Southern District Health Board

A Report by the

Health and Disability Commissioner

(Case 17HDC00550)

Health and Disability Commissioner
Te Toihau Hauora, Hauātanga

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Executive summary

1. Mr A has been a patient of the Southern District Health Board (SDHB) Ophthalmology (Eye) Service (the Ophthalmology Service) since 2006 for the treatment of his complex glaucoma.[1] His care since 2006 involved ophthalmology review, nurse specialist care, and visual field testing.[2] In 2012, testing of Mr A's visual field showed that Mr A had a visual field index (VFI) of 80% vision bilaterally.[3] He had regular ophthalmology and nurse specialist appointments in 2014 and 2015 and received regular visual field testing, performed annually around November of each year.

2. On 7 October 2015, Mr A was seen in the Eye Clinic by a locum consultant ophthalmologist, Dr B, who planned the next visual field test for April 2016, five months later than the usual annual November review. SDHB reported that the planned annual visual field test scheduled for November 2015 was deferred for a further six months without documented reason. Dr B explained that he reasoned that it would be best to do the visual field testing after Mr A's cataract surgery, as a cataract can interfere with the outcome of a visual field test, and a more accurate representation could be obtained after the surgery. On 12 November 2015, Mr A underwent left cataract surgery privately.

3. As Mr A's April 2016 visual field testing appointment approached, his wife contacted the Opthalmology Service on several occasions regarding an appointment date. The planned April 2016 appointment for visual field testing did not go ahead for Mr A until 28 July 2016. This was 18 months after Mr A's previous visual field test.

4. On 8 August 2016, a consultant ophthalmologist, Dr E, reviewed Mr A at the SDHB Eye Clinic. Because of the advised glaucoma and visual field defects, Mr A was deemed not fit to drive. Mr A was seen again by Dr E in clinic on 2 September 2016, and was referred to consultant ophthalmologist Dr C for a surgical opinion.

5. Mr A was seen by Dr C on 28 September 2016. Mr A's left eye was deemed to be extremely high risk. Dr C recommended a left trabeculectomy, to be followed quite closely by a right trabeculectomy. Mr A proceeded with a right trabeculectomy in private care on 30 November 2016. A left trabeculectomy was performed in the public system at SDHB on 10 January 2017.

Follow-up booking process

6. According to SDHB, the reason for the delay in the visual field appointment was related to demand on the DHB service. In relation to processes in place at that time to clinically prioritise patients for specialist follow-up and visual field testing, SDHB told HDC the following:

[1] Usually, glaucoma is caused by a build-up of the fluid that flows through the eye. This build-up occurs because the fluid drains out of the eye more slowly than it is pumped in. Since new fluid continues to enter the eye, joining the fluid already there, the pressure continues to rise. This raised pressure may damage the back of the eye, resulting in gradual loss of sight.
[2] An objective measure of central and peripheral vision.
[3] Visual Field Index (VFI) is a global index that assigns a number between 1% and 100% based on an aggregate percentage of visual function, with 100% being a perfect age-adjusted visual field.

- The follow-up plan for individual patients was dictated by the clinician seeing the patient at the clinic. A clinic slip was completed and the patient was booked as a "planned patient" into the date they should have been seen by. This method effectively placed them onto a "waiting list" for booking closer to the time that the appointment was due. This was electronically captured and visible.

- When patients were unable to be fitted in, the administration staff would seek assistance from clinical staff; however, this could not accommodate the volume of patients that needed to be seen.

- At the time, an acuity tool was not utilised.

- Administration staff booked the short-term follow-ups and urgent patients into the regular appointment slots within the time frame identified by the ophthalmologist; the remaining slots were assigned to the patients who had been waiting the longest.

- There were more patients planned for follow-up appointments than there was capacity to review and treat. Physical space within the ophthalmology department restricted the ability to run additional catch-up clinics. Locum cover was sought to replace ophthalmologists on leave, but the area available restricted the employment of further permanent ophthalmologists.

Findings

7. SDHB's inaction to address the demands on its Ophthalmology Service failed Mr A. It was wholly inappropriate for SDHB booking staff to be tasked with the important responsibility of prioritising ophthalmology follow-up appointments without sufficient information on which to base prioritisation decisions, and clear direction about what might constitute a higher risk patient requiring clinical escalation.

8. Although the deferral of Mr A's visual field testing from November 2015 to April 2016 was clinically defensible due to his surgery, Mr A still required effective prioritisation of his testing to ensure timely and ongoing monitoring of his glaucoma. SDHB reported that there was no way to identify that the visual field testing regimen had been missed or extended. The key failure in this case was the failure to prioritise Mr A's visual field testing in light of his established glaucoma. While Mr A's clinicians may have been aware of his testing regimen and the date for the planned visual field testing, rather than prioritising Mr A's visual field testing based on clinical need, at the time of events administrative processes determined who was seen. In this context, the Commissioner considered that a further three-month delay in Mr A's visual field testing from April to July 2016 was not appropriate.

9. SDHB did not provide services to Mr A with reasonable care and skill and, accordingly, breached Right 4(1)[4] of the Code of Health and Disability Services Consumers' Rights.

Recommendations

10. The Commissioner made a series of detailed recommendations requesting follow-up information and evidence of the corrective actions and strategies adopted by SDHB.

[4] Right 4(1) provides: "Every consumer has the right to have services provided with reasonable care and skill."

11. The Commissioner also recommended continued auditing of the remedial actions taken to shift patients to clinically appropriate times and follow-up, and that SDHB provide a formal written apology to Mr A.

Complaint and investigation

12. The Commissioner received a complaint from Mr A about the care and services provided to him by Southern District Health Board.

13. The following issue was identified for investigation:

> *Whether Southern District Health Board provided Mr A with care of an appropriate standard.*

14. The parties directly referred to in this report are:

Mr A	Consumer/complainant
Southern District Health Board	Provider

15. Information was also reviewed from:

Dr B	Locum consultant ophthalmologist
Dr C	Consultant ophthalmologist
CNS D	Clinical nurse specialist
Dr E	Consultant ophthalmologist
Ministry of Health	

16. Independent expert advice was obtained from an ophthalmologist, Dr Philip Polkinghorne (**Appendix A**).

Information gathered during investigation

Background summary

17. Mr A has been a patient of the Ophthalmology Service since 2006 for the treatment of his complex glaucoma. His care since 2006 involved ophthalmology review, nurse specialist care, and visual field testing. In 2012, testing of Mr A's visual field showed that Mr A had a visual field index (VFI) of 80% vision bilaterally.

2014

18. On 8 April 2014, Mr A was seen in the SDHB Eye Clinic by a consultant ophthalmologist, Dr E, as well as a clinical nurse specialist (CNS), CNS D. Mr A's intraocular pressure (IOP) reading at this time measured 24mmHg.[5]

19. Mr A had regular ophthalmology and nurse specialist appointments in 2014 and 2015 and received regular visual field testing, performed annually around November of each year.

20. Mr A's medication for his glaucoma was altered frequently because he did not always tolerate it and experienced side effects (for example, lowered blood pressure). On 17 April 2014, Mr A's medication combination was changed by Dr E.

21. On 28 May 2014, Mr A's intraocular pressures were 30mmHg (left) and 21mmHg (right) and so Mr A's medication combination was altered again.

22. On 18 June 2014, Mr A's corrected visual acuities were 6/7.5 –2 (right) and 6/19 –1 (left)[6] with intraocular pressures (measured using Goldmann tonometry[7]) improved to 23mmHg and 20mmHg.

23. On 13 August 2014, visual acuities were 6/9 +2 and 6/19. IOP readings had improved to 18mmHg and 15mmHg (also using Goldmann tonometry). It was planned that Mr A be booked in for his visual field testing around late October/early November 2014.

24. The specialist nurse's notes for 2 October 2014 state that Mr A's medications were altered[8] (as he had reacted to some of them) and that he should be seen again in the clinic in 4–6 weeks' time — "do not delay".

25. The next appointment (for 30 October 2014) was cancelled because of DHB staff illness. An appointment was scheduled for 12 November 2014, but Mr A did not attend.

26. Mr A had visual field testing on 26 November 2014, and the nurse suggested that he be seen in Dr E's retinal clinic in 2–3 weeks' time.

2015

27. On 23 January 2015, Mr A was seen again by Dr E. Mr A's IOP was up to 22mmHg (right eye) and 24mmHg (left eye). Visual acuity was 6/12 and 6/24. There was also some mild

[5] Eye pressure is measured in millimetres of mercury (mmHg). The Glaucoma Research Foundation states that normal pressure ranges from 12–22mmHg, and pressure of greater than 22mmHg is considered above normal. When the intraocular pressure (IOP) is higher than normal, without signs of glaucoma, this is referred to as ocular hypertension.

[6] Visual acuity reflects a comparison against normal vision. The first number is the distance in metres from the chart, to where the patient stands (6m), the second number is how well the patient can read when standing at 6m, compared with a normal person. Thus 6/12 means that a patient standing 6m away from the chart can read only as well as a normal person standing 12m away. Normal vision is 6/6 (previously, in feet, 20/20). 6/12 vision (using both eyes) is required to obtain a licence to drive. The World Health Organization regards vision of 3/60 or worse (in both eyes) as "blindness".

[7] A particular method of testing intraocular pressure involving a device placed lightly against the cornea.

[8] By another consultant ophthalmologist.

cataract formation. Medication was altered to include use of Cosopt drops[9] twice daily. Optical coherence tomography (OCT) scanning[10] was performed.

28. On 26 August 2015, Dr E reviewed Mr A, who had complained of experiencing some photophobia and blurred vision. IOP was measured as 24mmHg right and 29mmHg left. Mr A was put on a waiting list for left cataract surgery. A request was made to check the IOPs again in four weeks' time.

Locum appointment

29. On 7 October 2015, Mr A was seen in the Eye Clinic by a locum consultant ophthalmologist, Dr B. At the appointment, Mr A's IOP was recorded as normal (Mr A's IOP had decreased to 15mmHg right and 14mmHg left) and the previous OCT scans had failed to show any nerve damage.

30. According to the handwritten clinical records, Dr B reviewed Mr A and relied on pressure readings taken by nursing staff using an iCARE tonometer (as opposed to a Goldmann tonometer). Dr B considered that it would be reasonable to rely on the pressures taken with the iCARE tonometer as it is standard practice in many New Zealand eye clinics.

31. Dr B told HDC that the reason Mr A was booked into his clinic was to have his intraocular pressure checked. Dr B stated:

> "[W]hen I saw him his pressures were R15 L14 which was an excellent reduction (37.5% and 52% respectively) and I would have been well pleased with that outcome. He was now using his drops regularly and was happy with them …"

32. Mr A's medication was not altered by Dr B, and the next visual field test was planned for six months' time, in April 2016 (five months later than the usual annual November review). No clinic letter was produced for this appointment. SDHB reported that the planned annual visual field test scheduled for November 2015 was deferred for a further six months without documented reason. The DHB noted that had the test been left on schedule, it may have alerted the service to the progression of Mr A's visual field loss.

Alteration to visual field testing

33. In relation to the further visual field testing, Dr B explained:

> "I would have reasoned that it would be best to do his field test after cataract surgery as the cataract can interfere with the outcome of the field test and it would give a more accurate representation after cataract surgery. As cataract surgery usually takes around 4–5 months to get done, a field appointment at that stage would be appropriate. As his pressure at that [time] was adequately controlled and he was happy taking his drops I would have felt it not unreasonable to wait until he had had cataract surgery for his field to be done.
>
> It was my job as a locum, I felt, to assess his intraocular pressure as requested and to act accordingly. This did not require me to comprehensively go through his notes and check (not that I necessarily would have had time to do so) what my other colleagues

[9] This medication works by decreasing the amount of fluid within the eye.
[10] A non-invasive imaging technique using light waves to take a cross-section of the retina.

had been doing for him and whether they were treating him properly **unless I had good reason or suspicion to do so** [original emphasis]. His intraocular pressures at that visit had reduced to acceptable levels (the lowest they had been for over a year) and he was now happy taking his medication. I recognised that he needed a field test (and assumed that my colleagues who were treating him on a regular basis recognised that as well) but concluded that would be best done post cataract surgery."

Private cataract surgery

34. Mr A chose to proceed with his cataract surgery privately. Dr E saw Mr A in his rooms on 30 October 2015 for an assessment. IOPs at that time were 16mmHg in both eyes. On 12 November 2015, the left cataract surgery was performed at a private hospital.

2016

YAG capsulotomy and telephone contact with SDHB

35. In the postoperative review period, Dr E felt that Mr A would benefit from a YAG laser capsulotomy[11] (to help clear central posterior capsular plaque) and, on 5 February 2016, Dr E referred Mr A to the SDHB Ophthalmology Service to have the procedure performed. IOPs at the time measured 15mmHg bilaterally.

36. Dr E's private clinic letter (to SDHB, and copied to Mr A's GP) noted that visual field testing was due in a few months' time (ie, in April, as noted above). Dr E suggested that the YAG capsulotomy be done prior to any visual field testing.

37. On 10 February 2016, Dr E followed up his referral letter with a referral email to CNS D at the SDHB Ophthalmology Service. On 18 February, CNS D emailed booking staff requesting a clinic appointment for Mr A before the visual field test.

38. On 8 March 2016, the nurse specialist sent an email to booking staff making reference to having received a telephone call from Mr A, who had "phoned today again" prior to his YAG procedure. A telephone log was not kept by the SDHB Eye Clinic until late June 2016, and there is no documentation on file of any other telephone calls.

39. On 15 March 2016, the YAG laser procedure was performed by Dr E at SDHB Ophthalmology Service. It was noted in Dr E's subsequent clinic letter that visual field testing was planned for April 2016.

40. As Mr A's April 2016 visual field testing appointment approached, his wife contacted the Ophthalmology Service on several occasions regarding an appointment date. Mr A told HDC:

> "My wife became very concerned about me not receiving any appointments plus follow-up that would be required, and after phoning the Eye Clinic several times to find out what was going on she was told they had lost me in the system."

41. The planned April 2016 appointment for visual field testing did not go ahead for Mr A until 28 July 2016.

[11] Laser treatment to help improve vision after cataract surgery.

Follow-up booking process

42. According to SDHB, the reason for the delay in the visual field appointment was related to demand on the DHB service.

43. In relation to processes in place at that time to clinically prioritise patients for specialist follow-up and visual field testing, SDHB told HDC the following:

- The follow-up plan for individual patients was dictated by the clinician seeing the patient at the clinic. A clinic slip was completed and the patient was booked as a "planned patient" into the date they should have been seen by. This method effectively placed them onto a "waiting list" for booking closer to the time that the appointment was due. This was electronically captured and visible.
- When patients were unable to be fitted in, the administration staff would seek assistance from clinical staff; however, this could not accommodate the volume of patients that needed to be seen.
- At the time, an acuity tool was not utilised.
- Administration staff booked the short-term follow-ups and urgent patients into the regular appointment slots within the time frame identified by the ophthalmologist; the remaining slots were assigned to the patients who had been waiting the longest.
- There were more patients planned for follow-up appointments than there was capacity to review and treat. Physical space within the ophthalmology department restricted the ability to run additional catch-up clinics. Locum cover was sought to replace ophthalmologists on leave, but the area available restricted the employment of further permanent ophthalmologists.

Review appointments

44. On 28 July 2016, Mr A saw Dr E for visual field testing. The visual field test performed that day was 18 months after Mr A's previous visual field test.

45. This visual field test was reviewed by Dr E in a virtual clinic on 1 August 2016. Mr A's VFI was 40% right and 20–29% left. The testing showed advanced glaucomatous changes requiring urgent review.

46. On 8 August 2016, Dr E reviewed Mr A at the SDHB Eye Clinic. Mr A's IOPs were 15mmHg bilaterally. OCT scanning showed some thinning of the nerve fibres. Mr A had early cataract formation in his right eye.

47. Because of the advanced glaucoma and his visual field defects, Mr A was deemed not fit to drive, and CNS D wrote to the New Zealand Transport Agency regarding the situation.

48. Mr A was seen in clinic by Dr E on 2 September 2016, and was referred to consultant ophthalmologist Dr C for a surgical opinion.

Dr C review

49. On 28 September 2016, Dr C noted that Mr A had had a lot of variability in his IOPs and a drop in his visual field results. The IOP readings at that time were 20mmHg right and 16mmHg left.

50. Dr C opined that few options would improve Mr A's vision, and might only delay visual deterioration. The left eye was deemed an extremely high risk. Dr C recommended a left trabeculectomy,[12] to be followed quite closely by a right trabeculectomy.

51. Dr C waitlisted Mr A as a general anaesthetic case as, although Mr A had a degree of chronic obstructive pulmonary disease[13] that might preclude general anaesthesia, his surgery was deemed to be technically challenging under local anaesthetic.

52. Although the surgery was requested urgently, there was a delay until December 2016 getting Mr A on the inpatient waitlist.

53. Mr A was referred by his GP to be seen privately by an ophthalmologist in late 28 November 2016. The ophthalmologist noted that although Mr A's care had been managed in the public hospital setting, he had found "follow-up an issue". The ophthalmologist noted that Mr A had glaucoma and that "it would appear that this has progressed rather rapidly recently". The ophthalmologist also noted that Mr A's intraocular pressure was too high in his right eye for the degree of visual field he had and this needed urgent attention.

Surgery

54. Mr A proceeded with the right trabeculectomy in private care on 30 November 2016. A left trabeculectomy was performed in the public system at SDHB on 10 January 2017 and, after postoperative care, Mr A continued to see Dr C privately.

SDHB follow-up guidelines

55. In relation to national and international guidelines/standards adopted or referred to by SDHB ophthalmologists in determining clinical timeframes for follow-up review and visual field testing, SDHB told HDC:

> "The SDHB ophthalmologists follow evidence-based guidance for treatment and monitoring of patients who are glaucoma suspects, have definite glaucoma or ocular hypertension. They have adopted the NICE (National Institute for Health and Care Excellence) Glaucoma Guidelines 2011 in the UK and the NHMRC (National Health and Medical Research Council) Guidelines for the screening, Prognosis, Diagnosis, Management and Prevention of Glaucoma 2010 Australia. These stratify patient groups and give guidance to clinicians for accepted treatment and follow up."

Serious Adverse Event Report (SAER)

56. SDHB undertook a SAER conducted by an ophthalmologist and a quality performance and systems manager.[14] The report was completed in July 2017.

57. The reviewers concluded that the delay in Mr A's visual field testing meant that although his IOPs and OCT were acceptable but labile, the continuing visual loss that had been exhibited in visual field testing for several years was overlooked in the 18-month gap between the November 2014 and July 2016 visual field tests.

[12] A trabeculectomy is a surgical procedure that lowers the intraocular pressure inside the eye in patients with glaucoma.
[13] Lung disease that causes difficulty with breathing.
[14] SAE 85668.

58. Contributory factors were noted as follows:

- Intraocular pressures appeared under control although these had been labile and difficult to control previously. Glaucoma progression was evident in previous and ongoing visual field tests.
- The medical locum in October 2015 booked April 2016 visual field testing. Up until this point Mr A's visual field tests had been done yearly and had shown deterioration; however, at clinical request these were delayed for five months, which then became eight months with delays inherent in the service at the time.
- No regular visual field test regimen identification or monitoring was adhered to, and there were multiple practitioners handling the case. There was no way to identify that the visual field regimen had been missed or extended.
- There was no telephone log in place until June 2016, and no procedure for reviewing cases of frequent callers.

59. The recommendations and changes to systems and processes that flowed from the SAER were as follows:

- Develop a system to proactively manage the frequency of individual patient telephone calls.
- Establish a clinic format for locum medical staff that allows for sufficient time or process to fully assess and plan care for complex patients as well as non-complex patients.
- Ensure that all locum clinic outcomes, including findings and treatment plans, are documented in the letter to the GP.
- Undertake work aimed specifically at improving patient flow through the system to alleviate the delays in all, and in particular those identified as urgent, patients receiving their appointment.
- Design a system that in conjunction with clinical decision-making identifies and monitors the status of patients requiring regular visual field testing, to avoid testing being delayed or missed, and to raise a red flag should this occur.
- Feed back the outcome of the report to locum medical staff involved in Mr A's care.

External review of ophthalmic incidents

60. An external review commissioned by SDHB commenced in December 2016 and was completed on 24 March 2017. The review report, entitled *Review of 34 ophthalmic (eye) incidents in the Southern DHB (SDHB) identified in the period 1 July 2015 to 30 September 2016*,[15] was made available publicly in May 2017.

[15] https://www.southerndhb.govt.nz/files/20058_20170517140858-1494986938.pdf.

61. In its analysis, key issues identified in the cases reviewed were:

- Patients were not seen in a timely manner.
- The SDHB Ophthalmology (Eye) Service lacked capacity to meet demand, and did not have enough appointment spaces. Capacity involves not just health professionals but also physical space, equipment, and clerical support staff.
- There was not enough recognition of the great increase in demand for eye clinic appointments to manage chronic eye disease caused by changes in the last 10 years (including the advent of Avastin treatment) occurring in the context of resourcing issues and a lack of specialists.
- Many DHBs were grappling with the issue of a rapid increase in numbers of people needing eye clinic appointments, as well as other factors such as an aging population, increasing numbers of people with diabetes, and increased rates of detection of glaucoma.

Clinically indicated time frames

62. The external review authors noted:

> "[There are] very clear recommendations for appropriate periods of review for patients with common chronic eye conditions such as diabetic eye disease, glaucoma and wet Age-related Macular Degeneration (AMD) based on large studies and extensive international experience in managing these common conditions … Numerous recent high quality clinical trials give clear timelines for appropriate review of patients undergoing treatment for wet AMD."

63. In relation to follow-up timing it was stated:

> "Appropriate patient follow-up appointment timing for the medical conditions covered by these cases, to minimise undetected major disease progression, is extremely well established. In a busy public ophthalmic (eye) service inevitably there will be some delay to follow-up with some patients. Delay of up to 1.5 times the requested review period (e.g. patient is booked for 6 months but seen at 9 months) is probably acceptable, delay stretching out to twice the requested interval is not."

Clinical prioritisation

64. The external review stated:

> "
> - The two SDHB eye service departments do not appear to have operated with a system for prioritising patients beyond a 'see in (time period)' request, explaining that this becomes insufficient when the demand and volume of booked appointments required greatly exceeds the number of appointments available. Simply prioritising more patients as urgent follow-ups, effectively 'grid-locked' that system in an attempt to avoid patients waiting excessive amounts of time.
> - This problem of availability of appointments was 'managed' by administration staff who were not qualified to, nor had clear processes for, deciding which patients should get priority, which was unacceptable."

65. The external reviewers also opined that "to some degree a culture of tolerance of unacceptable delays developed because this was the norm".

Acuity tool

66. In September 2015, SDHB reported that it had introduced an acuity tool to produce a ratio for a patient's relative risk based on length of time waiting beyond what was clinically acceptable. The external reviewers stated that while the acuity tool is a useful snapshot in monitoring the extent of overdue patients, it is a very limited tool in managing clinical risk. It is not a solution to prioritisation and excess demand. Strong concerns were raised that:

- The acuity tool initially put in place implied that wait times well in excess of the recommended evidence-based guideline time period were "low/no risk", and only waits of five times the booked time and longer were "high risk".
- Delays of more than 1.5 times the follow-up time requested carry significant clinical risk, and the acuity tool classifications were "quite frankly misleading" and "of serious concern" because, as a rule of thumb, a patient wait of twice what has been requested is, in the reviewers' opinion, unacceptably long.

67. The external reviewers stated that "ultimately the departments continue to lack a system to prioritise high risk patients that is effective".

68. The reviewers noted that often prioritisation schemes use a "traffic light" classification similar to the acuity tool but based on clinical assessment of individual patients. For example, "red patients" are those who must be seen in a timely way because of the risk of serious consequences — such as loss of vision — if they are not.

DHB management on notice

69. The external reviewers outlined that:

- This was not a newly arising problem, but rather a culmination of insufficient responses by senior management to growing demands for ophthalmology services over a number of years; the issue had been flagged by the ophthalmic workforce — evidence from a long series of documents viewed indicated that the problems were raised on a number of occasions.
- Staff from the Ophthalmology Service did attempt to communicate their concerns to management regarding the growing problem, but "the scale of the response needed was not realised, and management did not appear to understand that the concern was that patients were losing vision because they were not getting treatment within evidence based timeframes".

Other issues

70. The external reviewers also made the following points:

- In cases where patients lost to follow-up called the Ophthalmology Service, generally telephone calls received by SDHB were not handled by clinical staff, and were not followed up with reference to the clinical record. For a period, calls were not necessarily recorded, and, if recorded, this was not systematic. Calls were not referred

to clinical staff, and did not result in action. Patients under the care of an eye department need to have unobstructed telephone access to clinical staff.

- A barrier to adequate resourcing is the relatively limited understanding by senior management and by medical colleagues from other specialties as to what ophthalmologists actually do. Ophthalmology was seen as a surgical specialty when it is predominantly a medical specialty, with a majority of time being spent in clinic treating patients with chronic conditions, and rarely involving theatre.
- There are no Elective Services Patient Flow Indicators (ESPIs) relating to reviewing patients with chronic disease in a timely manner, meaning that in order to meet ESPIs relating to new referrals and patients booked for surgery, new patients were prioritised over follow-ups, and surgical lists over outpatient clinics.
- Delays in patients having ophthalmic medical consultations is not a newly arising problem, but is rather the culmination of insufficient responses by senior DHB management to growing demands for ophthalmology services over many years.
- The problem of capacity was compounded by long-standing issues of recruiting and retaining ophthalmologists.
- Demands, and efficient clinics, cannot be met by specialist-only services. Ancillary clinicians (such as optometrists, trained nurses, and technicians) also need to be used.
- It is essential that the service have in place a robust auditable process for tracking and accounting for all referrals.
- An underlying cause of the communications and efficiency problems identified has been the deficiencies in governance of the two departments.
- External review of the Eye Service systems and process was suggested, along with formal credentialling of the two SDHB departments.

71. The external review made nine detailed recommendations[16] covering issues of capacity, management of the departments, prioritisation, telephone systems, management of referrals and follow-up, efficiency, credentialling, national improvements, and shared learning.

Ministry of Health oversight

72. The Ministry of Health is working closely with DHBs that have a backlog of ophthalmology patients, and is discussing the plans each has in place to address the issue.

73. In December 2016, the Ministry wrote to all DHBs reinforcing its support for improving capacity and managing demand. The support will include some further funding to assist DHBs to develop, implement, or improve eye healthcare models. (DHB service improvements may include improved capacity and demand planning, improved referral management, consistent prioritisation, and alternative workforce options.)

74. In April 2017, the Ministry of Health updated HDC on both the local DHB and nationwide actions and initiatives being implemented to address pressures being faced by a number of DHB ophthalmology services nationally.

[16] See page 26 of the external review.

75. In relation to SDHB, the Ministry advised that SDHB is progressing a two-phased recovery plan (tactical and strategic) to build capacity and workforce, and deliver changes to models of care respectively. SDHB provided the Ministry with its planned activity for reducing its backlog and working toward zero patients waiting beyond clinically appropriate timeframes.

76. Performance against the SDHB backlog programme project is a standing agenda item for the Ministry and DHB Executive Monitoring Intervention Framework meetings.

77. The functions of the former National Health Committee have been transitioned to the Ministry, which has a work programme to identify how Health Technology Assessment (HTA) should best be carried out.

78. The Ministry advised that it has been working with the New Zealand branch of the Royal Australian and New Zealand College of Ophthalmologists (RANZCO) to form a multidisciplinary service improvement expert advisory group.

Further information — SDHB

79. SDHB accepted that care of Mr A was fragmented and there were unacceptable delays in the provision of elements of his care, in particular his visual field testing in 2016. This contributed to the failure to detect the progression of Mr A's glaucoma, and his consequent loss of vision. However, SDHB also noted:

> "[T]he fact remains that a planned annual field test scheduled for November 2016 was deferred without documented reason for a further six months, when if left on schedule may have alerted the service to the progression of his visual field loss and prevented in some degree that severity of subsequent loss of vision."

Responses to provisional opinion

Mr A

80. Mr A was given an opportunity to comment on the "information gathered" section of the provisional opinion. Where relevant, his comments have been incorporated into the "information gathered" section above.

Southern DHB

81. Southern DHB was given an opportunity to comment on the provisional opinion. It advised HDC that it did not have any further comment to make.

Opinion: introductory comment

82. As I have stated recently,[17] over the last 10 years a combination of factors has driven rapidly increasing demand for ophthalmology services in New Zealand, including outpatient clinic time. A key factor has been the introduction of very effective new therapies and

[17] 16HDC01010 (16 April 2018).

treatment (such as Avastin), which has resulted in consumers needing to see specialists for regular ongoing follow-up and/or treatment, fuelling increased demand for ophthalmology services. I consider that the Ministry of Health has a role, with DHBs, to recognise the effect of the introduction of such new technologies and associated pressures on the system, and plan accordingly.

83. Provider accountability is not removed by the existence of systemic pressures. A key improvement that all DHBs and the Ministry of Health must make, now and in the future, is to assess, plan, adapt, and respond effectively to the foreseeable effects that new technologies will have on systems and demand.

Opinion: Southern District Health Board — breach

Introduction

84. DHBs are responsible for the operation of the clinical services they provide, and are responsible for any service failures. It is incumbent on all DHBs to support their staff with systems that guide good decision-making and promote a culture of safety. In addition, it is the responsibility of DHBs to prioritise patients appropriately and in a timely manner, and provide patients with good information, particularly when waiting for resource-constrained specialist services.[18]

Demands on the Ophthalmology Service and management response

85. As I have stated in a recent case:[19]

> "I am fully cognisant of the complex resourcing pressures and associated demographic factors at play affecting long-term ophthalmology treatment in New Zealand, including the prevalence and incidence of chronic eye disease and its resulting demands on the system. This issue is described in helpful detail by the external reviewers' analysis.
>
> I am also mindful of the more recent reviews and subsequent actions taken by SDHB to address the deficiencies identified.
>
> At the time of [Mr A's] care, the Ophthalmology Service at SDHB lacked capacity, in that the clinics did not have enough appointments for the number of patients clinicians had to see.
>
> This was contributed to by an insufficient response by senior management at SDHB to growing demands for ophthalmology services over many years. Clinical staff attempted to communicate to management the concerns regarding the growing problem. However, there was a lack of recognition among management at SDHB of the clinical risk caused by this lack of capacity — that patients were losing vision because they were not being seen within evidence-based timeframes. In addition, I note the reviewers' comment: '[W]hen efforts to increase funding, staff and capacity have been declined, there does

[18] See 16HDC01010 (12 March 2018).
[19] Ibid.

not appear to have been any assessment of the risk consequent from such decisions, and the opportunity to identify the problem, and that it was being compounded, was missed at these decision points.'

In the context of resource constraint, prioritisation schemes become vital in ensuring that those patients at greatest risk are seen first. However, as is detailed below, SDHB's Ophthalmology Service lacked an appropriate prioritisation system.

SDHB management failed to communicate effectively with its clinical staff and act on valid concerns raised by senior clinicians, and to ensure that a system was in place that effectively managed and appropriately prioritised patients waiting for follow-up specialist ophthalmology care, including those at higher risk. I am also concerned at the comment by the reviewers that 'to some degree a culture of tolerance of unacceptable delays developed because this was the norm'. In this environment, delays became normalised and, as a result, SDHB tolerated a situation that put patients at risk. Even when a system is under pressure, appropriate patient prioritisation must be the central focus."

86. These are issues of central importance for all DHBs that, if not recognised and acted on, can have severe consequences for consumers. In this case, SDHB's inaction failed Mr A.

Lack of prioritisation system

87. The external review noted:

- The two SDHB eye service departments do not appear to have operated with a system for prioritising patients beyond a "see in (time period)" request. This becomes insufficient when the demand and volume of booked appointments required greatly exceeds the number of appointments available. Simply prioritising more patients as urgent follow-ups — in an attempt to avoid patients waiting excessive amounts of time — effectively "grid-locked" the system.
- The problem of insufficient available appointments was "managed" by administration staff who were not qualified to decide, nor had clear processes for deciding, which patients should get priority, which was unacceptable.

88. The external reviewers also opined that "to some degree a culture of tolerance of unacceptable delays developed because this was the norm".

89. My comments in the case referred to above[20] also apply here:

"Prioritisation of booking of appointments was managed by administration staff, who were not qualified to decide which patient should get priority, nor did they have clear processes to assist them to do so. I consider this situation to have been unacceptable, and I note that the external reviewers also came to this conclusion.

At the time of [Mr A's] care, the only criteria considered when booking appointments was the time period requested by the clinician, rather than the particular patient's risk factors.

[20] Ibid.

> Essentially, this approach was flawed when the volume of booked appointments required greatly exceeded the number of appointments available. Simply prioritising more patients as urgent, not surprisingly, grid-locked such a system. I consider that the lack of an appropriate prioritisation system at SDHB that focused on patients' clinical need, including specific risk factors, contributed to the delay in [Mr A's] follow-up appointment. In a resource-constrained environment, a proper prioritisation system ensures that those with risk of serious consequences are seen in a timely manner."

90. It was wholly inappropriate for SDHB booking staff to be tasked with the important responsibility of prioritising ophthalmology follow-up appointments without sufficient information on which to base prioritisation decisions, and clear direction about what might constitute a higher risk patient requiring clinical escalation. In this respect, SDHB failed its staff as well as consumers, including Mr A.

Delayed visual field testing

91. Mr A has been a patient of the Ophthalmology Service since 2006 for the treatment of complex glaucoma. His care since that time involved visual field testing annually in order to monitor his complex condition.

92. There were delays in the timely provision of elements of Mr A's care, in particular his visual field testing. A planned annual visual field test scheduled for November 2015 was deferred for five months by Dr B. SDHB noted that there was no documented reason for this, and that, had the test been left on schedule, the service may have been alerted to the progression of Mr A's visual field loss.

93. My expert advisor, Dr Philip Polkinghorne, agrees with Dr B's rationale in October 2015 for deferring Mr A's visual field testing. I am guided by Dr Polkinghorne's advice on this matter. I would, however, remind Dr B of the importance of documenting important clinical decisions and the reasons for them.

94. Although the deferral of Mr A's visual field testing from November 2015 to April 2016 was clinically defensible due to his surgery, Mr A still required effective prioritisation of his testing to ensure timely and ongoing monitoring of his glaucoma. SDHB reported that there was no way to identify that the visual field testing regimen had been missed or extended. The key failure in this case was the failure to prioritise Mr A's visual field testing in light of his established glaucoma. While Mr A's clinicians may have been aware of his testing regimen and the date for the planned visual field testing, rather than prioritising Mr A's visual field testing based on clinical need, at the time of events it was administrative processes that determined who was seen. In this context, I consider that a further three-month delay in Mr A's visual field testing from April to July 2016 was not appropriate.

Conclusion

95. Dr Polkinghorne advised that Mr A has not received the standard of care expected within the New Zealand health system. Dr Polkinghorne considers that the departure from the standard of care could be quantified between moderate and severe. I concur, and for the reasons outlined above I consider that SDHB did not provide services to Mr A with reasonable care and skill and, accordingly, breached Right 4(1) of the Code.

Recommendations

96. In a case completed earlier this year[21] I made a number of recommendations that are also applicable to this investigation. These included SDHB providing HDC with a detailed update report on the following:

a) An independent evaluation of the systems in place to identify and prioritise ophthalmology patients whose appointments are overdue. This should include the use of clinically driven patient acuity scores so that patients with higher acuity are prioritised and patients identified as specifically high risk do not have appointments delayed, and patients who self-identify with severe pain or sudden loss of vision are booked for urgent review.

b) A quantitative and qualitative audit of the management of Ophthalmology (Eye) Service referrals and follow-ups since December 2016, to ascertain that tracking systems are in place so that all referrals are responded to in a timely manner.

c) The proactive steps taken to build departmental capacity, responsiveness, and adaptability, including regular accurate measurement and reporting of demand and capacity, using objective agreed criteria that account for actual and projected increases in demand, as well as details regarding:

- Training and implementation of nursing staff and ancillary and non-specialist staff to remove inefficiency associated with lower priority tasks;
- The effectiveness of the Service's relocation to enhanced physical space; and
- Recruitment of ophthalmologists, optometrists, orthoptists, and ophthalmology staff.

d) Details of the redefined roles and responsibilities of those involved in the management of the Ophthalmology (Eye) Service.

e) Routine telephone access to clinical staff so that DHB Ophthalmology (Eye) Service patients, across both centres, can contact the Service readily, speak to an appropriately trained person when clinical concerns are raised, receive an appropriate response, and have this recorded in the patient's clinical notes.

f) Shared learning:

- Use of regular forums involving Ophthalmology (Eye) Service staff and management staff, to include discussion and planning to assist development of treatment protocols in the context of an ageing population.
- Confirmation that the external review report was discussed with all other DHBs via their Chief Medical Officer, to enable any patient risk arising from similar circumstances to be identified and controlled.

g) Regular credentialling of the Ophthalmology (Eye) Service and its facilities, as occurs in most DHBs.

[21] Ibid.

h) A further update on how the Ophthalmology Backlog Programme project has been established across SDHB, involving its weekly stakeholder updates to track and monitor progress toward zero patients waiting beyond clinically appropriate timeframes.

97. I also recommend that SDHB:

a) Continue auditing the remedial actions taken to shift patients to clinically appropriate times and follow-up, with the outcome and analysis of the audit to be reported to HDC. SDHB is to advise HDC of the date of its next audit; the audit date is to be provided to HDC within three weeks of the date of this report.

b) Provide a formal written apology to Mr A. The apology is to be sent to HDC for forwarding, within three weeks of the date of this report.

Follow-up actions

98. A copy of this report with details identifying the parties removed, except Southern District Health Board, will be sent to the Director-General of Health (Ministry of Health), HealthCERT (Ministry of Health), HQSC, the Royal Australian and New Zealand College of Ophthalmologists, the National CMO Group, and Central TAS, and placed on the Health and Disability Commissioner website, www.hdc.org.nz, for educational purposes.

Appendix A: Independent ophthalmology advice to the Commissioner

The following expert advice was obtained from an ophthalmologist, Dr Philip Polkinghorne.

> "Thank you for your letter of the 23 January, 2018. I also appreciate the additional information from [a general practitioner] dated 1 February, 2018 clarifying the type of anaemia [Mr A] was reported to have.
>
> If I can conclude the diagnosis of [Mr A's] anaemia, [the general practitioner] assured me it was normocytic and normochromic and does not have a Vitamin B12 deficiency. This is at variance with the anaesthetic assessment form on the 11 October, 2016 when [Mr A] was reported to have 'anaemia chronic'. Furthermore, in a further anaesthetic assessment dated 16 December, 2016 the anaesthetist recorded [Mr A] as having 'chronic anaemia, Vitamin B12 deficiency' and receiving routine three-monthly Hydroxocobalamin injections. My reason for raising the B12 anaemia is that Vitamin B12 deficiency can cause an optic neuropathy and so compromise [Mr A's] vision. This issue has also been addressed to [the CEO] in response to my supplementary questions put to the Commissioner.
>
> On balance, I do not think on the evidence received to date any Vitamin B12 deficiency would have been a significant factor in [Mr A's] optic neuropathy.
>
> Similarly, I also raised the question and concern from a letter dated 15 April, 2017 from a Dr […] where [Mr A] was given a diagnosis of polymyalgia rheumatica. Again sometimes this disorder is associated with temporal arteritis and again can cause an optic neuropathy. Again I am reassured by the supplementary responses from [the CEO].
>
> With respect to the other material I was able to review, was [Mr A's] medical notes from [Southern] District Health Board. The earliest notes I have been able to review dates from 5 March, 2016. In addition, I have received copies of [Mr A's] OCT scans of his nerves and visual fields.
>
> I have also reviewed [Mr A's] complaint letter and [SHDB's] initial response letter to the HDC dated 15 May, 2017, together with [Dr E's] response dictated 1 May, 2017. I have also reviewed a copy of the Serious Adverse Incident report relevant in this case Incident No […]. I have also reviewed the Southern Response Notification dated 19 October, 2017, the material from [Dr B] and, as I mentioned, limited clinical records.
>
> My assessment of these documents has led me to the conclusion that between 2015 and 2016 there was inadequate monitoring of [Mr A's] glaucoma due largely to visual fields being deferred and compromising the ability of the clinicians to reassess treatment options. This failure appears to have contributed to [Mr A] losing vision and the ability to drive.
>
> [The Chief Executive Officer] for the Southern District Health Board, in his letter to the Health and Disability Commissioner, maintains that the SDHB ophthalmologists follow evidence-based guidelines for the treatment and monitoring of patients who have

glaucoma. The implication being that the support structures were present enabling [Mr A] to have appropriate and timely appointments in the ophthalmology department at SDHB. I have no doubt that the organisation strives to comply with these guidelines, but the reality is that [Mr A] did not receive optimal care. For example, in the document referred to by [the CEO] (Management and Prevention of Glaucoma) it states that '… in highly unstable established glaucoma where intraocular pressure targets are not being achieved, the management plan requires (timely) review'. This did not occur in [Mr A's] case and deferral of the scheduled field test in April, 2016 thwarted the clinicians to adequately review [Mr A's] management.

At that time [the CEO] reported there were capacity issues at SDHB and the acuity tool was not being utilised. I note a plan has already been introduced to lessen further harm to [SDHB] patients. But while these plans and procedural documents developed by SDHB appear to be satisfactory, a recent audit still demonstrates patient care within the ophthalmology department is still 'at risk' and not all patients are being seen in a timely fashion. This is exemplified by greater than the 200 patients who are seen in a timeframe 100% beyond what has been clinically determined. As an example, what this means is that a patient to be reviewed at six months would, in fact, not be seen for twelve months.

The Commissioner may wish to request further updates of this audit until he is satisfied that SDHB is compliant.

The CEO has already commented that there was no protocol at the time in question when the eye service received a patient enquiry and this has now been addressed. The use of a telephone log is an important method to ensure patients' concerns are addressed to the appropriate individual within the department.

With respect to [Dr B's] care of [Mr A], he saw him on one occasion only and at that time [Mr A's] intraocular pressure, presumably measured by a nurse in the department, was satisfactory. I appreciate that there is conflicting evidence on the number of patients booked to see [Dr B] in clinic, but if the higher number is accepted by the Commissioner and unless stated in the contract, then [Dr B] does not determine the number of patients he sees in clinic; that again is an administrative function. If there is concern, then the administration at SDHB must take ownership of the clinic numbers. In [Dr B's] submission, he maintains he saw fewer patients than alleged by SDHB and does not use the 'overworked' issue in his defence, suggesting that the lower number seen was likely the correct figure.

[Dr B's] submission also addresses the reason for deferral of organising a visual field (before the scheduled time in April, 2016) stating [Mr A's] cataract would have made any visual field performed prior to the surgery unreliable. I agree with this rationale. A cataract degrades visual function so any field test performed at that visit or prior to cataract surgery would, in my opinion, not be warranted and indeed a waste of resources. With reference to the method of measuring intraocular pressure, I assume again that the clinicians at the SDHB would have approved iCare patients attending the eye department otherwise that device should not have been in the department. However, I agree with [Dr B] that iCare tonometers are widely used in New Zealand and around the world for a number of reasons, including simplicity, no need for

expensive platforms (slit lamps) and sterility and can easily be used by nursing staff. Furthermore, as [Dr B] states and with evidence-based documentation, the iCare tonometer is a reliable instrument for measuring intraocular pressure and is comparable to the Goldmann tonometer.

In summary, my opinion of [Dr B's] management of [Mr A] was professional and of a high clinical standard. He has no case to answer.

Equally, I have reviewed the care provided by [Dr E]. The clinical notes I have been able to review show that [Dr E] managed [Mr A] appropriately and diligently monitored him. The notes demonstrate [Dr E] performed tonometry and inspected [Mr A's] optic nerves and continued to monitor his visual fields. [Dr E] performed clinically indicated cataract surgery and referred [Mr A] for subspecialty care for glaucoma and drainage surgery.

I do not believe that [Dr E] is culpable for the delay in [Mr A] having visual fields performed. Instead, I believe the delay was the consequence of an organisational breakdown at SDHB and failure to have suitably robust procedures in place to prevent this unfortunate episode.

The CEO of SDHB has informed the Commissioner that the Acuity Tool was not being used at the time [Mr A] was assessed in the eye department in 2015/2016. Unfortunately, at that time there does not appear to have been a robust procedure or protocol for ensuring patients were followed in a timely fashion. Instead, it appears those with the longest wait time were prioritised and this may not be ideal, particularly when the service was so stretched. The evidence I received does not specifically address the prioritisation of visual fields, but I think it is safe to assume that a disconnect between organising visual fields and clinic appointments would have existed at that time. The CEO also identified issues with staffing and physical space issues which I hope have now been addressed.

In 2016 and presumably prior to that, a protocol to record and action patients' messages was not in use in the eye department. This has now been addressed. The use of a telephone log is an important method to ensure patients' concerns are elevated to the appropriate individual within the department. Emails are another increasingly popular method of communication and steps should be taken to ensure these are appropriately logged and answered.

The Commissioner has asked for advice on managing the increasing burden of eye care in public facilities in New Zealand. Various DHBs have responded to this in different ways and the CEO of SDHB has put forward a plan to put more resources into the eye department. These include additional FTEs for optometrists, nurses and consultant medical staff. Nurse-led clinics and training nursing staff to perform intravitreal injections are all moves in the right direction in my opinion.

Another area the hospital might like to review is a programme to reduce the 'Did not attend' rate. Some DHBs have found it useful to check with patients a day or two before their scheduled appointment to see if they are going to attend. If not, then the slot might be offered to another patient. Regarding [Mr A's] attendance, he was highly

compliant, but even if [SDHB] is able to reduce its DNA rate by 2–3% [it would allow] for more patients to be seen and greater efficiencies within the finite resource.

You asked about the accepted standard of care. Regrettably, I feel that [Mr A] has not received the standard of care expected within the New Zealand health system. In my opinion, his pressure-lowering surgery was unfortunately delayed. He did not have adequate monitoring of his visual fields and if this information had been available to the clinicians he might have had a better outcome. I believe the departure from the standard of care could be quantified between moderate and severe. I believe this matter would be endorsed by my peers.

With respect to recommendations for the future, I would like to think that the initiatives set up by [the CEO] will reduce the risk of further serious adverse events in the eye department.

I strongly believe that ongoing efforts to shift patients to clinically appropriate times and follow-up should be audited and that this data is conveyed to the ophthalmology service staff and the audit also reviewed by the Commissioner.

Kind regards

Yours sincerely

Philip Polkinghorne MD”