

## CONSULTATION – PROPOSAL FOR NEW SPECIALIST OPTOMETRIST SCOPE OF PRACTICE - OPHTHALMIC LASER SURGERIES

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**Submissions Due: 22 December 2021**

### Introduction

- 1 The principal purpose of the Health Practitioners Competence Assurance Act 2003 (the Act) is to protect public health and safety by ensuring that health practitioners are fit and competent to practise their professions. In accordance with this, one of the key functions of the Optometrists and Dispensing Opticians (the Board), is to prescribe scopes of practice and their associated qualifications necessary for the provision of safe care by the profession within these scopes.
- 2 The Board must describe the contents of the profession in terms of one or more scopes of practice. A scope of practice may be described in any way the Board thinks fit, including, without limitation, in any one or more of the following ways:
  - by reference to a name or form of words that is commonly understood by persons who work in the health sector
  - by reference to an area of science or learning
  - by reference to tasks commonly performed, and
  - by reference to illnesses or conditions to be diagnosed, treated, or managed.
- 3 The Act allows for specified activities to be restricted to registered health practitioners, in order to protect members of the public from the risk of serious or permanent harm. This means that it is illegal for anyone other than a health practitioner regulated under the HPCA Act to perform this activity unless performed in an emergency situation. Under the Act, the activity of practitioners is determined by the scopes of practice within which they work. A registered health practitioner may do anything in his or her scope of practice – including an activity that is otherwise restricted, if that scope of practice covers or clearly includes that activity.

## Background and current scopes of practice

- 4 Currently, the Board has two scopes of practice for the profession: 'The Optometrist Scope of Practice' and the 'Provisional Optometrist Scope of Practice.' The latter scope is a time-limited scope for those in the process of completing Board-accredited training to prescribe therapeutic medicines. Once someone has completed this training, they may apply for entry to the Optometrist Scope of Practice. A copy of the Board's current scopes of practice as published in the *New Zealand Gazette* has been included as *Appendix 1* to this document.
  
- 5 An optometrist registered in the Optometrist Scope of Practice provides evidence-based comprehensive eye health and vision care in a professional and ethical manner, in accordance with the HPCA Act.

The "practice of optometry" includes:

- prescribing any ophthalmic appliance, optical appliance, or ophthalmic medical device intended for remedial or cosmetic purposes or for the correction of a defect of sight
- assessing, diagnosing, treating and managing conditions affecting the eye and its appendages
- prescribing medicines whose sale and supply is restricted by law to prescription by authorised prescribers
- reporting or giving advice in an ophthalmic capacity, using the knowledge, skills, attitudes and competence initially attained for the primary optometry qualification and built upon in postgraduate and continuing clinical education, wherever there could be an issue of patient health or wellbeing
- signing any certificate required for statutory purposes, such as driver licensing eyesight certificates, and
- holding out to the public, or representing in any manner that one is authorised to practise optometry in Aotearoa New Zealand (NZ).

The practice of optometry goes wider than clinical optometry, and includes teaching, research, optometric or eye health management, in hospitals, clinics, general optometric practices and community and institutional contexts, whether paid or voluntary.

Additionally, clinical practice is defined as any work undertaken by an optometrist that relates to the care of an individual patient. Non-clinical practice is defined as any work undertaken by an optometrist that does not relate to the care of an individual patient.

- 6 The first inclusion in the bulleted list above (highlighted in red) is one of the few specified activities currently restricted to registered health practitioners by the Director-General of Health. The Board included this in the Optometrist Scope of Practice on the basis that the training that optometrists undertake to become qualified specifically covers these tasks, including practical application in a workplace setting under supervision prior to qualification.
- 7 The last major change to optometrist scopes of practice in 2017 saw the establishment of one core scope of practice, the 'Optometrist Scope of Practice', and the inclusion of prescribing therapeutic medicines as the minimum, contemporary safe standard of practice for optometry within this scope. At the time this change occurred, those without a qualification in therapeutic prescribing were transferred into the new scope and had a condition attached to their scope identifying them to members of the public as being unable to prescribe therapeutic medicines.
- 8 At the same time, the entry requirements for registration to practice in NZ were also changed. It required anyone wishing to practice optometry in NZ to either have a specified qualification that enabled them to prescribe medicines; or be enrolled in and in the process of completing a specified qualification in therapeutic prescribing. Those in the latter category granted entry to the only other scope of practice, the 'Provisional Optometrist Scope of Practice' enabling them to complete their training and then apply for entry to the 'Optometrist Scope of Practice.'
- 9 The Board is now considering the introduction of an additional restricted activity for the profession, namely, the restricted activity of *surgical or operative procedures below the mucous membrane or surface of the skin*. Specifically for optometry, this would be the performance of specified ophthalmic laser surgeries.

### **The case for change (NZ and Abroad)**

- 10 In recent years, the Board has been approached by District Health Boards (DHBs) enquiring as to whether optometrists can perform ophthalmic laser surgeries to assist in relieving the burden on the health system of patients waiting to receive these surgeries. Unfortunately, the current scope of optometry does not authorise the performance of ophthalmic laser surgeries by optometrists. The introduction of additional restricted activities is not something the Board enters into lightly or without performing due diligence on the efficacy and safety implications for the public, so no proposals for change to enable this have been made until now.

- 11 In a 2018 study, there were some regions of NZ which had limited access to ophthalmological services, and there were almost four times as many therapeutically qualified optometrists than ophthalmologists.<sup>1</sup> Enabling some of these optometrists to perform minor laser surgeries themselves would reduce the burden on the private and public ophthalmology sector and lower geographical barriers to accessing care. By freeing ophthalmologists for more complicated procedures, this would have the effect of reducing overall waiting times for *all* ophthalmic procedures, improving treatment efficiency, and therefore reducing unnecessary impairment of vision. It would also improve the patient experience, as the same person who diagnoses the condition could undertake the treatment, often at the same visit, increasing the level of patient rapport and surgical satisfaction. It also supports the key focus areas of the 2020 Health Reform – to increase primary health care in the community.
- 12 Optometrists have been permitted to perform specific laser surgeries, with additional training, in both the United States (US) and the United Kingdom (UK). Oklahoma was the first state to pass legislation permitting optometrists to perform laser surgeries, including capsulectomy, iridotomy, and trabeculectomy, in 1998, and by 2014 optometrists were performing 33% of all selective laser trabeculectomy procedures in the state.<sup>2</sup> Other states have since followed, including Kentucky in 2011, Louisiana in 2014, Alaska in 2017 (pending state board guidelines), and Arkansas in 2019. In the US, laser surgery training is now included in more than half of the optometric training programmes. Optometrists in the UK are permitted to perform neodymium:yttrium-aluminum-garnet (Nd:YAG) capsulectomy and peripheral iridotomies at certain hospitals, for example Moorfields Eye and Ear Hospital, under specific frameworks.<sup>3,4</sup>
- 13 In terms of clinical skills, in a 2004 study of UK optometrists referring for posterior capsular opacification, optometrists had a diagnostic concurrence of over 99%.<sup>5</sup> For acute referrals, similar to what might be expected with an adverse surgical outcome, NZ optometrists had the highest diagnostic accuracy of any referrer group, and the authors suggested that if given the choice, patients may prefer the ease of access of a local optometrist over a tertiary ophthalmology setting.<sup>6</sup> However, such expansions of scope can understandably be met with resistance from the medical community, some of whom maintain that these procedures require medically trained ophthalmologists.
- 14 Despite over two decades of optometrists performing these laser procedures, there are no published studies which demonstrate any negative patient outcomes. One study that initially suggested poorer patient outcomes when selective laser trabeculectomy was performed by an optometrist compared to an ophthalmologist,<sup>7</sup> was immediately rebutted and called out as being politically motivated.<sup>8</sup> The American Optometric Association highlighted that the results instead reflect best practice, and therefore

the initial paper inadvertently highlighted the more cautious approach to surgery that recently qualified optometrists possessed.<sup>9</sup> In Scotland, outcomes from a 2015 pilot programme using allied health workers (including optometrists) to perform selective laser trabeculoplasty showed that surgical outcomes when performed by allied health practitioners were at least no worse than when performed by an ophthalmologist.<sup>10</sup>

15 Optometrists tend to be risk-averse, and in every state in the US, optometrists manage both younger and less medically complex patients than ophthalmologists.<sup>11</sup> This was also seen in the UK, where the guidelines for laser surgery training of allied health professionals required at least five procedures, based on ophthalmology training guidelines, but during the training the optometrists preferred to remain supervised for more than twenty, until they were more self-confident in their own competence.<sup>10</sup> This risk-averse style of practice is also demonstrated by NZ optometrists, with slow adaptation to previous scope of practice expansions such as oral medication prescribing.<sup>12</sup>

16 NZ optometric training includes:

- human biology with a focus on the eye and adnexa
- extensive training in light, geometric, and physical optics, and
- mastery of optometric examination practical skills, such as the use of slit lamp biomicroscopes, mirrored contact lenses and prisms (e.g. gonioscopes), and binocular indirect ophthalmoscopes.

Optometrists are also trained to identify and manage abnormalities in the eye, and to recognise the signs and symptoms in a patient that requires referral to a surgeon. Many optometrists are working in post-operative care and will be routinely detecting and managing adverse outcomes following surgery. However, no aspect of surgery is currently part of the optometric curriculum.

17 In performing surgery, in addition to learning new skills, there are additional risks and benefits that need to be fully appreciated by a clinician so that they can competently undertake specific ophthalmic surgeries. The working environment and frequency of practice of an optometrist typically differs from that of a surgeon, therefore restrictions on which optometrists and working environments may be suitable to such an expanded scope need to be considered and regularly audited as part of on-going competency assurance.

18 In considering the possibility of specified ophthalmic laser surgeries being undertaken by the profession, the Board determined that a pilot programme would be needed to test whether an optometrist would be able to acquire and demonstrate the skills and knowledge required to safely and competently

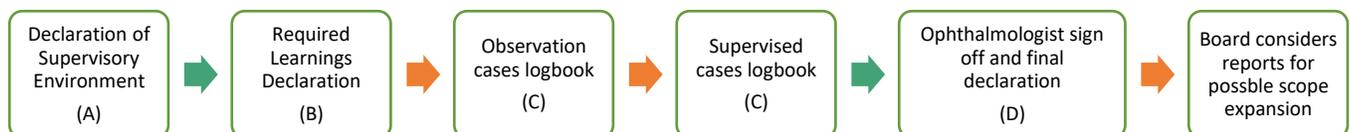
perform specific ophthalmic laser surgical techniques. The Board, therefore, partnered with one of the main DHBs to conduct such a Pilot, which has just successfully concluded.

## The Pilot

- 19 The Board authorised training procedures for two neodymium-doped yttrium aluminium garnet (Nd:YAG) laser surgery, including:
- Nd:YAG laser capsulotomy, and
  - Nd:YAG laser peripheral iridotomy.

The use of a Nd:YAG laser for any other procedure, or the use of any other laser type (e.g. Argon) was not authorised. All authorised surgeries follow a similar process of Board approval and it is possible to complete different surgeries simultaneously with each at a different stage of the approval process.

- 20 The diagram below indicates the general flow of the pilot and the detailed requirements for each step can be found in the supporting documentation for each authorised surgery (see *Appendix 2*). The nominated supervisor is made aware of these steps before they gain approval. Orange arrows indicate which steps of the process required approval of a submission to the Board before proceeding to the next step.



- 21 The pre-training requirements for optometrists participating in the pilot were:
- Be registered with the Board in the Optometry Scope of Practice.
  - Hold a current Annual Practising Certificate with no conditions on practice.
  - Have worked in a DHB ophthalmology department for a minimum of three years with at least 400 hours as a clinician in the relevant clinic (i.e. 400 hours in a cataract clinic for capsulotomy, and/or 400 hours in a glaucoma clinic for peripheral iridotomy).
  - Have formal arrangements with a registered consultant ophthalmologist in the same workplace, who has agreed to train and supervise the optometrist in the relevant surgery.

- Any changes to the supervisory environment had to be approved by the Board before any further training was undertaken. The pilot had to stop until the approval had been received.
- Be able to meet the current and on-going auditing requirements specific to the surgery in which the candidate optometrist wishes to begin training.
- A declaration attesting to meeting these requirements needed to be submitted to the Board prior to undertaking formal training.

22 The optometrist who is applying to be approved to undertake the training in the use of ophthalmic lasers for conducting ophthalmic laser surgery requires additional knowledge which is not formally taught as part of the training required for the Optometrist Scope of Practice. Therefore, any optometrist undergoing this pilot was expected to gain and ensure they had specialised knowledge of the following:

- Comprehensive knowledge of the relevant anatomy and physiology of the eye and adnexa.
- Knowledge of the physics of light and laser, and the penetration of light through ocular tissues.
- An understanding of the interaction of light and living tissue including thermal effects, photocoagulative effects, photoablative effects and photodisruptive effects.
- Knowledge of the wavelengths and powers utilised in ophthalmic lasers for the specific surgery.
- Knowledge of required sterile techniques for performing laser surgery.
- Knowledge of surgical procedure and specialised equipment.
- Knowledge of the risks and benefits for each surgery.
- Knowledge of appropriate management plans for adverse outcomes.

A declaration that the above required knowledge was obtained, and how it was obtained, was required to be submitted.

23 Before any of the Board-approved surgeries can be performed independently by an optometrist, the Board needs to be satisfied that the training, observations and supervised surgeries have led to the level of competence needed for optometrists to independently undertake these specific ophthalmic surgeries. In this pilot the Board-approved surgeries had a three-step process (DOS) which had to be completed in sequence with checkpoints along the way requiring approval from the Board to proceed. These steps included:

1. **D**eclaring competence in pre-training requirements and obtainment of the theoretical and procedural aspects of the surgery,
2. **O**bserving the surgery being performed,
3. **S**upervised surgery.

If the proposal below proceeds following consultation, a fourth step will be introduced: *Ensuring ongoing competence in annual audits*. The four-step process will become known as DOSE.

- 24 In addition, it is intended that the approved optometrists undertaking these surgeries will need to follow a specific annual continuing competence plan. It is proposed that an annual audit process will be used, as outlined in Appendix 3, and is provided in this paper for information purposes.
- 25 The pilot programme was supervised by two Ophthalmologists (Dr Hussein Patel and Dr Andrew Riley) with oversight from the clinical director of Auckland DHB Ophthalmology (Dr Sarah Welch). The pilot was noted by the supervisors as being well structured and all procedures were carried out in a safe manner with positive outcomes and no adverse events reported.
- 26 The Board has reviewed the reports of the optometrist and supervising ophthalmologist who participated in the pilot and has determined that the introduction of an additional restricted task for the profession to allow suitably experienced and trained optometrists to independently undertake specific ophthalmic laser surgeries has merit and can be performed in a safe manner, therefore be consulted on with relevant practitioners and stakeholders.

## The Proposal

- 27 While it might seem most logical to expand the Optometrist Scope of Practice to include the performance of the specified ophthalmic laser surgeries, the Board is not proposing this **at this time** for two reasons:
1. The primary qualifications approved for entry to the Optometrist Scope of Practice do not include training in the skills and knowledge required to safely and competently perform Nd:YAG capsulotomy and Nd:YAG laser peripheral iridotomy; and
  2. Including this in the current scope would mean that everyone already in the scope who does not have this additional skill and knowledge will require a condition be included in their scope of practice identifying them as not being able to perform Nd:YAG capsulotomy and Nd:YAG laser peripheral iridotomy, which seems excessive when it is not an authorisation held by the majority of scope holders.

In time, should the above position change, the Board will consult with relevant practitioners and stakeholders on a new proposal for change.

28 At this time, the Board proposes to gazette a **new** specialist optometrist scope of practice in accordance with section 11 of the HPCA Act. This proposed scope of practice is as follows:

***“Specialist Optometrist Scope of Practice - Ophthalmic Laser Surgeries”***

*An optometrist registered in the Specialist Optometrist Scope of Practice - Ophthalmic Laser Surgeries is authorised to perform specified ophthalmic surgical procedures below the mucous membrane or surface of the skin. Specifically, they are authorised to perform:*

- a. neodymium:yttrium-aluminum-garnet (Nd:YAG) laser capsulotomy; **and/or***
- b. neodymium:yttrium-aluminum-garnet (Nd:YAG) laser peripheral iridotomy in an approved hospital setting.*

29 It is intended that an optometrist registered in this new specialist scope of practice would be required to participate in ongoing recertification and audit relevant to this scope of practice in addition to the ongoing recertification and audit requirements for the main *Optometrist Scope of Practice*. They would also be required to maintain a collegial relationship with a consultant ophthalmologist working at the location where they are performing the laser surgery and provide the Board with a comprehensive continuing competence plan utilising the Board-approved template.

## **How to have your say**

30 The Board welcomes submissions from any and all stakeholders and interested parties. If you wish to make a submission on the proposed new scope of practice, please provide this in writing **on 22 December 2021**. The Board does not guarantee that submissions received at the Board’s offices after this date will be considered.

31. **Submissions be sent to:**

Elmarie Stander

The Registrar

Optometrists and Dispensing Opticians Board

PO Box 9644

Wellington 6141

Email: [registrar@odob.health.nz](mailto:registrar@odob.health.nz)

## Appendices

Appendix 1 – Current scopes of practice as published in the *New Zealand Gazette*

Appendix 2 – Supporting documentation for each authorised surgery

Appendix 3 – Continued competency declaration

## References

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