this letter does state starting on high-dose prednisone and gradually reduced. It also does give the updated blood tests with a rise in the CRP [C-reactive protein] to 21 and asking for further advice. (6) A letter from Dr [B] on 2nd August 2022 gave advice to increase the prednisone from 20mg once daily to 30mg once daily. There was a clinic review 19th August 2022 with the introduction of a steroid-sparing medication, leflunomide. There was no documented plan to reduce the prednisone in this clinic letter. (7) Email communication between [the pharmacy] and Dr [B] 29/03/22 — this gives the advice from Dr [B] to drop the

	prednisone from 160mg once daily — which the patient had been taking – down to 40mg once daily. Then "following the BPAC recommendations" for further reduction. This is from 40mg once daily, reducing by 10mg per fortnight till 20mg once daily. The email communication mentions "GP reducing to 80mg and 60mg from last week." (8) To summarise the complaint, the complainant took 160mg of prednisone for one month. This was not intended; the true dose should have been 40mg once daily. When this was discovered, there was reduction from 160mg once daily to 40mg once daily and symptoms in the context of the rapid drop. With a rapid steroid reduction from high dose there can be symptoms related to Addisonian. There was a delay of 5 months between the planned appointment and the eventual appointment. There is email communication not outlined in the clinical correspondence that the intended plan might have been to use 80mg and 60mg of prednisone (ie an intermediate prednisone dose between 160mg and 40mg).
Question 1: The appropriateness of the prednisone tapering advice provided by Dr [B], in particular the immediate decrease from 160mg to 40mg.	
List any sources of information reviewed other than the documents provided by HDC:	(1) BSR guideline on diagnosis and treatment of giant cell arthritis, Rheumatology 2020; 59:e1–23. (2) Eular recommendations for the management of large vessel vasculitis. Hellmich, Ann Rheum Dis 2020;79:19–30. (3) BPAC best practice journal 2013; 53, 17. (4) Med safe Prescriber update 2021. 42(2):21–2. (5) (5) NZ formulary page Cautions and contraindications of corticosteroids, nzf.org.nz/nzf_3812. (6) Eular recommendations on the management of medium and high dose glucocorticoid therapy. (7) Duru et al. Ann Rheum Dis 213 Dec; 72(12): 1905–13. (8) Maz et al. ACR guidelines for management of GCA and Takayasu's Arteritis. Arthritis and Rheumatology 2021: 73(8): 1349–65.
Advisor's opinion:	(1) The clinical pattern — symptoms and laboratory investigations are consistent with GCA. The clinical documentation does mention an ultrasound without the halo sign, but this does disappear rapidly with prednisone treatment. The lack of a temporal artery biopsy in the clinical context is also not required for diagnosis clinically if the

	presenting symptoms and investigations are sufficiently secure. (2) There was an error in the dispensing of the initial amount of prednisone. The intended dose of 40mg once daily is within accepted practice for the management of Giant Cell Arteritis. This is mentioned in the British and European recommendations plus locally with the BPAC best practice article. The abbreviation qd is not commonly used to indicate once a day prescribing. (3) The amount of prednisone issued at 160mg once daily was excessive for GCA management in the clinical context. A higher dose of prednisone at times when vision is impaired, but this was not the case. The dose of prednisone 160mg daily for one month — it is atypical to the extent that I would have thought this would lead to questioning of the dose from the pharmacist. (4) There should have been written and verbal advice from Dr [B] regarding the plan to reduce the prednisone. In addition interval steps to reduce the dose of prednisone from 160mg to 40mg. This might have potentially mitigated the Addisonian side effects with the drop of prednisone dose. (5) There was communication in the email about the prednisone reduction but not in the clinical notes and not [in] direct communication with the patient. (6) Clinic follow-up time, it would be accepted practice for patients with acute Giant cell arteritis to be reviewed promptly post diagnosis four–six weeks.
What was the standard of care/accepted practice at the time of events? Please refer to relevant standards/material.	(1) The initial dose of prednisone for GCA is between 40 and 80 mg with the exception of patients who have visual impairment. This is outlined in the ACR, Eular and BSR guidelines. The local information from the BPAC information sheet does reflect the BSR guidelines. (2) The BSR guideline and the BPAC information sheet do mention the dose reduction of prednisone in GCA — guiding steroid reduction. After an initial

	four weeks at 40–60mg then there is reduction in dose by 10mg every two weeks down to 20mg once daily. (3) There is no clear approach to cover the reduction of a dose of prednisone from 160mg once daily. I would refer to the Med safe prescriber update 42(2):21–22 which outlines that "the need for gradual prednisone withdrawal should be assessed on a case-by-case basis. Generally, dose tapering is required for patients who have … received more than 40mg of prednisone per day for more than one week." There are other criteria mentioned for dose tapering. (4) It would be expected practice from a high dose of prednisone of 160mg once daily to taper, perhaps to 80mg once daily before further drops to 60mg and then perhaps 40mg once daily. (5) The communication would also expect that the clinician would directly contact the patient to clarify the dose reduction. The Medsafe documentation does mention clear information about dose tapering. The documentation provided does not indicate any direct communication with the complainant from the MidCentral team about the dose reduction. This should have occurred directly rather than via the GP or even the pharmacist.
Was there a departure from the standard of care or accepted practice? • No departure; • Mild departure; • Moderate departure; or • Severe departure.	Mild departure
How would the care provided be viewed by your peers? Please reference the views of any peers who were consulted.	No peers consulted. I would suspect that most clinicians would have contacted the patient directly and provided clear verbal followed by written instructions.

Please outline any factors that may limit your assessment of the events.	Lack of direct documentation or response from Dr [B]. With locum work, I am uncertain as to the work circumstances: was Dr [B] able to have clinics in one month as planned, or another clinician. Did Dr [B] have access to the MidCentral system with the clinical records and contact details for Mrs [A].
Recommendations for improvement that may help to prevent a similar occurrence in future.	Message to Medsafe: The abbreviation qd can create error if handwritten. Suggestion would be either electronic prescribing or if handwritten to write the script fully not using abbreviations. The example would be "prednisone 40mg once daily for one month". Inform Dr [B] of the circumstances and case.
Question 2: Whether this tapering recommendation was supported by the information Dr [B] had available.	
List any sources of information reviewed other than the documents provided by HDC:	Nil new references.
Advisor's opinion:	The information did include clinical assessment and the email from [the pharmacy] stating the error in giving 160mg of prednisone daily. The tapering recommendation was not supported by any provided information from the MidCentral documentation. A mitigating factor is the high risk of complications predominantly related to infection with a dose of 160mg of prednisone daily. It might have been the concern with this dose that led to the advice to diminish the dose directly from 160mg to 40mg once daily.
What was the standard of care/accepted practice at the time of events? Please refer to relevant standards/material.	There is no clear standard of care to support the tapering of 160mg once daily to 40mg once daily.

Was there a departure from the standard of care or accepted practice? • No departure; • Mild departure; • Moderate departure; or • Severe departure.	No departure
How would the care provided be viewed by your peers? Please reference the views of any peers who were consulted.	N/A
Please outline any factors that may limit your assessment of the events.	Lack of direct communication from Dr [B] about the complaint.
Recommendations for improvement that may help to prevent a similar occurrence in future.	N/A
Question 3: Any other matters in this case that you consider warrant comment.	
List any sources of information reviewed other than the documents provided by HDC:	(1) BPAC best practice journal 2013; 53, 17. (2) Eular recommendations for the management of large vessel vasculitis. Hellmich, Ann Rheum Dis 2020;79:19–30. (3) A survey of the New Zealand rheumatology Workforce; Harrison et al. NZMJ 2019;132(1507)
Advisor's opinion:	There may be resource constraint, but this does illustrate the value of adequate staffing of the rheumatology service. The Royal College of Physicians recommendation (as discussed in the Harrison et al paper) is for one rheumatologist per 86,000. This is substantially lower for MidCentral.
What was the standard of care/accepted practice at the time of events? Please refer to relevant standards/material.	The BPAC guidance does mention follow ups for GCA scheduled one, three and six weeks later. This however is likely to pertain to primary care

	The Eular guidelines do suggest one to three months during the first year. So it would be reasonable to suggest a patient with acute GCA would be reviewed one month after the initial assessment.
Was there a departure from the standard of care or accepted practice? • No departure; • Mild departure; • Moderate departure; or • Severe departure.	Mild departure
How would the care provided be viewed by your peers? Please reference the views of any peers who were consulted.	It would be considered atypical to have a patient with the diagnosis of GCA to have a review 5 months after the initial consultation.
Please outline any factors that may limit your assessment of the events.	Staffing might have changed from 2022, and there has been the appointment of Dr […].
Recommendations for improvement that may help to prevent a similar occurrence in future.	The NZ rheumatology association and Arthritis NZ have advocated previously around staffing.

Signature: Keith Colvine

Name: Dr Keith Colvine

Date of Advice: 10 August 2024’

Appendix B: Relevant policies and standards

Pharmacy SOPs

The Pharmacy's 'Dispensing and Checking a Prescription' SOP required the pharmacist to consider several aspects of prescription, including:

a. Checking the suitability of the prescribed medicine in terms of the quantities prescribed.

b. Checking the appropriateness of each prescribed medicine with respect to its therapeutic use and for the consumer's parameters.[1]

c. Reviewing each medicine dispensed against the medicine prescribed on the prescription (checking both the generated dispensary label and original prescription), including for the 'correct instructions for use' and 'correct formulation, strength and quantity of medicine'.

d. Check any calculation made (if possible, by another pharmacist or pharmacy technician).

In addition, the 'Dispensing Errors' SOP stated:

a. Where there has been a dispensing error, it is essential that the situation is dealt with in a professional and timely manner. At all times, customer safety is the key focus.

b. As soon as a dispensing error is identified or notified, the Dispensary Manager or Charge Pharmacist will be called upon to undertake the correct procedures.

c. The Dispensary Manager or Charge Pharmacist will follow up with the consumer to determine the health outcome and explain that the matter is being investigated and that the Pharmacy is taking steps necessary to prevent any similar dispensing errors occurring in the future.

d. Depending on the severity or type of incident, a letter of apology will be written, checked and then sent to the consumer.

Pharmacy Competency Standards

The Pharmacy Council of New Zealand Competence Standards for the Pharmacy Profession (2015) include the following requirements for pharmacists:

a. 'M1.2. Comply with ethical and legal requirements.'

b. 'O3.1.3. Applies knowledge in undertaking a clinical assessment of the prescription to ensure pharmaceutical and therapeutic appropriateness of the treatment and to determine whether any changes in prescribed medicines are warranted.'

c. 'O3.2.1. Maintains a logical, safe and disciplined dispensing procedure.'

[1] The SOP stated examples such as the consumer's age, weight, renal function, possible adverse effects, contraindications, dosage, route and administration, and the duration of treatment.

d. ‘O3.2.2. Monitors the dispensing process for potential errors and acts promptly to mitigate them.’

e. ‘O3.2.3. Identifies the interchangeability and bioequivalence of different proprietary products where applicable.’