Submissions summary report: Consultations on the proposal for a new Specialist optometrist scope of practice – Ophthalmic Laser Surgeries, and its associated prescribed qualification

Background

In 2018, the Board had meetings with some key stakeholders – also within district health boards (DHB) – following a report that identified the significant lack of ophthalmology cover in many areas across Aotearoa New Zealand. However, there were sufficient optometrists in those areas (Chadwick *et al,* 2019). Enabling some of these optometrists to perform minor laser surgeries would reduce the burden on the private and public ophthalmology sector, and lower geographical barriers to accessing care. This in turn would free up ophthalmologists to do the more complicated procedures, effectively reducing overall wait-times for all ophthalmic procedures, improving treatment efficiency, and reducing unnecessary impairment of vision. The patient experience would also be improved, as the same person who diagnoses the condition could then undertake the treatment, often at the same visit. It also supports the key focus areas of the 2020 Health Reform – to increase primary health care in the community.

After several meetings with key stakeholders, and a preliminary literature review, the Board approved a pilot study to run in the ophthalmology department at Greenlane Clinical Centre, in Auckland DHB. Its purpose was to ensure the Board could safely introduce a specialist optometrist scope of practice in ophthalmic laser surgery. This required buy-in from various stakeholders and provision of training and close supervision from ophthalmologists in that area. The Board reviewed and approved every phase in the proposed training programme (prescribed qualification), and scope.

In 2021, the Board successfully completed the pilot study and were satisfied that the Board could safely ensure the training and practise of these practitioners. The findings from the pilot study were tabled at the August 2021 Board meeting. The Board decided to go ahead with the consultation, but to do two separate consultations – one for the proposal to introduce a new Specialist optometrist scope of practice – Ophthalmic laser surgery, and one for the proposal to introduce a prescribed qualification for those who wish to train and be able to register in the Specialist optometrist scope of practice – Ophthalmic laser surgery. The public consultation was open between 10 November 2021 and 22 December 2021.

Submissions

The Board received 23 written submissions[1], and held a debrief meeting with all participants in the pilot programme. The written submissions consisted of seven submissions from organisations and 15 individuals. The organisational submissions included two from Ophthalmology departments within DHBs, two from key education and training providers of eye healthcare professionals (Australia and New Zealand), one from a New Zealand-based membership organisation and two were from Australian-based organisations – one membership organisation and the other a regulatory organisation. Of the 15 individual submissions, one was from an ophthalmologist with the rest being optometrists. This summary report only covers the written submissions.

As anticipated, most of the submissions were favourable, including the submissions from optometrists and New Zealand-based education and training providers, and Australian and New Zealand-based membership organisations. While favourable submissions from within the optometric community could be seen as biased, it is important to note that the profession of optometry is risk adverse and has been slow to adopt previous expansions in scope. Additionally, previous consultations a few years ago about scope expansion revealed that not all optometrists were in favour of this move towards

[1] While submitters were identified, their response remain anonymous.

medical optometry. Therefore, the universally supportive responses from a wide range of practice backgrounds shows confidence in the training and abilities of their peers.

This confidence was notably absent from most, but not all, of the ophthalmology responses. They are however less familiar with modern optometry and its scope of practice, as may be inferred from some of their concerns later discussed in this report.

Those in support of both proposals

Those who were in support of both proposals often reiterated key aspects from the consultation document. Should the Board agree to implement the proposed Specialist optometrist scope of practice, the following themes were prominent:

1. It will **improve public access providing** a wider range of eye health services within the community – a key focus of the current Health Reform. This would **reduce inequity** for these important eye health services, particularly in low-serving communities.
    - Provision of such services by optometrists will directly benefit the public by making access to laser services more equitable for patients across Aotearoa New Zealand. Having optometrists deliver laser services will reduce demand on already stretched ophthalmology services nationwide, for a procedure that is safely within the knowledge and capabilities of the optometric workforce.
    - It will also enable some patients to be treated in a timelier fashion, which can reduce unnecessary impairment of vision as a result.
    - This may also encourage more (public) hospitals to employ and train senior optometrists to meet the need in their community, and highlighted that employment of more optometrists into public hospitals can be beneficial.

2. The proposals outline **appropriate and safe training protocols and regulatory instruments to ensure safety to the community.**
    - These procedures have been shown to be delivered safely by similarly trained optometrists overseas. There is compelling evidence overseas that this is undertaken safely and effectively by optometrists, with high patient satisfaction.
    - Students within the Bachelor of Optometry undergraduate programme already receive extensive training in the biology of the eye, optometric examination (including referral of conditions for surgical treatment), interaction of light (including lasers) with biological tissue, and of optics (including extensive use of non-surgical lasers).
    - This, coupled with the proposed pre-requisites of three years or 400 hours of relevant clinical experience while working under supervision with an ophthalmologist will sufficiently prepare optometrists to perform these procedures safely.
    - The Board will have a conservative approach to the roll-out of this new scope and will approve every phase of the training programme, and registered practitioners will have to meet annual recertification requirements. The latter will include being in a collegial (supervisory) working relationship with an ophthalmologist.

3. The proposed **training environment and practise requirements are appropriate**.
    - It would only be done within a Board-approved hospital or relevant clinics where a senior optometrist is working closely with an ophthalmologist.
    - This will be supported by Board-approved processes/guidelines, periodic approval, and ongoing monitoring.

Those opposing both proposals

Most of the concerns from those who were opposing the proposals were from an ophthalmology-perspective, and hinged on the following four themes:

1. There is potential for misdiagnosis of the visual condition and the decision-making process about surgical intervention.
2. Laser surgery is done with a surgical device with critical safety requirements and has the potential for complications.
3. The proposed training is too short and not sufficient for optometrists to safely practise.
4. There may not be a need for additional capacity to perform laser surgeries and may take training opportunities away from Ophthalmology training registrars.

Each of these are discussed below.

1. The potential for misdiagnosis of the visual condition and the decision-making process about surgical intervention.

These concerns are not deemed a substantial risk, as optometrists frequently encounter and diagnose the specific conditions related to the proposed laser surgeries, and already refer for surgery after discussing treatment options with their patients. All optometrists are required to manage a wide range of eye diseases, which sometimes includes referral for surgery (especially the example provided of cataract surgery). Some response from ophthalmology-perspectives appear to believe optometrists only survey low-risk presentations of ocular diseases, such as glaucoma or keratoconus, prior to referral for surgery. This suggestion emphasises how the hospital-based ophthalmology departments may be unaware of the modern optometrist scope of practice. These types of cases are being safely managed in the community for some time, and it is reducing an unnecessary burden on the hospital.

All clinicians have some risk of misdiagnosis, so the inference here is that optometrists may be more likely to misdiagnose these conditions. However, there is no evidence provided for this, and in fact there was evidence against this claim in the proposal document regarding one of the proposed conditions for which laser surgery would be performed, posterior capsular opacification (Menon, 2004). It should be noted that Menon's paper, which shows 99% diagnostic concordance, dates from 2004. It is likely that optometrists practicing at modern standards, who then also gain this Specialised optometrist scope of practice, will be more familiar with the conditions than community optometrists from almost 20 years ago were.

Approval to perform peripheral iridotomy (PI) follows capsulectomy, so the optometrist will be even more familiar with laser surgeries prior to undertaking the procedure with higher risk. It is also important to note that the optometrist will not take on sole management in these cases – if there is suspicion of glaucoma for example, there will likely be involvement of other eye care professionals, and there is no expectation that the optometrists performing the PI must take over management of the patient. As evidenced by our self-audits – referral to ophthalmology from optometry for surgical consideration of PI is common, and here the optometrist would provide this opinion, perform the surgery if indicated, and then discharge the patient back to the referring clinician after they are satisfied with the outcome.

Ultimately, it appears that respondents failed to recognise the management decisions made by the optometrist prior to conducting, and during the surgery. If a particular case presentation or surgery becomes complex, and outside the knowledge, skill, or comfort level of the optometrist performing the surgery; then it would be expected that this case be referred. This is not dissimilar to the management of a wide range of ocular conditions that are currently managed by optometrists in the community. Further, these surgeries would be performed in an ophthalmology environment, where support is

readily available. Regarding accountability, this is not specifically different than an optometrist managing any other eye condition. For instance, if an eye infection does not respond as expected, it would be referred. If a keratoconic patient progresses and can no longer be suitably managed with rigid contact lenses, it will require a surgical consult. The accountability lies in the decision-making to undertake a particular management plan in the first place. For more advanced procedures, such a selective laser trabeculoplasty in the United Kingdom (UK), the public trust optometrists to provide the service, and are happy with the outcomes (Konstantakopoulou *et al,* 2021).

2. Laser surgery is done with a surgical device with critical safety requirements and has the potential for complications

The optometrists who take on this Specialised optometrist scope will be required to be working in a Board-approved hospital or ophthalmology clinics and have many years of experience in this role. Because of this, compared to a primary care optometrist, they would be expected to have an even higher-level familiarity and understanding of surgical indications, options, and outcomes. The Board also do not believe it will receive many applications for this new scope, as there are not that many practitioners who will meet the Board's requirement at present.

Overseas experience has not shown an increased risk of harm to the public from an optometrist performing laser procedures, so there does not seem to be a valid foundation for these views that public safety may be compromised. The framework provides minimum standards, and it requires the supervising ophthalmologist to agree that the optometrist is competent, which is similar to, but far more rigorous, than UK ophthalmology training processes (The Royal College of Ophthalmologists, 2018). Interviews with optometrists performing SLT (a more technical procedure than capsulectomy) in the UK show public trust in the decision-making and outcomes (Konstantakopoulou *et al,* 2021).

The Board also understands that, while there are a handful of studies which report on optometrists performing laser surgeries, this is still an emerging field internationally, and there is limited hard evidence for the financial savings at this stage (Jones *et al,* 2021). As more information becomes available, the Board will update the relevant guidelines and policies for performing laser surgery to ensure public health and safety is maintained at all times.

3. The proposed training is too short and not sufficient for optometrists to safely practise

Some are of the opinion that the training programme will be too short to sufficiently train optometrists to safely perform laser surgery. However, the training programme has been explicitly designed to manage risk while the optometrist is undergoing training, being stepwise in design with multiple checkpoints along the way. Once gaining approval to begin training, these progressive steps include observing the procedure, performing simulated procedures, being directly supervised, before becoming progressively more independent (but still operating in a collaborative setting). Progression between stages requires both the supervising ophthalmologist to agree on progress, and Board approval of the required supporting documentation. During this time, complications and adverse events are expected to be seen, and there is additional potential to simulate complications, a process similar to that used to train ophthalmology registrars in the United Kingdom (UK) (The Royal College of Ophthalmologists, 2018). This stepwise process for training optometrists is likely more extensive, and more cautious, than most medical specialities (Chadwick *et al,* 2019).

Some of these concerns may be grounded on the lack of traditional surgical training, where due to the development of new procedures over a career, solid surgical foundations are expected with no shortcuts taken (Geng, 2020). However, this framework is quite different from training a career surgeon. It names and details specific procedures, such that optometrists (who are not trained surgeons), but decision-making clinicians, can safely perform a specific surgery.

There was some concern that this change may be a gateway into other procedures, and that is certainly a possibility. However, changes to the listed procedures would be guided by evidence, and there are many layers of protection in place. This includes restrictions on eligibility, the requirement for

ophthalmology sign-off and cooperation for training and supervision, ongoing regular auditing and minimum patient numbers, and Board-oversight, who have a mandate to protect the public.

As there is evidence of optometrists performing limited laser surgery is beneficial to the public with no increased risk of harm, then an argument against scope expansion would seem to be placing artificial barriers to accessing healthcare.

4. **There may not be a need for additional capacity to perform laser surgeries and may take training opportunities away from Ophthalmology training registrars.**

The prevalence of the relevant diseases was also raised, but this is a self-limiting problem. The training framework requires a certain number of cases at each step – if there are insufficient cases, then the training will not be completed. As the training requires a supervising ophthalmologist, this also allows ophthalmology to ensure their trainees preferentially meet their requirements, should there be a shortage of cases.

Responses from the two DHB Ophthalmology departments pointed out that their biggest backlog is not for laser procedures. This is not particularly relevant, but also underappreciates the benefits of this scope change. By releasing ophthalmologists from these procedures, they will become more available to assist with other areas where backlogs exist, and for which allied health is less able to help. In other words, to be effective, this scope change does not necessarily need to address the greatest need, as it will enable collateral benefits by allowing ophthalmology to tend to more complex cases.

Another concern was the limited number of acute peripheral iridotomies (PI) performed. However, the estimation is likely grossly under-representing the true rate at which PI is performed, which is more often prophylactic rather than just managing an acute angle crisis. In fact, owing to the rarity and potential severity of angle closure, it would be highly unlikely that an optometrist would be solely managing these acute cases at all. Therefore, their concern that training a small number of optometrists would deprive ophthalmology registrars of such learning experiences is probably unfounded. If these concerns are genuine, in the UK, the training of optometrists to perform laser procedures is thought to be unlikely to impact on ophthalmology training, and inter-disciplinary training models have been proposed (Konstantakopoulou *et al,* 2021). As detailed in the Supplement on PI procedure document included in the consultation[2], the number needed to treat is high for PI. As the procedure has higher risk than capsulectomy, it is likely to decrease in popularity over time. However, there will still be need, so this is not a reason to not pursue the introduction of this Specialist optometrist scope of practice at this stage.

Similarly, the financial and time investment for training an optometrist is minimal, and quickly recovered by freeing an ophthalmologist for other activities, and it is surprising that this was not appreciated in the response from DHBs. During training, the optometrist is either observing an ophthalmologist who was going to perform the procedure anyway (adding minimal cost) or being directly supervised for the final stage of the training process. While there likely is some loss of surgical efficiency at this final stage, considering that subsequently the optometrist can then interdependently manage the cases; thus, freeing up the ophthalmologist to see more complex cases. This would seem likely to quickly recover any lost time and money. In the UK, it is acknowledged that optometrists, owing to their training and clinical skills (e.g., competency on slit lamp, gonioscopy) require the least upskilling, and are the most appropriate profession to conduct laser surgeries, and optometrists replacing consultant ophthalmologists is likely to have cost savings (Konstantakopoulou *et al,* 2021).

[2] All ODOB Consultation documents are available on our website: https://www.odob.health.nz/news/consultations/

In summary

In summary:

- The concerns regarding diagnosis and management appear dated and unsupported by the literature, and do not reflect the current optometry scope of practice where consideration for surgical referral is routine.
- The concerns regarding safety are not supported by published literature of international experience, and patient experience is at least as high when an optometrist performs the procedure.
- The concerns regarding accountability and continuity of care are not novel or unique to this procedure, and are already part of the optometrist scope. Many models of co-management of conditions between ophthalmology and optometry already exist.
- The concerns about implementation costs are very short-term in nature and quickly recovered, and enable efficiency gains in more complex areas of ophthalmology for which there is greater requirement for specialist care.

Board's decision

At the Board meeting of 25 February 2022, the Board approved a new scope of practice, the Specialist optometrist – Ophthalmic laser surgery, and its associated prescribed qualification. Both have been published in the Gazette[3][4].

References

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[3] Specialist Optometrist Scope of Practice – Ophthalmic Laser Surgeries for the Optometrists and Dispensing Opticians Board in 2022: https://gazette.govt.nz/notice/id/2022-gs1720

[4] Prescribed Qualification for the Specialist Optometrist Scope of Practice—Ophthalmic Laser Surgeries for the Optometrists and Dispensing Opticians Board in 2022: https://gazette.govt.nz/notice/id/2022-gs1932