

Public consultation on amendments to Guidelines for use of Scheduled Medicines

23 November 2012

Introduction

The Optometry Board of Australia (the Board) is releasing proposed amendments to its *Guidelines for Use of Scheduled Medicines* (the Guidelines) for public consultation.

The Board's *Endorsement for Scheduled Medicines Registration Standard* (approved by Ministerial Council in March 2010) is not being amended, and there are no proposed changes to the list of Schedule 4 medicines contained within this standard.

This consultation paper has been developed under the requirements of the *Health Practitioner Regulation National Law* as in force in each state and territory (the National Law).

The National Law empowers the Board to develop and approve codes and guidelines to provide guidance to the profession. The National Law requires the Board to ensure there is wide ranging consultation on the content of any proposed registration standard, code or guideline.

The proposed amended *Guidelines for Use of Scheduled Medicines* can be found at **attachment A** and is accompanied by background information at **attachments B and C**.

At the completion of this consultation, the Board will consider the feedback and decide whether or not to approve any or all of the amendments proposed.

Background

The Board's *Guidelines for Use of Scheduled Medicines* (the Guidelines) came into effect on 1 July 2010.

The Board's Scheduled Medicines Advisory Committee (the Committee) has considered the Guidelines since their implementation.

The Guidelines were an edited version of guidelines developed more than 10 years ago by the Optometrists Registration Board of Victoria. In the intervening period there have been significant changes in a number of key areas that impact on the currency of the current Guidelines. These include:

- *Publication of new clinical management guidelines*
National Health and Medical Research Council of Australia's (NHMRC) (2010) *Guidelines for the Screening, Prognosis, Diagnosis, Management And Prevention Of Glaucoma*.
- *An increase in the scope of pre-registration training for optometrists*
The scope of education and training of optometry students has advanced such that all approved optometry programs in Australia and New Zealand include training in scheduled medicines for management of eye conditions, and qualify graduates for registration endorsement for scheduled medicines.
- *Technological advances and clinical understanding*
In respect of glaucoma there has been a significant increase in the clinical understanding of the diagnosis and management of the disease and advancements in technology to support this.

Summary of changes

The proposed amended *Guidelines for use of scheduled medicines* is at **attachment A**.

The structure of the Guidelines is changed slightly to include an 'authority', 'purpose' and 'scope' statement. The proposed significant amendments are:

- a new section (2.5) that reminds optometrists of the need to report adverse events to Therapeutic Goods Administration
- section 6 of the Guidelines refers to collaborative care arrangements and *continues to support* optometrists entering into collaborative care arrangements with ophthalmologists for the care of patients with glaucoma, and
- section 7 (new) enables optometrists endorsed for scheduled medicines to initiate and implement management (*in the form of eye drops*) of patients diagnosed with chronic glaucoma, or who are at high risk of developing, the disease.

Attachment B of this document contains the Board's rationale for the amendment in section 7. In drafting this amendment, the Board has considered:

- the objectives of the National Registration and Accreditation Scheme
- the increasing prevalence of chronic glaucoma
- the practical limitations of the current requirements for participation in a formal share-care or management plan with an ophthalmologist coupled with the reported maldistribution of the ophthalmological workforce (Health Workforce Australia 2012)
- National Health and Medical Research Council (2010) *Guidelines for the Screening, Prognosis, Diagnosis, Management and Prevention of Glaucoma*
- optometrists' skill-base and access to equipment to assist in the diagnosis and management, and
- the importance of providing early treatment and regular monitoring to minimise complications of chronic glaucoma.

The NHMRC Guidelines outline a series of recommendations and supporting evidence for all practitioners involved in the screening, prognosis, diagnosis, management and prevention of glaucoma. This includes the skills and equipment required for practitioners to care for patients with, or at high risk of developing, the disease. Optometrists endorsed for scheduled medicines who manage patients with glaucoma, or who are at high risk of developing the disease, are expected to be familiar with and refer to the NHMRC guidelines in their practice.

The Board's Scheduled Medicines Advisory Committee has advised the Board in the development of these amendments. The Committee's terms of reference are published at the *About* tab of the Board's website.

Making a submission

The Board now invites interested parties to address their written comments on the proposed guideline amendments to Mr Colin Waldron, Chair, Optometry Board of Australia by COB on **Monday 4 February 2013**.

Electronic submissions are preferred and can be made at: optomconsultation@ahpra.gov.au.

How submissions will be handled

As part of the consultation process, the Board will acknowledge submissions received.

Submissions will generally be published unless those making submissions request otherwise. The Board publishes submissions on its website to encourage discussion and inform the community and stakeholders.

However, the Board will not place on its website, or make available to the public, submissions that contain offensive or defamatory comments or which are outside the scope of reference. Before publication, the Board may remove personally-identifying information from submissions, including contact details.

The views expressed in the submissions are those of the individuals or organisations who submit them and their publication does not imply any acceptance of, or agreement with, these views by the Board.

The Board also accepts submissions made in confidence. These submissions will not be published on the website or elsewhere. Submissions may be confidential because they include personal experiences or other sensitive information. Any request for access to a confidential submission will be determined in accordance with the *Freedom of Information Act 1982 (Cth)*, which has provisions designed to protect personal information and information given in confidence. Please let the Board know if you do not want us to publish your submission, or want us to treat all or part of it as confidential.

The Board may choose to consult with key stakeholders individually in addition to the Board's broader consultation processes published at www.ahpra.gov.au/Legislation-and-Publications/AHPRA-Publications.



Attachment A

Amended Guidelines for use of scheduled medicines

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Authority

These *Guidelines for Use of Scheduled Medicines* have been developed by the Optometry Board of Australia (the Board) under section 39 of the Health Practitioner Regulation National Law as in force in each state and territory (the National Law).

Guidelines approved by a National Board may be used as evidence of what constitutes appropriate professional conduct or practice in proceedings against a health practitioner under the National Law.

Purpose

These guidelines outline the Board's expectations in relation to the use of scheduled medicines by endorsed and non-endorsed optometrists.

Scope

The guidelines apply to:

- optometrists with general registration who use scheduled medicines for diagnostic purposes, and
- optometrists with an endorsement for scheduled medicines who use scheduled medicines therapeutically to manage eye conditions independently and collaboratively with other healthcare practitioners.

In accordance with the Board's *Code of Conduct for Optometrists*, optometrists have a responsibility to recognise and work within the limits of their competence and scope of practice. This includes ensuring they have the equipment, expertise and skills necessary to practise safely and effectively.

1. Endorsement for scheduled medicines

Under section 94 of the National Law the Board may endorse the registration of suitably qualified optometrists to prescribe scheduled medicines¹.

Table 1 of the Board's *Endorsement for scheduled medicines registration standard* lists the Schedule 4 medicines that optometrists with this endorsement are qualified to obtain, possess, administer, prescribe or supply for topical use. (Refer to **appendix C** of these guidelines.)

The Board considers optometrists with an endorsement for scheduled medicines to be qualified and competent to:

- obtain, possess, administer, prescribe or supply specified scheduled medicines, and
- use those medicines appropriately for the treatment of conditions of the eye in the course of optometry practice.

Optometrists who hold this endorsement may only possess, prescribe or supply Schedule 4 medicines to the extent authorised under the legislation that applies in the state or territory in which they practise. Information will be published on the Board's website concerning the authorities that apply in each State and Territory of Australia.

1.1 Eligibility for endorsement

To be eligible for an endorsement for scheduled medicines, an applicant must, in accordance with the *Endorsement for scheduled medicines registration standard*, have successfully completed:

- an approved program of study in ocular therapeutics OR
- a program of study determined by the Board to be substantially equivalent to an approved program of study OR
- a Board-approved examination or assessment in ocular therapeutics.

¹ The term 'scheduled medicine' is a substance included in a schedule to the current Poisons Standard within the meaning of the *Therapeutic Goods Act 1989* (Cwth).

1.2 Approved programs of study and assessments

Information about currently approved programs of study and approved examinations and assessments is contained in Appendix A 'Approved programs of study and assessments for the purposes of endorsement of registration'.

2. Use of scheduled medicines by optometrists

In all states and territories, optometrists holding general registration are permitted to obtain, have in their possession and use scheduled medicines in the course of their practice for diagnostic purposes (for example anaesthetic and mydriatic eye drops).

Appendix B of these guidelines lists the Schedule 4 medicines approved by the Board for administration for diagnostic purposes by optometrists holding general registration. An endorsement is not required for an optometrist to use diagnostic medicines in the course of his or her practice.

2.1 Quality Use of Medicines

Optometrists who prescribe scheduled medicines should observe the Quality Use of Medicines (QUM)² principles.

Quality use of medicine means:

- (a) selecting management options wisely by
 - considering the place of medicines in treating illness and maintaining health, and
 - recognising that there may be better ways than medicine to manage many disorders.
- (b) choosing suitable medicines (if a medicine is considered necessary) so that the best available option is selected by taking into account:
 - the individual
 - the clinical condition
 - risks and benefits
 - dosage and length of treatment
 - any coexisting conditions
 - other therapies
 - monitoring considerations, and
 - costs for the individual, the community and the health system as a whole.
- (c) using medicines safely and effectively to get the best possible results by
 - monitoring outcomes
 - minimising misuse, overuse and under use
 - improving people's ability to solve problems related to medication, such as negative effects, and
 - managing multiple medications.

2.2 Maintaining competence

All optometrists are expected to maintain their competence through continuing professional development, and need to meet the requirements set out in the Board's continuing professional development registration standard.³

This standard also outlines the specific requirements to be met by optometrists with an endorsement for scheduled medicines.

² The complete strategy can be found at www.health.gov.au.

³ Refer to the Registration Standard tab on the Board's website.

2.3 Prescriptions

Optometrists with a scheduled medicines endorsement must ensure that, when authorising the supply of a Schedule 4 medicine to a patient, the prescription is in handwritten or computer generated form. In some jurisdictions, optometrists may, in an emergency, give oral instructions for the supply of Schedule 4 medicines to a pharmacist, which must be confirmed in writing as soon as practicable.

When prescribing a Schedule 2 or 3 medicine, the Board encourages endorsed optometrists to issue a prescription as a means of ensuring adequate communication with the pharmacist and that the patient receives the correct medicine.

Prescriptions must be handwritten or computer generated and include the following:

- date of issue
- details of the prescriber, patient, medicine (including name, strength and quantity)
- precise directions (except where directions are too complex and are provided separately, or where administration is to be carried out by a nurse or other person authorised to administer), and
- the prescriber's signature.

The Board advises against endorsed optometrists self-diagnosing and then self-prescribing schedule 4 medicines.

2.4 Practice procedures

Optometrists should ensure that the:

- scheduled medicines are stored securely and in accordance with the manufacturer's recommendations
- details of in-practice administration of scheduled medicines are recorded on the patient's clinical record, and
- if required under the legislation of the jurisdiction, relevant authorities are notified of the loss or theft of a scheduled medicine.

2.5 Adverse event reporting

The Therapeutic Goods Administration (TGA) is part of the Australian Government Department of Health and Ageing, and is responsible for regulating therapeutic goods including medicines, medical devices, blood and blood products.

The TGA also collects reports of adverse events associated with medicines and medical devices. Adverse event monitoring allows the TGA to monitor, investigate and take action on medicines safety issues.

Optometrists can assist the TGA in safeguarding public health by reporting all suspected adverse events associated with medicines, particularly those associated with new products. This information forms an important part of the TGA's monitoring activities and it plays a key role in its work to identify potential relationships between a therapeutic good and a series of adverse events. When a link can be established, the TGA takes action to ensure that medicines available in Australia continue to meet appropriate standards of safety, efficacy and quality.

Further information can be found on the TGA website (www.tga.gov.au).

3. Sale of scheduled medicines

The Board supports the view that the division of responsibility between an endorsed optometrist who prescribes (authorises the supply of a scheduled medicine) and the pharmacist who dispenses the scheduled medicine to the patient provides an important check designed to safeguard patients.

The expertise of the pharmacist in counselling of patients is important in the follow-up care of the patient by checking adherence to the prescriber's instructions, confirming administration times and techniques, screening for adverse reactions, and referring back to the prescriber for further investigations or advice when required.

There will however be circumstances when it is permissible for an optometrist to sell a scheduled medicine to a patient such as in an emergency, in remote areas or after hours, when access to a pharmacist is impractical, or where the particular drug or agent is not normally stocked by the pharmacy.

Optometrists who choose to supply a scheduled medicine directly to a patient must meet labelling and record-keeping requirements contained in the legislation of the jurisdiction in which they are practising, and, as for all other prescribing, provide counselling about the use of the medicine, side effects and potential interactions.

4. Guidelines for the use of topical antimicrobials

All optometrists treating anterior eye infections with scheduled medicines must have a clear understanding of:

- microbiological and pathological processes relevant to anterior eye infection and their natural histories
- typical presentations of ocular surface infections and the differential diagnoses of these from other anterior eye conditions
- ocular infections that constitute true ocular emergencies and require immediate treatment
- identification of risk factors for ocular surface infections
- indications and mechanisms of referral for microbiological investigation, and
- interpretation of the results of microbiological investigation and appropriate management stratagems arising from these results.

4.1 Microbial resistance

Optometrists using antimicrobial preparations should understand all issues relating to the emergence of resistance by pathogenic organisms and mechanisms for limiting this. Selection of an antimicrobial should always involve consideration of the risk that microbial resistance could develop. In particular, treatment regimens should be avoided that could result in:

- inappropriate drug selection (i.e. use of a more potent antimicrobial preparation than required for the clinical condition)
- insufficient therapeutics (i.e. drug regimen inadequate to control infection, either in duration or therapeutic effect)
- overuse
- inappropriate dosage.

At present, fluoroquinolones have broad-spectrum activity with relatively little microbial resistance. To maintain maximal efficacy of these preparations, fluoroquinolones should not be used where alternative, equally effective agents could be used instead.

Optometrists should consider a specialist opinion for patients who may require long-term antimicrobial use.

5. Guidelines for the use of topical steroidal preparations

Optometrists seeking to treat ocular inflammation with scheduled medicines must have a clear understanding of the:

- immunological processes relevant to inflammatory conditions of the eye and their natural histories
- typical presentations of inflammatory conditions of the eye and the differential diagnoses of these from other anterior eye conditions
- inflammatory conditions of the eye that constitute true ocular emergencies and require immediate treatment
- identification of risk factors for developing ocular inflammation
- potential side effects of topical steroid preparations, including a propensity for raising intraocular pressure in susceptible individuals and the potential development of cataract
- management strategies for steroid-related intraocular pressure rises.

Optometrists should consider referral for a specialist opinion for those patients who may require long-term steroid use.

6. Collaborative care guidelines

For the purpose of these guidelines, 'collaborative care' describes when the care of a patient is provided by two or more health care practitioners, each practising within his or her sphere of expertise.

Various collaborative care relationships between health care practitioners exist, ranging from a formal documented shared-care agreement to those that are more ad hoc. For eye conditions, the sharing of care is likely to vary according to the location of the patient and ease of access to ophthalmological care.

6.1 Role, responsibilities and communication in collaborative care of patients

Within any collaborative care arrangement, it is essential that the roles and responsibilities of the optometrist and the other health practitioner(s) are defined clearly and continue to be redefined as appropriate over time.

Communication is the linchpin of effective collaborative care. Participating practitioners and their patients must understand which practitioner is responsible for providing the various aspects of care.

To avoid repetition and confusion, each party must have a clear understanding of:

- the diagnoses, treatment(s) and ongoing recommendations to the patient of the other treating practitioners
- the information to forward to other parties involved in the care of the patient
- time frames in which this information should be forwarded
- the preferred format for this information
- who is responsible for ongoing patient care and the follow up of patients who miss scheduled appointments, and
- the roles and responsibilities of each person participating in the shared care.

The use of standardised protocols and forms are recommended to clarify responsibilities, and facilitate the transfer of information and communication between practitioners. Such systems may involve standardised forms used by all parties participating in the arrangement or may be a less regimented agreement that each party will forward a report to others after each consultation with the patient.⁴

Ongoing discussion between the optometrist and the other treating practitioner(s) should review these protocols and make any changes necessary over time to ensure optimal care of the patient.

6.2 Patient involvement

In any collaborative care arrangement, patients must be clearly informed of who maintains responsibility for their primary eye care and when they are required to attend reviews with each practitioner. Patients must be provided with the opportunity to choose whether they wish their care to be shared between an optometrist and health practitioner(s).

Written information for patients regarding collaborative care may prove a useful adjunct to verbal discussions with treating practitioners.

7. Guidelines for care of patients with, or at high risk of developing, chronic glaucoma

The following guidelines for care of patients with, or at high risk of developing, chronic glaucoma should be read in conjunction with:

- section 6 of these guidelines 'Collaborative care guidelines'
- National Health and Medical Research Council of Australia's (NHMRC) Guidelines for the screening, prognosis, diagnosis, management and prevention of glaucoma 2010 (the NHMRC Guidelines), and
- A Guide to Glaucoma for Primary Health Care Providers – A companion document to NHMRC Guidelines for the screening, prognosis, diagnosis, management and prevention of glaucoma.

⁴ Optometrists Association Australia has published a position statement on Shared Care. This may inform the development of such protocols and or forms.

The NHMRC Guidelines and the companion document outline a series of recommendations and supporting evidence for all practitioners involved in the screening, prognosis, diagnosis, management and prevention of glaucoma.⁵

With regard to collaborative care of patients with glaucoma, the Board endorses the recommendation from the NHMRC Guidelines 'that the professional roles, responsibilities and referral pathways are best determined in individual cases based on location, resources, skill-base of local health care practitioners and patient choice.'⁶

When a diagnosis of chronic glaucoma is made, or a patient is at high risk of developing the disease, optometrists who hold an endorsement for scheduled medicines must refer the patient for specialist assessment or develop a management plan that includes initiation of treatment and monitoring of the patient's response. Instillation of anti-glaucoma eye drops is the preferred primary intervention in chronic glaucoma management⁷ however, in certain cases, patients will need initial assessment by an ophthalmologist for possible surgical intervention or laser treatment. Optometrists must be able to identify those cases and refer where appropriate.

Optometrists should familiarise themselves with and refer to the NHMRC Guidelines when setting target intra-ocular pressures⁸ and when making decisions about glaucoma management plans and monitoring cycles.

Referral for ophthalmological assessment and advice must be considered if the anti-glaucoma treatment does not stabilise the patient's condition.

Optometrists managing patients with glaucoma must communicate all diagnostic and management decisions to the health care professionals that have, or will have, responsibility for the patient. As has been articulated in the previous section, clear communication between practitioners is crucial to ensure each practitioner understands who is responsible for providing each aspect of the patient's care.

7.1 Equipment

To comply with these guidelines, optometrists must have the equipment to measure and/or assess a patient's intraocular pressure, central corneal thickness, threshold visual fields, anterior chamber angles, optic nerve heads and retinal nerve fibre layers. Optometrists should refer specifically to the sections on 'Diagnosis of glaucoma' and 'Monitoring: long-term care' in the NHMRC guidelines.

7.2 Emergency management of acute primary angle closure

Individuals suffering from an acute angle closure event may present to an optometrist or, rarely, an angle-closure event may be induced through routine pupil dilation.

The standard management of such a patient is emergency referral to an ophthalmologist or hospital. However, both the nature of the condition and therapeutic endorsement place the optometrist in a position that he or she can initiate treatment for such patients to stabilise their ocular state before referring them (refer to [Appendix D](#) of this document for suggested first aid for an angle closure event).

As the definitive intervention in acute angle-closure is procedural intervention (laser therapy), the optometrist should seek ophthalmological input, if possible, prior to administering first aid to lower intraocular pressure and reduce pain. Exceptions to this include when an ophthalmologist cannot be contacted and the best interests of the patient are served by initiating treatment prior to emergency referral to the most convenient ophthalmologist or hospital.

Review

The Board will monitor this guideline for effectiveness and review it at least every three years. This guideline replaces any previously published National Board guidelines on use of scheduled medicines.

⁵ Published at <http://www.nhmrc.gov.au/guidelines/publications/cp113-cp113b>

⁶ National Health and Medical Research Council of Australia's (NHMRC) Guidelines For The Screening, Prognosis, Diagnosis, Management And Prevention Of Glaucoma 2010, p 83 www.nhmrc.gov.au/guidelines/publications/cp113

⁷ *ibid.*, p108

⁸ NHMRC Guidelines, p 80

Appendix A

Approved programs of study and assessments for the purposes of endorsement for scheduled medicines

The Board accepts the following qualifications and assessments for endorsement for scheduled medicines.

Approved programs of study

A list of approved programs of study accredited by the Optometry Council of Australia and New Zealand (OCANZ) for:

- undergraduate optometry courses which include therapeutic training that provides qualifications for general registration and endorsement for scheduled medicines, and
- post graduate courses in ocular therapeutics that qualify for endorsement for scheduled medicines

at <http://www.optometryboard.gov.au/Accreditation.aspx>.

Overseas-trained optometrists

Optometrists currently registered in Australia who trained outside Australia and New Zealand and who have or have had therapeutic prescribing rights in their country of training, may have their registration endorsed to prescribe medicines by successfully completing the Assessment of Competence in Ocular Therapeutics (ACOT) examination conducted by the Optometry Council of Australia and New Zealand (OCANZ). Information about ACOT can be found on the OCANZ website at <http://www.ocanz.org>.

Inactive programs of study

Ocular therapeutics courses conducted between 2001 and 2005 and granted accreditation by the Optometrists Registration Board of Victoria are also approved by the Optometry Board of Australia.

Appendix B

List of Schedule 4 medicines approved by the Optometry Board of Australia for administration by optometrists holding general registration

The Optometry Board of Australia has approved the following diagnostic drugs for optometrists to administer in the course of their practice:

- anaesthetics, local (synthetic cocaine substitutes) — when prepared and packed in the form of eye drops
- tropicamide — when prepared and packed in the form of eye drops containing one (1) per cent or less of tropicamide
- cyclopentolate hydrochloride — when prepared and packed in the form of eye drops containing one (1) per cent or less of cyclopentolate hydrochloride
- atropine — when prepared and packed in the form of eye drops containing one (1) per cent or less of atropine sulphate
- homatropine — when prepared and packed in the form of eye drops containing two (2) per cent or less of homatropine hydrobromide
- pilocarpine nitrate — when prepared and packed in the form of eye drops containing two (2) per cent or less of pilocarpine nitrate
- physostigmine salicylate — when prepared and packed in the form of eye drops containing 0.5 per cent or less of physostigmine salicylate.

Note: Phenylephrine in concentrations of less than five (5) per cent is a Schedule 2 medicine, which can be used by all optometrists.

Registered optometrists should be familiar and comply with the current requirements of State and Territory drugs and poisons legislation in the jurisdictions in which they practise. The Board will publish on its website, a list of authorities that apply in each state and territory.

Appendix C

Board approved list of Schedule 4 medicines

Under section 94 National Law the Board may endorse the registration of eligible optometrists as qualified to obtain, possess, administer, prescribe or supply the scheduled medicines used in the treatment of conditions of the eye, included in the list below.⁹

Table C1 lists the Schedule 4 medicines that have been approved for use by optometrists whose registration has been endorsed by the Board. This is a duplicate of the list published in the Board's registration standard.

For an optometrist to possess, prescribe, supply or use these Schedule 4 medicines in a particular jurisdiction, the authorisation must be provided for by enactment of legislation in that jurisdiction. Registered optometrists should be familiar and comply with the current requirements in the jurisdictions in which they practise. The Board will publish on its website a list of authorities that apply in each state and territory.

Table C1 Board-approved list of Schedule 4 poisons that optometrists with a scheduled medicines endorsement are qualified to obtain, possess, administer, prescribe or supply

Anti-infectives	Anti-inflammatories	Anti-glaucomas	Miotics, mydriatics and cycloplegics
Aciclovir	Cyclosporin	Apraclonidine	Atropine
Azithromycin	Dexamethasone	Betaxolol	Cyclopentolate
Bacitracin	Diclofenac	Bimatoprost	Homatropine
Cephazolin	Fluorometholone	Brimonidine	Pilocarpine
Chloramphenicol ¹⁰	Flurbiprofen	Brinzolamide	Phenylephrine
Ciprofloxacin	Hydrocortisone	Carbachol	Tropicamide
Framycetin	Ketorolac	Diprivenfrin	
Gentamicin	Prednisolone	Dorzolamide	Local anaesthetics
Gramicidin		Latanoprost	Amethocaine
Neomycin	Decongestants/ anti-allergics	Levobunolol	Lignocaine
Ofloxacin	Olopatadine	Pilocarpine	Oxybuprocaine
Polymyxin		Timolol	Proxymetacaine
Tetracycline		Travoprost	
Tobramycin			
Vidarabine			

⁹ Refer to the Board's *Endorsement for scheduled medicines registration standard* published under the Registration Standards tab of the Board's website.

¹⁰ Now a schedule 3 poison

Appendix D

First aid for acute angle closure event

The following immediate interventions are suggested, unless otherwise contraindicated in a given patient, for the emergency management of acute primary angle closure:

- (a) An oral dose of acetazolamide 500mg (Diamox) can be administered provided there are no contraindications. To assist in timely administration, endorsed optometrists should consider keeping Diamox in a first aid kit¹¹.
- If Diamox cannot be tolerated orally, the patient is likely to require intramuscular or intravenous administration of Diamox and/or treatment with other therapeutic agents. In this situation, referral and transfer to an ophthalmologist or hospital emergency department should occur without delay.
- (b) Instil the following topical medications (allowing approximately two minutes between each drop):
- One (1) drop beta-blocking agent (e.g. timolol, 0.5 per cent).
 - One (1) drop alpha agonist (e.g. apraclonidine, 0.5 per cent).
 - One (1) drop carbonic anhydrase inhibitor (e.g. brinzolamide, 1.0 per cent).
 - If the eye is red and inflamed, one (1) drop high-penetrance topical steroid — with the optometrist or patient to instil a further three (3) drops at regular intervals in the first hour, then hourly thereafter.

It is preferable to withhold instillation of pilocarpine until the IOP has been reduced (except in the rare instance of an angle-closure event being caused through routine pupil dilation, in which case instillation of pilocarpine should commence immediately).

- (c) Just prior to the patient being transferred, and after discussion with the ophthalmologist confirming that instillation of pilocarpine is indicated, instil:
- One (1) drop pilocarpine, 2 per cent (with the optometrist or patient to instil a further drop in 15 minutes).

Note: Pilocarpine should only be used for mechanisms involving phakic pupillary block or angle crowding; use of pilocarpine is contraindicated for retrolenticular causes of angle closure as well as those involving aphakic or pseudophakic closure events.

¹¹For an optometrist to keep acetazolamide in a first aid kit, authorisation to do so must be provided for by enactment of legislation in that jurisdiction. The Board will publish on its website, a list of authorities that apply in each state and territory.

Attachment B

Rationale for proposed guidelines for care of patients with, or at high risk of developing, chronic glaucoma

(Section 7 of amended Guidelines for use of scheduled medicines)

Introduction

The Board proposes to permit endorsed optometrists to initiate treatment and manage patients diagnosed with chronic glaucoma, or who are at high risk of developing the disease. Optometrists can still choose to enter into a collaborative or shared-care arrangements with an ophthalmologist – and it is expected that many optometrists, where access to specialist care is not an issue, are likely to continue to do so.

In drafting this amendment, the Board has considered:

- the objectives of the national registration and accreditation scheme
- the increasing prevalence of chronic glaucoma
- the practical limitations of the requirement for participation in a formal shared-care or management plan with an ophthalmologist coupled with the reported maldistribution of the ophthalmological workforce (Health Workforce Australia 2012)
- National Health and Medical Research Council *Guidelines for the Screening, Prognosis, Diagnosis, Management and Prevention of Glaucoma, 2010* (NHMRC Guidelines)
- optometrists' skill-base and access to equipment to assist in the diagnosis and management of glaucoma, and
- the importance of providing early treatment and regular monitoring to minimise complications of chronic glaucoma.

Endorsed optometrists have the education, training and authority to prescribe topical anti-glaucoma medicines and are in a position to treat and monitor patients with chronic glaucoma thus facilitating timely stabilisation of glaucoma and increased compliance with treatment.

It is the Board's view that the amended Guidelines increase care choice for patients living with chronic glaucoma or at risk of developing the disease.

Background

Chronic glaucoma is a usually painless, progressive disease of the eye that can result in damage to the optic nerve and vision loss. Glaucoma often remains symptom-free for many years, with symptoms only developing after significant, irreversible visual loss has occurred. Despite increasing sophistication in the capacity to detect and control this visual loss, glaucoma remains an important cause of visual impairment in Australia.

Although many risk factors for the development of glaucoma have been identified, the physical cause of glaucoma is thought to be either raised pressure within the eye, or abnormal blood flow to the optic nerve, or a combination of these two events. Despite this view, the only intervention that has reliably been demonstrated to slow or stop visual loss from glaucoma is the reduction of pressure within the eye, whether the eye initially exhibits raised pressure or not. This knowledge forms the basis of glaucoma management throughout the world today.

Studies show that of the 300,000 Australians who have glaucoma, only half of them are aware that they have the disease (Wensor et al, 1998). Age is one of the most important risk factors for the disease, with at least five times as many people affected with glaucoma by the age of 65 years when compared with the number at 40 years of age (Le et al, 2003). As a result of the ageing population, these studies project the number of glaucoma patients in Australia will have increased by more than one third by the year 2025 (Dirani et al, 2011).

Through clinical research, improvement in diagnostic equipment and medical interventions, health care practitioners, including optometrists, are now better placed to identify and treat individuals with a high risk of developing glaucoma thus slowing glaucoma related vision loss (e.g. Kass et al, 2002; Lichter et al, 2001; CNTGS Group, 1998; The AGIS Investigators, 1998).

Timely assessment, diagnosis and treatment of the disease have the potential to greatly improve the quality of life for a significant proportion of Australians suffering from or at the risk of developing glaucoma over time.

History of the current guidelines

The current guidelines were approved by the Board to be in place for the transition to the National Scheme in 2010. The guidelines are an edited version of those that had previously been developed and approved by the Optometrists Registration Board of Victoria (ORBV).

Legislative change in 1996 in Victoria enabled suitably trained and qualified optometrists to have their registration endorsed to use scheduled medicines to manage a wide range of infective, inflammatory and allergic eye conditions. These changes were made in recognition of the increasing demand on medical-provided eye care services in rural regions of Victoria and the competence and geographical capacity of optometrists to provide such services.

The ORBV, at the request of the government at the time, developed a framework under which endorsed optometrists could contribute to the management of patients with glaucoma under a formal shared-care framework. This framework required an ophthalmologist to confirm the diagnosis of glaucoma, initiate treatment, decide on a management plan and any changes to it.

As other Australian states approved similar scheduled medicines lists and guidelines for optometrists, this structured shared-care arrangement for the management of patients with glaucoma was perpetuated. The guidelines approved by the Optometry Board of Australia brought the arrangement into the National Scheme.

Education and training

With the advent of scheduled medicines prescribing rights for optometrists, an increase in the theoretical and clinical training was required to achieve eligibility for endorsement of registration.

Postgraduate courses were developed to meet this need initially. They constitute a year of part time didactic study and supervised clinical work to ensure that optometrists are competent to prescribe the full range of topical ocular agents. A significant proportion of this study involves reviewing current best practice in eye disease including the diagnosis and management of glaucoma and the pharmacology and clinical use of glaucoma drugs.

The accreditation standards for pre-registration programs were amended so that competence to prescribe scheduled medicines was incorporated into undergraduate optometric training. These programs were expanded to an equivalent of five academic years to incorporate the extra therapeutic training. The transition to these new programs will be complete in 2013 with all initial applicants for general registration required to be eligible for a scheduled medicines endorsement from 2014 onwards.

For both pre-registration and postgraduate ocular therapeutics courses, medical glaucoma specialists are among the educators to ensure that graduating students have an adequate understanding of the importance of cross-disciplinary and evidence-based practice in the diagnosis and management of glaucoma.

The curricula of these courses are designed to ensure that optometrists are at a level of competence to engage in independent decision making in the diagnosis and management of glaucoma. As such, the proposed amendments do not require any changes to these programs of study.

The Board anticipates a gradual transition to an optometry workforce in which all are trained in ocular therapeutics as existing registrants complete postgraduate training or through natural attrition.

Optometrists are already authorised to prescribe topical glaucoma medications. Anti-glaucoma eye drops is the preferred first choice for treatment for chronic glaucoma and optometrists endorsed for scheduled medicines are authorised under the applicable state and territory drugs and poisons legislation to prescribe these drugs.

There is no change required to the list of scheduled medicines that optometrists with an endorsement for scheduled medicines are currently authorised to prescribe with the proposed guideline amendments.

The Board's Code of conduct for optometrists requires optometrists to work within the limits of their individual competence and scope of practice.

NHMRC Guidelines

In drafting the amendments, the Board has considered the advice of its Scheduled Medicines Advisory Committee. In turn, this committee has based its recommendations to the Board on the NHMRC Guidelines referred to earlier.

It is anticipated that the NHMRC Guidelines should ultimately contribute to the standardisation of the quality of glaucoma care in Australia. The Board's proposal to allow endorsed optometrists to treat patients with glaucoma is in keeping with the recommendations in the NHMRC Guidelines including that collaborative care networks should be established for any given patient:

"These guidelines encourage the establishment and nurturing of networks between primary health care providers, and between primary health care providers and ophthalmologists, to ensure best quality comprehensive care is provided to patients suspected of having, or diagnosed with glaucoma."

The NHMRC Guidelines echo the Board's view of the importance of inter-professional communication through statements such as:

"If the degree of diagnostic suspicion of glaucoma is high however, the network should still be used for advice, and the appropriate decision may be a direct referral to a health care provider able to initiate treatment."

Of particular relevance, is the recommendation of the NHMRC Guidelines on the roles of collaborative care teams in the diagnosis and management of glaucoma.

"The Working Committee recommends that the professional roles, responsibilities and referral pathways are best determined in individual cases based on location, resources, skill-base of local health care providers and patient choice," which is further clarified by the comment that *"Classically, referral occurs to an ophthalmologist when significant suspicion of glaucoma is raised. In some parts of the country optometrists and or general practitioners can initiate treatment."*

The NHMRC Guidelines and the companion document outline a series of recommendations and supporting evidence for all practitioners involved in the screening, prognosis, diagnosis, management and prevention of glaucoma. This includes the skills and equipment required for practitioners to care for patients with or at high risk of developing the disease. Optometrists endorsed for scheduled medicines who initiate treatment and manage (in the form of eye drops) patients diagnosed with glaucoma, or who are at high risk of developing the disease are expected to be familiar with and refer to the NHMRC guidelines in their practice.

Collaborative care arrangements

There is increasing recognition of the value of collaborative care or inter-professional practice models in managing a variety of issues that arise in modern health care.

Such models aim to provide patients with optimal care under the increasing economic constraints on health care systems, particularly in rural areas where the demands on a specialist's time are great and an ageing population continues to increase these demands (Liaw and Kilpatrick, 2008).

Studies suggest that an increasing demand on the ophthalmologist's time (Quigley and Broman, 2006) may result in difficulty with scheduling follow up appointments, and increased waiting times

(Kosoko et al, 1998). This in turn is shown to result in poor patient compliance with both follow-up visits and therapy (Kosoko et al, 1998). The earlier therapeutic control is reached the better the long-term control of glaucoma (The AGIS Investigators, 2000). The recent release of the Health Workforce Australia's Health Workforce 2025 report into medical specialties identifies ophthalmology as a specialty most likely to be in undersupply (Health Workforce Australia, 2012).

The current arrangements requiring a formal documented care arrangement are dependent on timely access to specialist care. This is not always possible for those living in rural and remote communities or for those who are socially disadvantaged and dependent upon the public health sector. Timely access to care is vital for good outcomes in the management of glaucoma.

Optometry as a primary health care profession, coupled with the national density of optometric relative to specialist services (AIHW, 2009), means that optometrists are already responsible for the majority of initial contacts with individuals at risk of developing glaucoma or living with undiagnosed glaucoma.

The proposed amendments have a potential cost saving component also as the cost of optometric care through Medicare schedules is substantially less than that for specialist consultation.

The Board considers that removing the imperative for initial onward specialist referral of glaucoma patients, unless indicated, will produce cost savings to the Australian health system, whilst also improving access.

Optometrists can still choose to enter into a collaborative or shared-care arrangements with an ophthalmologist – and many practitioners, where access to specialist care is not an issue, are likely to continue to do so.

Although anti-glaucoma eye drops are usually the first choice for treating glaucoma, there are cases when an ophthalmological assessment is required for possible surgical intervention. Endorsed optometrists are trained and competent to identify such cases and refer where appropriate.

As for all eye conditions diagnosed and managed by optometrists, endorsed optometrists are required to, and do, refer patients requiring initial ophthalmological care or who are not responding to therapy.

Under the Board's guidelines optometrists are required to communicate with any other practitioners involved in the care of the patient.

Public interest

Assessment for glaucoma is a cornerstone of optometry practice, and optometrists represent by far the largest proportion of eye care practitioners with the equipment, knowledge, therapeutic qualification, and training to both diagnose and manage chronic glaucoma (AIHW, 2009).

The increasing prevalence and associated burden of disease costs of chronic glaucoma within the ageing Australian population (DoHA, 2009) means both the Australian health system and the patient would be better served were optometrists permitted to initiate glaucoma therapy; monitor the response to therapy; and make decisions on the need for referral as appropriate.

Current optometric training and continuing education provides optometrists with the practical and theoretical framework to do so without any need to increase this training.

It is the Board's view that the amended Guidelines increase care choice for patients living with chronic glaucoma or at high risk of developing the disease. This is consistent with the objectives of the National Registration and Accreditation Scheme including facilitating access to the services in accordance with the public interest.

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