Health and Disability Commissioner
Te Toihau Hauora, Hauātanga

A Decision by the Deputy Health and Disability Commissioner

(Case 21HDC01773)

Introduction

1. This report is the opinion of Deborah James, Deputy Health and Disability Commissioner, and is made in accordance with the power delegated to her by the Commissioner.

2. The report discusses the care provided to Ms A by optometrist Ms B at an optometry clinic.

3. The following issues were identified for investigation:

- *Whether Ms A was provided with the appropriate standard of care by Ms B at the optometry clinic between 12 April 2017 and 23 April 2018 (inclusive).*
- *Whether Ms A was provided with the appropriate standard of care by the optometry clinic between 12 April 2017 and 23 April 2018 (inclusive).*

4. The parties directly involved in the investigation were:

Ms A	Consumer
Ms B	Provider/optometrist
Optometry clinic	Group provider/optometry practice

Names have been removed (except the advisor) to protect privacy. Identifying letters are assigned in alphabetical order and bear no relationship to the person's actual name.

5. Further information was received from:

Accident Compensation Corporation (ACC)
Health New Zealand|Te Whatu Ora

6. Independent clinical advice was obtained from optometrist Mr Richard Johnson (Appendix A). ACC considered the care provided to Ms A and sought external clinical advice from an optometrist (see Appendix B).

Background

7. On 2 August 2021, the Optometrists and Dispensing Opticians Board|Te Poari o ngā Kaimātai Whatu me ngā Kaiwahakarato Mōhiti (ODOB) referred a complaint to HDC regarding the care provided to Ms A by optometrist Ms B in 2017 and 2018.

8. Between 2010 and 2017, Ms A (aged in her mid-seventies at the time of events) had regular eye checks at the clinic (usually within a year). These consultations were with different optometrists. Over this time, Ms A had a documented history of bilateral retinoschisis[1] (noted by a specialist to be non-progressive) and cataracts[2] in both eyes.

9. Ms A was seen by Ms B on 12 April 2017. Ms A was concerned that her cataract was getting worse. Ms B conducted an eye examination and prescribed Ms A new glasses. Ms B documented that she gave Ms A the option to refer her to an ophthalmologist,[3] but Ms A preferred a one-year recall.

10. Ms A returned to the clinic on 24 November 2017 and was seen by a different optometrist for a 'recheck [of her] right cataract — no central vision'. She was referred to an ophthalmologist at this appointment.

11. Subsequently, Ms A was seen by an ophthalmologist on 23 April 2018 and diagnosed with a long-standing retinal detachment of her right eye that was beyond treatment and has resulted in partial blindness. Ms A told HDC that she does not want other people go through what she went through.

Examination on 12 April 2017

12. On 12 April 2017, Ms A returned to the clinic and was seen by Ms B. Clinical notes document that Ms A was concerned that her 'cataract [was] worse' but felt that her short-distance and long-distance vision was 'okay' and that the floaters (black or translucent spots or strands, which give the impression of seeing something 'float' across the field of vision)[4] and flashes

[1] A condition in which an area of the retina has separated into two layers.
[2] A cloudy area in the lens of the eye that develops slowly over time.
[3] A medical doctor who specialises in eye care and vision. An optometrist may refer a patient to an ophthalmologist for further treatment if an eye disease or injury is identified.
[4] Floaters and flashes are usually harmless but they may be symptoms of a torn or detached retina.

(strands of light that flicker across the vision) she experienced were 'stable' and 'intermittent only'.

13. Ms B documented Ms A's history and noted her right eye cataract but did not document the previous inner layer retinal splitting nor her current medications. It appears that in Ms A's previous clinical notes the patient history is an auto-populated section of the individual client's record. However, on 12 April 2017 the clinic note does not appear to have auto-populated the information about Ms A's general health, medications, and ocular history.

14. Ms B obtained a subjective history from Ms A and performed a series of clinical tests to assess her eyes. These included:

- A subjective refraction test[5]
- An examination of the anterior segment[6] of the eyes with a slit lamp
- An examination of the posterior segment of the eyes (fundus[7])

15. Ms B told HDC that Ms A had cataracts present in both eyes, but this was worse in the right eye. Ms B said that when she examined the fundus of Ms A's right eye, the central view was very poor (due to the cataract), but the peripheral view was adequate and seemed normal.

16. Ms B told HDC that she did not check Ms A's visual fields[8] or pupil reflexes,[9] and did not undertake pupil dilation[10] during this appointment. Ms B explained that she did not perform these tests during her consultation with Ms A as:

- She considered the assessment of Ms A's peripheral fundus (back of the eye) with an undilated pupil was adequate. She noted that the location of the lens opacities (cataract) limited the central view of the fundus, whereas the peripheral view was not restricted and Ms A's pupil size allowed a good view of at least the mid-periphery.
- The findings from the subjective refraction test supported the finding of a cataract. Ms B explained that Ms A had a moderate right cataract that was denser towards the centre and affected her ability to perceive fine detail.[11]

[5] The assessment of the refractive status of the patient's eyes using a combination of lenses to determine the best-corrected visual acuity. Usually this involves the optometrist holding up several lenses and asking the patient which lens gives the best vision (visual acuity).
[6] The front of the eyes, which includes, but is not limited to, the cornea, conjunctiva, anterior chamber and aqueous humour, anterior chamber angle, anterior chamber depth, episclera, sclera, iris, pupil and ciliary body (including surgical alterations).
[7] The back and the inside/interior of the eye, which includes, but is not limited to, the retina, choroid, vitreous, blood vessels, optic nerve head, macula, and fovea.
[8] A test that measures the patient's peripheral vision (by testing how wide an area the eye can see when focused on a central point).
[9] The pupil reflex test is usually done with a flashlight beam shined on one eye then swung to the other eye.
[10] Drops may be instilled in the eye to enlarge or dilate the pupil, which affords a clearer view of the inside of the eye.
[11] Ms B explained that Ms A's best corrected vision of 6/60 and pinhole vision of 6/30-1 supported the level and location of cataract she had.

- There was no complaint of classic retinal detachment[12] or any signs/symptoms to indicate that this had occurred.
- There was no mention of trauma and injury having been suffered.
- No other major general health issues were identified.

17. Based on the examination findings, Ms B determined that Ms A had a 'moderate cataract in the right eye and an early cataract in the left eye'. Ms B then prescribed Ms A new glasses with a stronger prescription. Ms B told HDC that during the consultation, she asked Ms A whether she would like a referral to an ophthalmologist for consideration of cataract surgery. Ms A declined this option, which was documented in the consultation notes as 'gave option to refer. Px [patient] refused.'

18. Ms B told HDC that she also recommended that Ms A have a shorter period of six to nine months' time for review of her eyes, as her vision had deteriorated, but Ms A told Ms B that she preferred to return in a year's time.

19. Ms B left her employment at the clinic shortly after this consultation. She told HDC that she remains registered with ODOB and the New Zealand Association of Optometrists (NZAO) as a non-practising member, and currently she is practising as a registered optometrist overseas. Ms B said that she was 'sorry to hear that [Ms A] had been diagnosed with a retinal detachment'.

Subsequent events

20. On 24 November 2017, Ms A returned to the clinic and saw a different optometrist. The consultation notes recorded that Ms A's reason for visiting was to 'rech[ec]k r[ight] cat[aract] — no central vision'. Ms A was referred to the Ophthalmology Service at the public hospital for an 'appointment to assess right cataract'. The notes do not document whether this was an acute presentation.

21. On 23 April 2018, Ms A was reviewed by an ophthalmologist at the hospital. The ophthalmologist found that Ms A had a marked right eye afferent pupil defect[13] and a dense right eye nuclear sclerotic cataract.[14] The ophthalmologist dilated Ms A's right pupil and found a 'total retinal detachment with fixed inferior retinal folds'. He considered that surgical options to improve her vision would not be helpful due to the longstanding nature of the detachment.

[12] An emergency in which the tissue at the back of the eye (the retina or light-sensitive layer of tissue) pulls away from a layer of blood and vessels, which can cause blindness.
[13] A condition in which the pupils respond differently to light stimuli shone in one eye at a time due to unilateral or asymmetrical disease of the retina or optic nerve.
[14] A nuclear sclerosis is a hardening and yellowing of the centre of the eye's lens.

Optometry clinic

22. The clinic told HDC that it is a requirement that all its optometrists complete a thorough comprehensive eye examination as defined by the NZAO.[15]

23. The clinic told HDC:

> 'It is expected that a dilated fundus exam would be performed on any patients with small pupils (including all elderly), diabetes, moderate to high myopia, as well as patients who are more prone to conditions such as retinal tears/detachment, tumours, maculopathy, any unexplained VA [visual acuity] changes, and to help see past lenticular opacities. It would be recommended that [Ms A] at [her age], undergo a dilated retinal examination. Pupil reactions would be assessed on ALL patients not just the elderly.'

24. The clinic told HDC that it has 'all the up-to-date equipment needed to complete a comprehensive eye exam, including an OCT'[16] retina scanner (although it was not specified whether an OCT retina scanner was present at the time of events). Pupil-dilating drugs were also available at the practice.

25. Ms B told HDC that an OCT retina scanner was not available at the time of Ms A's examination. HDC received information from an online article that indicated that the OCT scanner was installed at the clinic in 2018 (after Ms A's appointment of 12 April 2017).

26. Since Ms A's appointment in 2017, the clinic has changed ownership.

Relevant standards

27. The Optometrists and Dispensing Opticians Board (ODOB) [17] Standards of Clinical Competence for Optometrists (2017) state:[18]

> '**Task 3. Examination of the eye and visual system**
>
> 3.3 Assesses the structure and health of the components of the ocular adnexae,[19] for their structure, health and functional ability, using diagnostic pharmaceutical agents where clinically indicated.

[15] NZAO is the professional/advocacy body, ODOB is the registration body. Optometrists who are members of the NZ Association of Optometrists are bound by professional ethics and clinical guidelines to provide the highest standards of eye health and vision care.

[16] An Optical Coherence Tomography (OCT) retinal scan is a non-invasive imaging test that uses light waves to take three-dimensional pictures of the back of the patient's eye.

[17] The ODOB is the responsible authority for the regulation of registered optometrists and dispensing opticians in Aotearoa New Zealand. ODOB sets standards for optometrists and dispensing opticians to ensure that practitioners are competent and fit to practise.

[18] Although the standard is undated, ODOB has confirmed to HDC that this version applied in April 2017.

[19] The 2018 ODOB standards state that 3.3 includes the 'eye and ocular adnexae': https://www.odob.health.nz/document/6709/3_Clinical%20Standards%20Optometrists_FINAL-STANDARDS-Nov-2018.pdf.

3.3.4 (a) Assesses and evaluates the structure and health of the components of the posterior segment including but not limited to: retina, choroid, vitreous, blood vessels, optic nerve head, macula and fovea.

3.4 Assess central and peripheral sensory visual function and the integrity of the visual pathways (including vision and visual acuity, visual fields, colour vision and pupil function).'

28. The New Zealand Association of Optometrists (NZAO)[20] sets out the following information on what a comprehensive eye examination should include:[21]

'**Key Elements of the Process:**

- Questions about your medical history
- An assessment of your internal eye health
- A Slit-lamp assessment of your external eye including lids and lashes
- An assessment of your colour perception as some general diseases affect colour vision
- Examination to assess glaucoma including a measure of the pressure in each eye
- An assessment of visual functions including any refractive error
- Tests of your eye muscles to check they move and coordinate properly
- Visual fields test to check for blind spots caused by eye disease or brain damage (e.g. glaucoma or stroke)
- An assessment of pupils function and response
- Discussion of the diagnosis
- Discussion of the management options and plan for treatment
- Recording all of above in your clinical record

…

Sometimes, in order to see all of the inside of your eye and to get a good view right to the back of it your optometrist will need to dilate your pupil. Dilation involves using eye drops to make the pupil larger bigger (completely painless) and it takes some time for the drops to work. After dilation your close-up vision may remain blurred for several hours as the pupil slowly goes back to its normal size.'

Responses to provisional opinion

Ms A

29. Ms A was given the opportunity to comment on the 'background' section of the provisional opinion. She clarified that she 'declined' a specialist referral for cataract treatment on 12

[20] NZAO is the professional/advocacy association for optometrists. Optometrists who are members of the NZAO are bound by professional ethics and clinical guidelines to provide the highest standards of eye health and vision care. NZAO is an incorporated society that represents the majority of optometrists in New Zealand.
[21] See: *New Zealand Association of Optometrists* <https://nzao.nz/home/comprehensiveeyeexam/> (accessed 1 September 2023).

April 2017 following discussion with Ms B as treatment was not considered to be required at that time.

Ms B

30. Ms B was provided with the opportunity to comment on the relevant sections of the provisional opinion and proposed courses of action and had no comment to make.

Clinic

31. The clinic was provided with the opportunity to comment on the relevant sections of the provisional opinion and had no comment to make.

32. The new owner of the clinic was provided with the opportunity to comment on the 'provision of comprehensive eye examination' section of the provisional opinion and had no comment to make.

Opinion: Ms B

33. On 12 April 2017, Ms A attended the clinic with concerns that her cataract was worsening. She was examined by Ms B. Ms B did not test Ms A's pupil reflexes and visual fields, and although Ms B documented that she had a 'very poor central view' of Ms A's right eye fundus, she did not dilate the pupil to improve her view. Ms B was later diagnosed with longstanding retinal detachment in her right eye, which has resulted in partial blindness. This report concerns the adequacy of Ms B's examination and documentation.

34. Regarding Ms B's documentation of the consultation, my clinical advisor, optometrist Mr Richard Johnson, noted that although Ms B did not document Ms A's medication in detail, this frequently occurs in private optometry practice as patients may forget to bring their medication or medication list. Mr Johnson also noted that usually optometry clinics are not able to access dispensed medication lists from the pharmacist.

Anterior eye examination and documentation — no breach

35. Regarding Ms A's eye examination, Mr Johnson noted that Ms B undertook a good examination of the front (anterior) segments of each eye for Ms A. Mr Johnson was not critical of Ms B's documentation regarding this aspect of the examination.

36. I accept Mr Johnson's advice that Ms B's documentation and examination of the anterior segments of Ms A's eyes were of an acceptable standard, and do not wish to comment further on this aspect of the care provided. I turn now to consider the further examination of Ms A's eyes.

Further examination — breach

37. Ms B acknowledged that she did not undertake a dilated pupil examination and did not check Ms A's pupil reflexes and visual fields at the appointment on 12 April 2017. However, she told HDC that the testing she performed was thorough and comprehensive and would have identified Ms A's retinal detachment if it had been present.

38. I note that both Mr Johnson and the ACC clinical advisor refer to the timing of Ms A's retinal detachment and whether this was present during the appointment on 12 April 2017. Mr Johnson advised that it is not possible to determine exactly when Ms A's retinal detachment occurred. Due to a lack of evidence, I am unable to make a finding as to whether or not Ms A's right retinal detachment was present during the consultation with Ms B on 12 April 2017. Regardless, the focus of this opinion is on whether Ms B's examination of Ms A was of an appropriate standard.

39. Ms B told HDC that she did not consider it necessary to undertake a dilated pupil examination as she considered the assessment of the peripheral fundus (back of the eye) with an undilated pupil to be adequate. She told HDC that the findings from the subjective refraction test supported the finding of a cataract, and there were no concerns of classical retinal detachment, trauma, or major health issues.

40. Mr Johnson identified that Ms A's correctable vision test indicated that some retinal pathology aside from the cataract may have been present. He explained that given Ms A's age, presentation, and type of cataract,[22] it would have been appropriate for Ms B to perform a dilated eye examination in order to 'improve the ability to observe around the centrally located cataract' and to assess the previously documented retinoschisis (splitting of the inner retinal layers). The level of cataract noted[23] also indicated that other potential retinal issues may have been present.

41. Mr Johnson advised:

> 'Pupil dilation is considered to be the standard practice with an optometric examination in Aotearoa/New Zealand, particular[ly] if indications are present such as reduced vision (as in this case), if the examination of the posterior segment of the eye is difficult (as noted in this case), and if there is a known retinal condition (as in this case).'

42. Mr Johnson considered that Ms B conducted an 'insufficient examination' of Ms A on 12 April 2017, and that she should have undertaken pupil dilation during Ms A's eye examination. I accept this advice, and I am critical that Ms B did not conduct a pupil dilation examination at this time.

43. I further note that the advice to ACC also considered that pupil 'dilation should have been routine on [someone of this age] based on age alone'. The ACC advisor advised that the fundus view was poor due to the cataract, and this was another reason to dilate. He noted that '[p]upil reflexes are a normal part of comprehensive care, and the detachment diagnosis could have been pre-empted'. The ACC advisor also noted that checking Ms A's visual fields could also have prompted a need for further investigation.

[22] Mr Johnson explained that Ms A had a posterior sub-capsular cataract (PSC) at the time of examination. A PCS is a centrally located cataract that has a pronounced effect on vision due to its central location, and also makes examination of the back of the eye difficult without dilating the pupil.

[23] Mr Johnson said that the level of cataract noted would be expected to reduce Ms A's vision to around 6/18 but Ms A's vision was documented to be 6/60, indicating that other retinal pathology may have been present.

44. Mr Johnson advised that the omission of a dilated pupil examination by Ms B was a moderate departure from accepted clinical standards and would be viewed with moderate disapproval by his peers.

45. Following review of Mr Johnson's clinical advice, Ms B told HDC that she now understands that it would have been 'best practice' for her to have provided Ms A with a dilated pupil examination.

Conclusion

46. I accept Mr Johnson's advice, supported by the advice of the ACC advisor, that a dilated pupil examination was clinically indicated in Ms A's circumstances. Further, a check of visual fields and pupil reflexes are part of the comprehensive eye examination that was expected by Ms B's employer and the ODOB standards. While I am unable to make a finding about whether Ms A's retinal detachment was present at the time she was examined by Ms B, I note Mr Johnson's comment that 'failure to detect the detachment (if present) was made more likely due to the lack of pupillary dilation that seems to have occurred'.

47. Having accepted that a dilated pupil examination was the accepted standard of care for someone in Ms A's clinical circumstances, I am critical that Ms B did not provide this examination, and in doing so, failed to provide services to Ms A of an appropriate standard. Accordingly, I find Ms B in breach of Right 4(1) of the Code of Health and Disability Services Consumers' Rights (the Code).[24]

Opinion: Optometry clinic — no breach

48. As a healthcare provider, the clinic is responsible for providing services in accordance with the Code. At the time of events, Ms B was employed by the clinic.

49. The clinic told HDC that it was a requirement that all optometrists it employed completed a thorough and comprehensive eye examination (as defined by the NZAO) on every patient. The clinic stated its expectation that a dilated fundus examination would be performed on all older clients, and those patients with a range of medical and ocular conditions.

50. Mr Johnson told HDC that the optometrist (Ms B) was responsible for deciding which tests were to be undertaken for the patient. Mr Johnson stated:

> '[T]he individual optometrists in their [employment], or those contracting to them, practise with full autonomy when conducting eye examinations. Any decision by the optometrist to include or exclude any tests or procedures is their own and they accept responsibility for these decisions.'

51. I accept Mr Johnson's advice that there was a reasonable expectation that the clinic could rely on Ms B's skills and expertise, and I note that Mr Johnson did not identify any systemic

[24] Right 4(1) of the Code states: 'Every consumer has the right to have services provided with reasonable care and skill.'

issues relating to the care provided by the clinic. In my view, the clinic did not breach the Code.

Provision of comprehensive eye examination — other comment

52. I note Mr Johnson's comment that dilated pupil examinations may not be undertaken 'due to time pressure of the examinations, limiting the available time to include the extra procedure within the allotted examination time'.

53. To improve the quality of the examinations conducted in cases such as Ms A's, Mr Johnson recommended that optometrists:

- Routinely utilise pupillary dilation to facilitate the examination of the posterior segment of the eye; and
- Utilise an OCT scanner to assess the retinal layers that could facilitate the detection of conditions such as age-related macular degeneration and (even subtle) retinal detachments.

54. As an employer who expects a dilated pupil examination to occur in a wide range of patients, I would encourage the clinic to ensure that optometrists have sufficient time during appointments for comprehensive and clinically indicated eye examinations (such as pupil dilation and OCT) to occur.

Changes made since events

55. Ms B told HDC that she has spent time reviewing her practice, including the ODOB and NZAO clinical standards and guidelines. She considers that it will be 'highly unlikely' for her not to carry out a dilated pupil examination (when appropriate) in the future.

Recommendations

56. I recommend that Ms B:

a) Provide a written apology to Ms A for the breach of the Code identified in this report. The apology is to be sent to HDC, for forwarding to Ms A, within three weeks of the date of this report.

b) Provide a written reflection to HDC on the learnings she has implemented following this case, including the identification and examination of a patient with symptoms of retinal detachment and the circumstances where dilated pupil examination is appropriate. The reflection should be provided to HDC within three months of the date of this report.

c) Undertake a course on comprehensive eye examination that includes the indications for dilated pupil examination (this can be part of continuing professional development) and provide evidence that this has been completed within six months of the date of this report.

Follow-up actions

57. A copy of this report with details identifying the parties removed, except the advisor on this case, will be sent to the Optometrists and Dispensing Opticians Board of New Zealand, the Optometry Council, and the health complaints organisation in the country where Ms B is now working, and they will be advised of Ms B's name.

58. A copy of this report with details identifying the parties removed, except the advisor on this case, will be placed on the Health and Disability Commissioner website, www.hdc.org.nz, for educational purposes.

Appendix A: Independent clinical advice to Commissioner

The following independent advice was obtained from optometrist Mr Richard Johnson:

'29/5/23. Regarding HDC Case C21HDC01773

Private and confidential.

Reason for this comment:

I have been asked to provide a further opinion to the Health and Disability Commissioner on case number C21HDC01773. This is in light of further information provided to me, in addition to the information initially provided.

Initial sources of information reviewed and referenced:

In writing the original opinion, I have been provided and have read the following:

1. Clinical records from [the clinic] for [Ms A] from 1 November 2012 to 24 November 2017 (including care by other optometrists).
2. [The clinic's] response to the HDC on 26 August 2022.
3. [The clinic's] referral to Ophthalmology Department at [the public hospital] on 4 March 2021.
4. The New Zealand Optometrists and Dispensing Opticians Health Board Clinical Standards Document, 2018.

Subsequent sources of information reviewed and referenced:

In writing this subsequent opinion, I have been provided and have read the following additional information:

1. ACC Notification of risk of harm to the public (Accident Compensation Act Section 284) dated 15 July 2021, including:
   a. ACC Risk of Harm Report Optometrists and Dispensing Optician Board
   b. External Treatment Injury Advice received from [ACC advisor]
2. [The] (Ophthalmologist at [the public hospital]) review of [Ms A] on 23 April 2018.
3. [Lawyer's] response (on behalf of [Ms B]) dated 4 October 2022.

Conflict of Interest:

I confirm once more that I have no personal or professional conflict of interest in this case.

Background of the case:

The background of this case is as follows:

On 12 April 2017, [Ms A] presented to [the clinic]. She was seen by optometrist [Ms B] and presented with experiencing worsening vision associated with a cataract in her right eye. A set of tests were performed to assess [Ms A's] eyes. [Ms B] has offered [Ms A] a referral to the ophthalmologist regarding the cataract, but this was declined by [Ms A]. Following this presentation, [Ms B] left her employment at [the clinic] and moved [overseas]. [Ms B] remains registered as a non-practising member with the Optometrists and Dispensing Board (NZ) and the New Zealand Association of Optometrists. On 24 November 2017, [Ms A] presented to [the clinic] again and was seen by another optometrist. It was documented she had "no central vision" with her right eye. [Ms A] was then referred for ophthalmology care at [the public hospital] on 4 March 2021 and was seen on 23 April 2023.

Comment on [Ms B's] assessment of [Ms A] on 12 April 2017.

On the date of 12 April 2017, [Ms B] has conducted the following tests on [Ms A]:

1. Pre-testing, including auto-refraction, pachymetry and non-contact tonometry.
2. Patient history, including symptoms, previous ocular history, family ocular history, general health and medications.
3. Unaided visual acuities, refraction and best corrected visual acuities.
4. Anterior ocular segment health examination.
5. Posterior ocular segment health examination, although it is not documented if this was performed with pupillary dilation or without.

In my opinion, [Ms B] has conducted an **insufficient** examination of [Ms A] on the 12 April 2017 if a dilated pupillary examination was not undertaken (this is not documented as being performed in the supplied clinical notes).

She has conducted a history of [Ms A] and documented the previously noted right eye cataract but not noted the previously diagnosed areas of retinoschisis (inner layer retinal splitting).

She has undertaken a good examination of the anterior segments of each eye. She has performed an examination of the posterior segment of each eye and noted that the right allowed a "poor central view" due to the presence of the noted cataract. She does not appear to have performed dilated fundus examination to try and improve visualisation of the back of the eyes. If an inadequate view of the back of the eye is obtained, either due to the presence of cataract or a small pupil, it is normal to dilate the pupils to facilitate a better view.

She has refracted and prescribed new spectacles for [Ms A].

With regard to management, she has offered [Ms A] the option of being referred for consideration of right eye cataract surgery, which [Ms A] has declined. I understand that [Ms A] does not dispute that the offer for referral was made and that she did decline the referral.

When assessing cataracts, optometrists should correlate the patient's best correctable vision (in this case right 6/60 and left 6/9) with the density of the cataract (in this case right (psc2+ ns1+ brunescence1+) and left (psc1+ ns1+ brunescence1)). If the reduction in best correctable vision does not match the density of the cataract in the eye, further testing should occur to attempt to fully explain the full cause of the vision loss. The level of cataract noted (PSC 2+) would be expected to reduce the vision to around 6/18 but [Ms A's] vision was documented to be 6/60, indicating that other retinal pathology may have been present. Given the age and presentation of [Ms A], it would have been appropriate at this stage to offer a dilated eye examination to facilitate the examination of the posterior of the eye behind the cataract.

The type of cataract that [Ms B] has documented that [Ms A] has had at the time of the examination is a posterior sub-capsular cataract (PSC). This particular type of cataract is a centrally located cataract with a pronounced effect on vision due to its central location but also a type which makes examination of the posterior segment of the eye difficult without dilating the pupils. If the patient's pupils are dilated, an examination of the posterior segment of the eye is much more effective as the examiner can view around the centrally located cataract. This is particularly important in older patients, as conditions such as age-related macular degeneration become more common with increasing age.

Further additional testing, such as Amsler chart testing to check for macular function may not have yielded further information about the health status of the macular due to the density of the cataract at this level. An OCT retinal scanner would likely have been able to objectively scan through the cataract but it is not clear whether the practice had one at the time of the conducted examination or, if the practice had an OCT scanner, whether it was used.

The New Zealand Optometrists and Dispensing Opticians Health Board Clinical Standards Document, 2018 states that:

"3.3 Assesses the structure and health of the components of the eye and ocular adnexae, for their structure, health and functional ability, understanding the need for and using diagnostic pharmaceutical agents where clinically indicated".

In my interpretation, poor visualisation of the posterior segment of the eye due to the presence of cataract or small pupils would indicate a clinical indication.

As the events in the case occurred in 2017, the 2017 version of the same document should be applied. This version has omitted "eye" from clause 3.3.

However, Section 3.3.4 (a) states "Assesses and evaluates the structure and health of the components of the posterior segment including, but not limited to: retina, choroid, vitreous, blood vessels, optic nerve head, macula and fovea."

Section 3.3 states "understanding the need for and using diagnostic pharmaceutical agents where clinically indicated."

As section 3.3.4 falls within section 3.3, then the interpretation is still to utilise diagnostic pharmaceutical agents where clinically indicated to fully assess the posterior segment of the eye, including the retina.

In terms of **advice given**, [Ms A] was given, but declined, the option of referral for treatment of the cataract, instead preferring to be recalled in 1 year. Standard practice at this stage would be to advise the patient to return earlier if they experienced any new symptoms or had any concerns. It is not documented that such information was given to [Ms A]. [Ms B] has given advice to a **satisfactory level**. It would have been prudent to explain that the presence of the cataract was reducing [Ms A's] vision, but also the view of the back of the eye that was able to be obtained without pupillary dilation.

In terms of adequacy and appropriateness of documentation of the consultation, including history, clinical findings and advice given (including that [Ms A] declined further referral), the consultation that was performed is **well documented**.

In terms of the **adequacy of relevant procedures and policies in relation to comprehensive eye examinations in place at [the clinic] at the time of events**, no particular further comments could be made beyond those which I have already made in the previous section. This is because the individual optometrists in their employ, or those contracting to them, practise with full autonomy when conducting eye examinations. Any decision by the optometrist to include or exclude any test or procedure is their own and they accept responsibility for these decisions.

There are no **other matters to be addressed** at this stage regarding this case, based on the information supplied to me to date during this preliminary stage of proceedings.

Updated opinion in regard to the additional information supplied in this case:

In summary, [Ms B] has conducted an **insufficient** examination of [Ms A] on the 12 April 2017. The reason for this opinion is that it appears that a dilated pupillary examination of the posterior ocular segment **has not** been conducted to improve the ability to observe around the centrally located cataract and also to assess the status of the previously documented retinoschisis (splitting of the inner retinal layers). In my opinion, this represents a **moderate** level of departure from accepted clinical standards. This level of clinical examination would be viewed with **moderate disapproval from our peers**.

Utilisation of pupillary dilation (and an OCT scanner to aid visualisation of the posterior segment of the eye) would constitute a **recommendation for further improvement** when assessing patients in this age group with this type of cataract and history of retinal issues.

Additional comments in view of [the lawyer's] response:

I have reviewed [the lawyer's] response and would like to provide the following comments on the following issues identified:

a. **[Ms A's] medication queried [paragraph 19]:** Although [Ms B] has not documented [Ms A's] medications in detail, this does occur with reasonable frequency in private optometry practice as patients may forget their medication or to bring a list of them. Additionally, private optometry clinics usually are not able to access dispensed medication lists from pharmacists.

b. **Pupil reflexes and visual fields tests not performed [paragraphs 21–22]**. Pupil testing may have elucidated a retinal issue in this case but this is more difficult in the presence of a cataract. Visual field testing may also have not elucidated a retinal defect in view of the cataract.

c. **[Ms A's] retinal detachment in her right eye being "longstanding" [paragraphs 24–27].**

d. **Missed retinal detachment diagnosis [paragraph 30]**.

I would address these two together as they do raise a couple of issues. It is unclear exactly when the retinal detachment in the right eye occurred. This is because the vision in the right eye has decreased from the initial records provided in 2010 through to 2018 as the level of cataract in this eye has increased. However, there were two periods in which the vision has reduced more rapidly than the other periods. These were between 2010 and 2011 (when it reduced from 6/9 to 6/18) and between 2015 and 2017 (when it reduced from 6/30 to 6/60).

It may be that the detachment occurred during one of these periods, although it may have occurred after the referral for the cataract assessment was made in November 2017. If this is the case, then the detachment was not missed at any of the examinations of [Ms A] at the practice.

If the detachment occurred between 2015 and 2017, then the detachment failed to be detected on two separate occasions (April 2017 and November 2017).

If the detachment occurred at an earlier stage, then the detachment failed to be detected over up to six separate examinations between 2011 and 2017.

Final comment:

It is not possible to determine exactly when [Ms A's] retinal detachment occurred and therefore culpability for failure to detect it cannot be placed with certainty on the examination conducted by [Ms B] in April 2017, as up to six separate examinations may have failed to detect the detachment.

However, failure to detect the detachment (if present) was made more likely due to the lack of pupillary dilation that seems to have occurred at each examination that was conducted. This may be due to time pressure of the examinations, limiting the available time to include the extra procedure within the allotted examination time. Despite this, as discussed, pupillary dilation is considered to be the standard practice within an optometric examination in Aotearoa/New Zealand, particularly if indications are present such as reduced vision (as in this case), if the examination of the posterior segment of the eye is difficult (as noted in this case), and if there is a known retinal condition (as in this case).

My strong recommendation to improve the quality of the examinations conducted in cases such as this, would be to:

1. Routinely utilise pupillary dilation to facilitate the examination of the posterior segment of the eye and,
2. Utilise an OCT scanner to assess the retinal layers that could facilitate the detection of conditions such as age-related macular degeneration and (even subtle) retinal detachments.

Please feel free to contact me if you have any questions or require more comments on this case and the advice given.

References:

The New Zealand Optometrists and Dispensing Opticians Health Board Clinical Standards Documents, versions 2017 and 2018:

https://www.odob.health.nz/document/6709/3_Clinical%20Standards%20Optometrists_FINAL-STANDARDS-Nov-2018.pdf'

Further advice received from Mr Richard Johnson 25 July 2023:

'Thank you for forwarding their reply to me.

I note that [Ms B], via [her lawyer], is in agreement with my comments in my second submitted expert opinion. In particular, these are that:

1. The failure by [Ms B] to utilise pupillary dilation went against best practice.

2. That the exact time of the occurrence of the retinal detachment is not able to be accurately determined and that therefore [Ms B] may well not have missed the diagnosis of retinal detachment as it may not have been present at the time of the consultation.

3. That I noted that [Ms A] does not deny that she was offered the option of referral to an ophthalmologist when she was seen by [Ms B].

As such, I do not feel that I need to alter my comments or expert advice thus submitted regarding this case.

Please let me know if you have any questions regarding this reply or require any further information/opinion regarding this case.'

Appendix B: ACC external clinical advice

'**ACC[#]**

1. Treatment injury advice

Client details

Client name: [Ms A]

Claim number: [#]

Date of birth: …

2. Request for external clinical advice — completed by ACC

3. Claim details

[Ms A] visited [the clinic] on the 12th April 2017.

The reason for the visit is recorded — [Ms A] thought her cataract was worse. The history recorded was adequate but not comprehensive ([Ms A] was taking medication presumably for high blood pressure and angina but the medicine name was not noted — there is no comment regarding medical or other allergies or reactions). Unaided and aided vision is recorded. There is comment on the external eye. There is comment on internal eye — specifically it is noted the view of the central fundus was very poor. There is comment on the peripheral right retina which we have to assume was done (the words used are the default field words in the auto populated [clinic] patient exam record). Intra ocular pressure is recorded. There is no comment on pupil reflexes and no comment on visual fields either by automated perimetry or by confrontation. There is no specifically noted diagnosis list but there is a management plan — [Ms A] was offered referral presumably for her right eye cataract — which was declined.

[Ms A] visited [the clinic] again on the 24th November 2017. [I]t's not absolutely clear but this was probably an acute presentation — the notes "ay recheck right cataract — no central vision". Corrected vision is recorded. The external and internal eye is commented on. The recommendation was to refer and this time [Ms A] accepted that advice.

[Ms A] was seen by the Hospital where the diagnosis was a dense right eye nuclear sclerotic cataract, a marked right eye afferent pupil defect — and on dilation — a longstanding right eye retinal detachment that was beyond treatment.

4. External Clinical Advisor Response

1. *Considering the client's presentation/assessment results should further investigations or referral have been actioned earlier? Or was the treatment provided reasonable and appropriate? Please explain your reasoning.*

This case highlights the importance of thorough comprehensive eye care. The ophthalmologist's opinion was that the retinal detachment was longstanding and, on that assumption, the retinal detachment would have been present at the April 2017 examination.

Dilation should have been routine on [someone of this age] based on age alone (1) (2). The fundus view was poor due to the cataract — another reason to dilate. Pupil reflexes are a normal part of comprehensive care and the detachment diagnosis could have been preempted here (3). Visual fields by confrontation could also have prompted a need for further investigation (4).

5. References

1. Mayo Clinic: Eye dilation: Necessary with every exam? https://www.mayoclinic.org/tests-procedures/eye-exam/expert-answers/eye-dilation/faq-20057882
2. National Eye Institute: Get a dilated eye exam? https://www.nei.nih.gov/learn-about-eye-health/healthy-vision/get-dilated-eye-exam
3. American Optometric Association. Comprehensive Adult Eye and Vision Examination. https://www.aoa.org/AOA/Documents/Practice%20Management/Clinical%20Guidelines/EBO%20Guidelines/Comprehensive%20Adult%20Eye%20and%20Vision%20Exam.pdf
4. Rhee DJ Pyfer MF. The Wills Eye Manual Third Edition 1999 Lippincott Williams & Wilkins.'