Standards for Ophthalmology Training Posts

Includes: Code of Best Practice

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Introduction

The Royal Australia and New Zealand College of Ophthalmologists (RANZCO) provides specialist ophthalmological training to Trainees through the Vocational Training Program (**"VTP"**).

The objective of the VTP is to produce a specialist ophthalmologist who, on completion of training, is equipped to undertake safe, autonomous, comprehensive, general ophthalmology

practice. The seven key roles of the ophthalmologist, adopted from the CanMEDs Framework and which underpin selection, training and assessment, are:

1. ophthalmic expert and clinical decision maker
2. communicator
3. collaborator
4. manager/leader
5. health advocate
6. scholar
7. professional.

RANZCO has identified and prepared curriculum performance standards across the following 11 clinical areas of ophthalmology. The curriculum standards underpin all training and assessment within the VTP:

- glaucoma
- cornea
- cataract and lens
- neuro-ophthalmology
- ocular inflammation
- ocular motility
- oculoplastics
- clinical refraction
- paediatric ophthalmology
- vitreo retinal
- and refractive surgery.

Collaborative Eye Care

The training of tomorrow's specialist ophthalmologists is achieved via a focussed and sustained effort by the following key stakeholders delivering the necessary preconditions for excellence in ophthalmology training across Australia and New Zealand:

STAKEHOLDERS	KEY RESPONSIBILITIES	KEY COLLABORATION AREAS (ALL

		STAKEHOLDERS)
RANZCO	• Design, development and implementation of the specialist Vocational Training Program in Australia and New Zealand. • Maintaining accreditation under the 'National Law' from the Medical Board of Australia as per Australian Medical Council's Standards. • Establishing Standards for the Accreditation of Training Posts. • Accreditation of Training Posts. • Working collaboratively with Health Agencies, Training Networks and Training Posts to achieve appropriate resourcing for proposed Training Posts achieving continuity of training posts and a stable training environment. • Supporting RANZCO Fellows involved in training including but not limited to Qualification and Education Committee (QEC) members, examiners, Selection Board and panel members, Trainee Progression Committee (TPC) members, Accreditation Committee members, Directors of Training (DOT), Term Supervisors and Clinical Tutors. • Supporting the development of training resources including but not limited to those on the RANZCO Electronic Learning Platform.	• Optimum patient outcomes. • The preconditions for excellence in eye care including appropriate training, resourcing and service delivery. • The preconditions for optimal training environments for trainee ophthalmologists including compliance with the Standards, appropriate resourcing and facilities and the primacy of the health and safety of trainees. • Continuous improvement of the training experience for trainee ophthalmologists. • Addressing Maldistribution • Closing the Gap[1] • Best practice human resources including: 　(i) Fair, transparent and consistent recruitment practices 　(ii) Flexible work practices with a focus on part-time and interrupted employment positions. 　(iii) Safe working environments
Health Agencies and Hospital Systems	• Meeting best practice human resource and organisational development standards including the thematics as set	• Contributions to the centralised selection

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[1] 'Closing the gap' is an Australian government strategy that aims to reduce disadvantage among Aboriginal and Torres Strait Islander peoples.

	out by the Medical Board of Australia and Australian Health Practitioner Regulation Agency (AHPRA). • Meeting the demands of service delivery including maldistribution, 'closing the gap' and planning for and resourcing the delivery of appropriate health care facilities and services including ophthalmology services and departments.	approach adopted by RANZCO. • Support via key appointments of QEC Chairs and Director of Training appointments.
Training Networks	• Assistance and Cooperation with RANZCO Accreditation Inspections. • Coordination of training rotations across Accredited Training Posts within the Training Network. • Ensuring that trainees receive supervised training and experience and assessment according to the College's curriculum standards in each of the clinical areas over the four years a Trainee is in a Training Network. • Providing supervised training experiences in Training Posts in the procedures listed in Schedule 1.	
Training Posts	• Cooperation with RANZCO Accreditation Inspections • Ongoing compliance with the Standards. • Timely reporting of noncompliance with Standards and issues impacting Trainee health and safety to RANZCO. • Timely reporting of material changes and opportunities for improvement. • Promoting and sustaining a culture of teaching, training, learning and research, by providing supplementary resources (including time) for these activities to be efficient and effective.	

		• Providing sustained funding to enable trainees to be appointed to approved Training Positions within Training Posts. • Providing a training environment which ensures the health, welfare and interests of the trainees and which provides assistance to trainees experiencing difficulty.	

Accreditation & The Standards

Accredited Training Posts play a central role in the VTP by providing supervised training and experience across all clinical areas.

Accreditation is a pre-condition for Training Post involvement in the delivery of supervised training within the VTP.

All Applications for Accreditation are assessed against RANZCO's Training Posts Standards and Criteria ("**Standards**").

RANZCO gathers evidence of compliance with the Standards from the Application and during inspection of Training Posts.

Subject to the terms of any Conditional Accreditation, Accreditation permits a Training Post to provide training to specified approved Training Positions.

Accreditation is typically for three (3) years.

Tables 1 to 7 (below) identify the Standards across seven key domains. In order to be Accredited, a Training Post must be able to demonstrate compliance with each Standard that is assessed against the specified mandatory criteria and requirements.

Guides to best practice are also included with these Standards. These guides are intended to highlight ways in which training opportunities may be maximised. Best practice guidelines may also help inform decision making concerning the delivery of training within Training Posts. Any movement away from best practice must be carefully considered and appropriately justified. (RANZCO acknowledges the work of Dr Brian Sloan in the development of these Best Practice Guidelines.)

All Applications for Accreditation are assessed in accordance with RANZCO's Policy for the Accreditation of Ophthalmology Training Posts available on the College website.

RANZCO invites individuals and bodies to provide comments, suggestions and feedback to the College on any aspect of these Standards to permit continued improvement.

Definitions

"Application" means an application for Accreditation in the form specified in Schedule A to the Policy for the Accreditation of Ophthalmology Training Posts

"Term Supervisor" means a Clinical Tutor who is a RANZCO Fellow who has been appointed by the Training Post and who coordinates the team of Clinical Tutors to provide education, training and work-based assessment of RANZCO Trainees. The Term Supervisor also complete the Trainees' End of Term Supervisor's report in consultation with Clinical Tutors and with other members of the internal professional team, if appropriate.

"**Clinical Tutor**" means a RANZCO Fellow, however on occasion, subject to a commitment to ophthalmic training and if approved by the Regional Qualification and Education Committee, the following are also permitted to perform the role of Clinical Tutor:

- • International Medical Graduate (SIMG) (surgical tutor only)
- • RANZCO final year trainee (surgical tutor only)
- • a consultant from another Australasian medical college

"Training Network" means network in which the Training Post is located e.g.
(a) in Australia:
  i. The Victoria Network
  ii. The Sydney Eye Hospital, NSW Network
  iii. The Prince of Wales Hospital, NSW Network
  iv. The Queensland Network
  v. The South Australia Network
  vi. The Western Australia Network;
  vii. The Tasmanian Network; and
(b) in New Zealand, the New Zealand Network;
(c) any training network formally recognised by the College.

"Training Position" means an approved training position at an Accredited Training Post. Each Training Position is identified by reference to a specific year or years within the VTP e.g. "1st year Training Position". Each Training Position shall be assigned a number to be recorded on RANZCO's Customer Relationship Management (CRM) database.

"Training Post" means the hospital/clinic/facility applying for Accreditation including all Training Sites as specified in the Application.

"Training Site" means each of the individual sites, (where there is more than one), comprising the Training Post as specified in the Application.

For the purpose of this Standard, "supervised" includes "overseen by a Clinical Tutor".

Australian Medical Council Standards and Medical Council of New Zealand Standards

In its 'Standards and Procedures' for the accreditation of specialist medical education and training and professional development programs, the Australian Medical Council (AMC) sets out three broad standards for the accreditation of hospitals and/or training positions:

• the training organisation specifies the clinical experience, infrastructure and educational support required of the accredited hospital and/or training position, and implements clear processes to determine whether these requirements are met;

• the training organisation's accreditation requirements cover clinical experience; structured educational programs; infrastructure supports, such as library, journals and other learning facilities; continuing medical education sessions accessible to inform trainees; dedicated time for teaching and training; and opportunities for teaching and training in the work environment; and

• the accreditation standards of the training organisation are publicly available.

These Standards have regard to the broad standards identified by the AMC and where possible, seek to improve upon those standards.

The Standards also clarify the mandatory Site Policy Framework required by all Training Posts to ensure the health and safety of Trainees.

The complete accreditation requirements of the AMC, as well as those of the Medical Council of New Zealand, are available at www.amc.org.au.

Training Post Accreditation Standards and Criteria

TABLE 1: RANZCO STANDARD 1: Site Facilities

Criteria	Requirements
1.1 – There are facilities available in, or close to, the ophthalmic clinic or outpatients department. Please note: in children's hospitals, lasers may be located in the operating theatre.	**1.1.1** Mandatory: • Fluorescein and other angiographies • Photocoagulation/Argon laser • NdYAG laser • Ultrasound: A scan • Ocular biometry (eg IOL master/Lenstar) • Automated visual field test • Internet access and computer facilities • OCT **1.1.2** Desirable: • Contact lens fitting • Access to electrophysiology • Ultrasound: B scan • Access to ocular pathology • Corneal topography • Refractive laser • Emergency/Casualty
1.2 – There are appropriate facilities available in the operating theatre.	**1.2.1** Mandatory: • Operating microscope with assistant's scope • Camera, TV monitor and video recorder • Video facilities • Sufficient instrument trays • Phacoemulsification equipment • Vitrectomy equipment **1.2.2** Desirable: • Dedicated theatre • Dedicated theatre staff • Cryosurgical equipment

TABLE 2: RANZCO STANDARD 2: Site Policy Framework

Criteria	Minimum Requirements
2.1 - A policy framework is in place to cover the health, welfare and interests of the Trainees and to provide assistance to Trainees experiencing difficulty*.	2.1.1 Mandatory: • A policy framework including the following elements in order to promote the health, welfare and interests of the trainees and to provide assistance to trainees experiencing difficulty. Policies should include mechanisms to detect and respond to systemic issues impacting the health, welfare and interests of the trainees and include: o Bullying, Discrimination and Harassment Policy; o Complaints Policy; o Policy ensuring safe working environment including safe working hours; and o Policy supporting part-time training and transition into and returning from periods of extended leave.

Training Posts that rely on public and tertiary hospital policy to meet this criterion must be able to provide evidence of formal adoption of relevant policy and confirmation that trainees have knowledge of and access to such policy. All accredited Training Posts shall be required to provide annual certification confirming compliance with this criterion.

TABLE 3: RANZCO STANDARD 3: Teaching and Learning Facilities

Criteria	Requirements

3.1 – There are facilities and arrangements in place to support training.	***3.1.1*** Mandatory: • Teaching programs including didactic lectures, clinicopathological conferences and journal clubs • Exposure to clinical research methods e.g. clinical trials, case reports • Access to pathology and microbiology and biochemistry departments • Access to library of ophthalmic texts and journals in either print or electronic form and literature search facilities • A base location for trainees • Routine radiological investigations with access to CT & MRI scanning
	3.1.2 Desirable: • Close liaison with other disciplines including neurology, neurosurgery, paediatrics, plastic and facio-maxillary surgery, endocrinology • Presentation and publishing of papers by trainees • Teleconference/video facilities for teaching lectures
3.2 Each Training Post should have access to at least one microsurgical skills laboratory that is readily available to trainees within its Network.	***3.2.1*** Mandatory: The room must be of adequate size to contain: • At least one bench • One operating microscope with observer piece • Small refrigerator (not necessary if only nonanimal eyes are used) • Lockable cupboard for instruments, etc. • At least two and preferably three mobile chairs
	• Two or three people

	3.2.2 Mandatory: The room must have: • Good lighting • Adequate power points • Temperature control and/or ventilation
	3.2.3 Mandatory: Contents of the room must include: • Operating microscope as above • Chairs as above • Adequate instruments, sutures, viscoelastic, etc. • A log book for registration of session • Phaco machine • Suitable eye holder • Ideally a video with a monitor and video recorder

TABLE 4: RANZCO STANDARD 4: Supervision

Criteria	*Requirements*
4.1 – Clinical Tutors and Term Supervisors	**4.1.1** Mandatory: • A minimum of three (3) Clinical Tutors per Training Post including a Term Supervisor.
	4.1.2 Mandatory: • For each additional trainee, there must be an additional consultant Clinical Tutor available

	4.1.3 Mandatory: • Term Supervisor and Clinical Tutor commitment must be demonstrated by the time spent supervising the trainee. This is verified by a roster document and by trainee feedback. The full time equivalent participation of consultants must be sufficient to meet the RANZCO Standards for Supervision of Trainees (below).
4.2 – Clinical Tutors are to be provided to the trainee	**4.2.1** Mandatory: • Term Supervisors to provide appropriately qualified Clinical Tutors to the trainee
4.3 – Term Supervisor Contact	**4.3.1** Mandatory: • Term Supervisors and trainees must have regular contact, weekly at a minimum
4.4 – Supervised Clinical Sessions	**4.4.1** Mandatory: • All clinical sessions undertaken by trainees must be supervised by a Clinical Tutor. • If a trainee does not need to be closely supervised in clinic, as assessed by the supervising consultant, a trainee may be regarded as supervised provided at least one consultant is present in the same building as the

	clinic and is available to attend the clinic at any time required by the trainee during the session. • Supervision may be provided remotely.
	4.4.2 Desirable: • A minimum of one (1) clinical session must be with the same person each week.

	4.4.3 Mandatory: • A Clinical Tutor may not oversee more than three (3) trainees in a clinic session.
	4.4.4 Mandatory: • Where remote supervision is provided, the trainee must be provided with a designated time to discuss any issues that may have arisen during the clinic.

Best Practice Guidelines

- *The number of trainers associated with each trainee is a delicate balance. The minimum number of trainers is set out in this section, and this allows for reasonable breadth of exposure to different methods, preferences and teaching styles. On the other hand, too many trainers can be troublesome, as the trainees spend less time with each, and have more difficulty developing meaningful educational relationships with them.*

- *In Training Posts where there are a high number of potential trainers, it obviously makes most sense to preferentially use those who show the most commitment to teaching, and those who have the highest number of sessions in the department (to maximise both formal and informal trainee contact).*

- *In departments where final year trainees are also trained, there may be some benefit in separating College trainees from fellowship training to maintain a direct and undiluted trainee:trainer relationship. This is discussed further in the sections below.*

- *There is considerable benefit for the trainee in having frequent and consistent contact with most of their Clinical Tutors. At least one clinical session must be with the same person every week. Clinics which run on fortnightly cycles are less attractive, particularly as annual leave, holidays, etc. often reduce contact with a specific trainer even further.*

- *Clinics which occur once a month are highly undesirable, and should only be considered if there are compelling benefits visible, such as excellence in teaching or a rarity of case mix*

4.5 – Supervised theatre sessions	**4.5.1** Mandatory: • All theatre sessions undertaken by trainees must be supervised by a Clinical Tutor. • A Clinical Tutor may not oversee

	more than two (2) trainees per operating session. • If a Clinical Tutor assesses that a trainee does not need to be closely supervised in theatre, that trainee may be considered to be appropriately supervised provided at least one Clinical Tutor is within the theatre complex, in theatre apparel, available to scrub and to attend theatre at any time during the session.
	4.5.2 Mandatory: • A **trainee in the first two years of training** must be closely supervised in order to: • ensure patient safety; • enable the Clinical Tutor to monitor the developing competence of the trainee; and • enable the Clinical Tutor to proactively identify any deficiencies in the trainee's performance as early as possible, and implement a suitable remediation process. For the purpose of this requirement, "closely supervised" means a Clinical Tutor must be present in theatre.

Best Practice Guideline:

• *Surgical supervision occurring on a two-weekly rotation is necessarily much more disrupted, and four-weekly supervision virtually requires the trainee and Clinical Tutor to start afresh every time they meet so it is of limited value and highly undesirable.*

- *When supervision is more remote like this, there should still be a designated time for the trainee and the Clinical Tutor to discuss any issues that may have arisen during the surgery, such as a quick note review at the end of the clinic.*

- *It is very easy to stop training our trainees as soon as they become competent. Whilst a period of consolidation is valuable once trainees have acquired the basic skills, there is also a unique opportunity to take their expertise 'to the next level' by continuing close supervision, and discussing each case objectively.*

- *The RANZCO surgical assessment format is useful – what was done well, and should be continued; what should be done more; what should be done less. Encouraging trainees to participate in calm and objective critical analysis of their performance is of immense value.*

- *Increasing competence obviously gives the opportunity to expand the trainee's surgical exposure – either more complex cases, or procedures from Schedule 1, Table 2.*

Table 5: RANZCO STANDARD 5: Profile of Work

Criteria	Requirements
5.1 – The Training Post provides a suitable workload and appropriate range of work	*5.1.1* Mandatory The Training Post must provide each trainee with four (4) supervised clinics per week. A supervised clinic is one in which the trainee and the Clinical Tutor work with patients, either in tandem or in close proximity, to enable them to discuss cases and maximise training opportunities as they present.
	5.1.2 Mandatory The Training Post must provide each trainee with two (2) supervised operating theatre sessions per week. A supervised operating theatre session is one in which the trainee and the Clinical Tutor are present together in theatre, preferably without a fellow or another trainee present.
	5.1.3 Mandatory The trainee is provided with opportunities to be trained in and use lasers.
5.2 – Supervised Clinics	*5.2.1* Mandatory: Trainees and Clinical Tutors must work from the same patient list. **5.2.2 Mandatory** Term Supervisors at the commencement of a term, complete in conjunction with the trainee, an "Intentions for Term" document that will guide the Clinical Tutors as to what skills the trainee should achieve in the training post.

Best Practice guideline:

- *There are many suitable models of supervision in clinic, but the ready availability of the Clinical Tutor is the key component.*

- *One Clinical Tutor may effectively supervise more than one trainee; two or three trainees is probably the practical limit – fewer if the trainer has their own clinic load to attend to.*

- *Fellows (such as visiting fellows or final year trainees) can supervise trainees in clinic, but it should be noted that, in this circumstance, the Clinical Tutor of the clinical session is required to be approved by RANZCO Regional QEC.*

- *There is great merit in supervised clinics working from one patient list, rather than the Clinical Tutor and the trainee having their separate patient lists. Benefits include:*

  o *the Clinical Tutor knows how many patients the trainee is seeing and how long they are taking – trainees should be rescued if a patient is taking much longer than normal;*

  o *the Clinical Tutor can select which patients the trainee should see – preferably selecting new patients, interesting clinical problems and patients the trainee has seen before (continuity of patient care is often sorely lacking through training); and*

  o *the Clinical Tutor may be able to give the trainee targeted assistance about what to look for in the allocated patient.*

- *Expectations regarding consultation about each patient with the Clinical Tutor should be explicitly defined early in the run. The art of presenting a patient to the Clinical Tutor is an extremely valuable one for the trainee (both in terms of preparation for exams and for practicing life). It also gives the Clinical Tutor an opportunity to understand and analyse the trainee's thought processes and their ability to sift through the noise and formulate sound structured management plans.*

- *It is not unreasonable to expect a first year trainee to report on every patient they see; more advanced trainees might only present new or complicated patients.*

5.3 – Supervised Theatre Sessions	***5.3.2*** Mandatory: The trainee implements procedures in accordance with a plan discussed beforehand with the Clinical Tutor taking into account the circumstances of each patient and the trainee's surgical skills (as previously demonstrated in a skills laboratory or on patients with a consultant in attendance).

Best Practice guideline:

- *At least one of the supervised surgical sessions each week should have direct trainee/Clinical Tutor interaction for the entire list, without any competing demands (final year trainees or visiting fellows, etc.).*

- *At least one of the supervised surgical sessions each week (preferably the same session as above) should have a case mix that is almost entirely suitable for the trainee's experience and skill level.*

- *The overall case mix should reflect RANZCO's lists of procedures (perform autonomously, assist with good knowledge, some understanding). Procedures that trainees are not necessarily expected to perform autonomously (Schedule 1, Tables 2 and 3) obviously provide an opportunity for the Term Supervisor or others (final year trainees or visiting fellows) to perform all or part of the surgery, but even these procedures may give some opportunity for the trainee to gain valuable skills by performing certain parts under supervision).*

- *It is important for at least one of the trainee's surgical sessions to be supervised by the same person each week, to allow development of surgical momentum. This issue is especially critical for junior trainees, whose confidence and skills may atrophy quickly without the opportunity to consolidate their skills by repetition.*

- *Surgical supervision occurring on a two-weekly rotation is necessarily much more disrupted, and four-weekly supervision virtually requires the trainee and Clinical Tutor to start afresh every time they meet so it is of limited value and highly undesirable.*

- *It is important that the trainee has continuity of care throughout the surgical episode. This includes the opportunity to assess the patient thoroughly pre-operatively (more than a quick look on the slit lamp in the surgical suite). The trainee should be able to enunciate and justify the surgical plan, identify particular areas of risk and plan contingencies.*

- *Trainees should be directly involved in the majority of their patients' post-operative care. Seeing their own cataract patients on day one will give them valuable feedback about what went right and what went wrong during surgery. Long term follow-up may be compromised by trainee rotations, but are also an essential part of the audit cycle.*

- *Alternating week rosters often make it more difficult for trainees to see their own patients post-operatively.*

Table 6: RANZCO STANDARD 6: Trainees' Surgical Experience

Criteria	Requirements

6.1 – Trainees' readiness for surgery To assist with adequate surgical exposure, it is strongly recommended that Accredited Training Posts are filled by 1st – 4th year trainees, and not final year trainees. It is recommended that the trainee by the end of year two should have performed an adequate number of supervised intraocular procedures.	**6.1.1** Mandatory: Term Supervisors must arrange for each new trainee to attend theatre as soon as practicable to become familiar with theatre business, technique, culture and protocols.
	6.1.2 Mandatory: Term Supervisors must as soon as practicable identify each trainee who has had no microsurgical experience and arrange a supervised program of wet lab or surgical simulator experience for the trainee.
	6.1.3 Mandatory: Term Supervisors must record a trainee's wet lab or surgical simulator experience and performance. Term Supervisors may use the College's *Theatre Performance Assessment* form for this purpose.
	6.1.4 Mandatory: The Term Supervisor must as soon as practicable make a judgment on the readiness of each trainee to perform procedures on patients and the degree of supervision required in theatre.
	6.1.5 Mandatory: A Term Supervisor of a term that is light in surgery should include in the 'Intentions for the Term' an arrangement for the trainee to maintain surgical skills in a wet lab or with a surgical simulator.
	6.1.6 Mandatory: Arrangements must be made as soon as practicable by the Director of Training for any trainee for whom there is a significant break in continuity of surgical exposure to regain such exposure and maintain

	surgical skills.
	6.1.7 Mandatory: Training Posts must ensure that priority is given to the surgical training needs of trainees.

Table 7: RANZCO STANDARD 7: Trainees' Clinical Experience

Criteria	Requirements
7.1 Trainees' readiness for clinical work	**7.1.1** Mandatory The trainee is to receive supervised training and experience, and be assessed according to the College's curriculum standards in each of the clinical areas.
	7.1.2 Mandatory The trainee is to be involved in a minimum of four (4) supervised outpatient clinics and two (2) supervised operating lists each week.
	7.1.3 Mandatory Trainees are to be involved in the management of ophthalmic casualties, probably by way of an emergency roster.
	7.1.4 Desirable Trainees should be involved in clinical audit, and in teaching at postgraduate and undergraduate levels where possible.

POST SPECIFIC FACTORS

There can be factors that might require or allow specific adjustment to the way in which a particular post's compliance with the Standards is assessed. For example:

• RANZCO is committed to Closing the Gap and the requisite cultural competence training that this requires. This includes encouraging exposure to both urban and remote Indigenous eyecare.

• Some Training Posts will be suitable for a trainee in years one and two, but not for a trainee in years three and four, and vice versa; this will be outlined within the recommendation and recorded in the College database.

• A Training Post might offer surgical experience that would be satisfactory for a rotation period of three to four months, but not for a period of six months or longer.

There may be other factors that are to be taken into consideration. Each case shall be assessed on its individual merits.

SCHEDULE 1

List of all surgical procedures contained in RANZCO's Clincial Curriculum peformance standards
Preamble

The following brings together surgical procedures contained in the College's curriculum performance standards for clinical areas. It has been extensively peer reviewed and is valid at 1 June 2017.

RANZCO expects that all Training Networks in Australia and New Zealand will be able to provide supervised training experiences in the procedures listed, appropriate to the table in which each procedure appears. In cases where appropriate training in a procedure is unlikely to be available, the director of training should seek advice from the RANZCO Censor-in-Chief to address gaps.

The Tables

Tables 1, 2 and 3 bring together all the surgical procedures that are contained in RANZCO's clinical curriculum performance standards.

These three tables indicate the level of mastery to be attained by trainees by the end of their training.

- Procedures that trainees must be able to perform autonomously are listed in Table 1 and are rated *** in the clinical curriculum performance standards.

- Procedures with which trainees should have assisted, and of which they should have good practical knowledge, are listed in Table 2 and are rated ** in the clinical curriculum performance standards.

- Procedures of which trainees must have some understanding are listed in Table 3 and are rated * in the clinical curriculum performance standards.

Use of this resource

RANZCO requires Directors of Training, Term Supervisors, Clinical Tutors and Trainees to use the following tables to plan and track training and assessment.

Table 1 – Surgical procedures that Trainees must be able to perform autonomously (***)

Curriculum Performance Standard	Procedure	Reference in Curriculum Performance Standards
Cataract	Perform accurate ocular biometry to assess corneal curvature (keratometry), anterior chamber depth, lens thickness and axial length	CT 2.10.1
	Perform and interpret B scan ultrasonography	CT 2.10.8
	Perform and interpret fluorescein angiography	CT 2.11.1
	Perform phaco-emulsification	CT 4.5.1
	Perform regional anaesthesia: peribulbar/ sub-Tenon block	CT 4.9.1
	Perform regional anaesthesia: topical anaesthesia	CT 4.9.1
	Perform cataract surgery	CT 4.10
	Design wound placement and creation taking into account pre-existing astigmatism	CT 4.10.1
	Select viscoelastic device suitable for surgical need	CT 4.10.2
	Maintain anterior chamber with use of viscoelastic device	CT 4.10.3
	Perform anterior capsulotomy with regard to the intraocular lens to be implanted, pupil size, cataract type and method of nuclear removal	CT 4.10.4
	Perform adequate hydro-dissection and hydro- delineation to ensure adequate lens mobility within the capsule when required	CT 4.10.5
	Perform lens disassembly and removal by desired technique	CT 4.10.6
	Perform cortical removal and clean up with irrigator-aspirator	CT 4.10.7
	Modify wound to appropriate lens size and insert lens with and without the use of a viscoelastic device	CT 4.10.8

	Appropriately rotate toric IOLs to the planned meridian having identified this meridian prior to surgery	CT 4.10.9

	Remove viscoelastic agent	CT 4.10.10
	Check wound integrity	CT 4.10.11
	Suture wound if indicated	CT 4.10.12
	Perform further incisional surgery to correct pre-existing astigmatism	CT 4.10.13
	Administer antibiotic and/or anti-inflammatory prophylactic	CT 4.10.14
Cornea	Perform corneal scraping and culture	CE 2.7.1
	Perform surgery to manage external eye and corneal conditions	CE 4.5
	Perform electrolysis for the treatment of trichiasis	CE 4.5.3
	Perform excision of pterygium and pinguecula including conjunctival autograft	CE 4.5.5
	Suture corneal lacerations	CE 4.5.6
	Glue corneal perforation and apply corneal bandage lens	CE 4.5.7
	Use epithelial debridement or bandage contact lens to aid in epithelial healing	CE 4.5.8
Glaucoma	Perform laser trabeculoplasty	GL 4.8.1
	Perform peripheral iridotomy using YAG and argon lasers	GL 4.8.2
	Perform panretinal photocoagulation using a laser for the management of glaucoma	GL 4.8.3
	Perform trabeculectomy including the use of antimetabolites and releasable sutures	GL 4.9.2
	Perform lens / cataract surgery as treatment for angle closure (glaucoma)	GL 4.9.3
	Perform combined glaucoma and cataract surgery	GL 4.9.4
	Perform a peripheral iridectomy	GL 4.9.5
	Identify and manage intraoperative complications of glaucoma surgery	GL 4.9.7

	Assist with or observe glaucoma drainage (tube) device insertion	GL 4.9.8
	Perform sub-conjunctival injection of 5-fluorouracil or steroids	GL 4.10.2
	Perform suturelysis	GL 4.10.3
	Inject visco-elastic into the anterior chamber	GL 4.10.5
Neuro	Perform temporal artery biopsy	NO 4.5.1
Ocular-Motility	Perform recession surgery	OM 4.6.4
	Perform inferior oblique myectomy	OM 4.6.4
	Perform advancement surgery	OM 4.6.5
	Perform resection surgery	OM 4.6.5
Oculoplastics/ Orbit	Perform emergency canthotomy / cantholysis	OP 4.7.2
	Perform techniques to correct ectropion	OP 4.7.3
	Perform techniques to correct involutional type entropion	OP 4.7.4
	Perform techniques to correct involutional ptosis	OP 4.7.5
	Perform simple eyelid and periorbital reconstruction including wedge resection lateral canthal advancement flaps and free grafts	OP 4.7.6
	Perform lateral tarsorrhaphy	OP 4.7.7
	Perform nasolacrimal probing and syringing	OP 4.7.8
	Perform punctal snip	OP 4.7.9
	Perform punctal occlusion	OP 4.7.10
	Perform tarsoconjunctival cautery	OP 4.7.11
	Perform simple evisceration and enucleation	OP 4.7.12

	Incise and curette tarsal cysts	OP 4.7.13

	Perform techniques to correct trichiasis including cryotherapy, electrolysis and radiofrequency follicle ablation	OP 4.7.14
	Perform eyelid biopsies	OP 4.7.15
	Perform bulbar conjunctival biopsy	OP 4.7.16
	Participate in enucleation with integrated orbital implant	OP 4.8.1
Ultrasound	Utilise B-scan ultrasound to determine the topographic nature of structures in the eye	OU 3.3
	Perform ophthalmic ultrasound on patients with vitreoretinal disease	OU 4.2
Paediatric	Investigate uveitis via aqueous and vitreous sampling	PO 4.8.1
Ocular/Inflammatory	Demonstrate safe use of laser techniques in management of ocular inflammation	UV 4.6.2
	Use photocoagulation to manage commonly encountered ocular inflammatory conditions	UV 4.6.1
	Administer therapies for ocular inflammation using intravitreal injection	UV 4.7.1
Vitreoretinal	Demonstrate safe use of laser techniques in vitreoretinal management	VR 4.4.1
	Perform laser treatment to manage diabetic retinopathy, including focal and grid laser for threatened or actual DME, and panretinal laser for PDR	VR 4.4.2
	Perform intravitreal injection of different agents (steroids, anti-VEGF therapies) to manage neovascular AMD, DME or other vascular retinopathies	VR 4.4.3
	Perform tap and inject procedures to manage endophthalmitis following intravitreal therapy	VR 4.4.4
	Participate in vitrectomy and buckling procedures	VR 4.4.5

	Use contact lens or indirect-laser delivery in performing laser treatment to seal retinal breaks	VR 4.4.6

Table 2 – Surgical procedures with which trainees should have assisted, and of which they should have good practical knowledge (**)

Curriculum Performance Standard	*Procedure*	*Reference in Curriculum Performance Standards*
Cataract	Perform extra-capsular cataract extraction (ECCE)	CT 4.5.2
	Perform regional anaesthesia: retro-bulbar block	CT 4.9.2
	Perform facial nerve blocks	CT 4.9.3
Cornea	Provide appropriate surgical management of corneal and conjunctival tumours and neoplastic disease	CE 4.5.9
	Inject botulinum toxin to induce ptosis	CE 4.5.10
Glaucoma	Assist with or observe goniotomy or trabeculotomy	GL 4.9.9
	Assist with or observe EUA for follow-up of infantile glaucoma	GL 4.9.10
Ocular/Motility	Use adjustable sutures to correct strabismus where appropriate	OM 4.6.6
	Undertake transposition techniques to correct strabismus	OM 4.6.7
	Understand vertical rectus muscle procedures for hypotropia and hypertropia	OM 4.6.8
	Understand Anderson-Kestenbaum techniques to correct head posture in nystagmus	OM 4.6.9
Oculoplastics/Orbit	Perform techniques to correct cicatricial ectropion with full thickness skin graft	OP 4.7.17
	Repair lid lacerations including monocanalicular stenting	OP 4.7.18
	Perform functional upper lid reduction	OP 4.7.19
	Perform medial and lateral canthoplasty techniques	OP 4.7.20

	Perform direct eyebrow lift	OP 4.7.21
	Perform external DCR	OP 4.7.22
	Assist with or observe surgical treatment of cicatricial entropion	OP 4.8.2

	Assist with or observe surgical treatment of ptosis	OP 4.8.3
	Assist with or observe surgical treatment of neurogenic ptosis	OP 4.8.4
	Assist with or observe surgical treatment of myopathic ptosis	OP 4.8.5
	Assist with or observe posterior lamellar reconstruction with mucous membrane grafting	OP 4.8.6
	Assist with or observe orbital surgery	OP 4.8.7
	Assist with or observe eyelid recession	OP 4.8.8
	Assist with or observe intubation of nasolacrimal system	OP 4.8.9
	Assist with or observe anophthalmic socket reconstruction	OP 4.8.10
	Assist with or observe fitting of ocular prosthesis	OP 4.8.11
	Assist with or observe lacrimal gland surgery	OP 4.8.12
	Assist with or observe assessment of the weight of gold required for an upper eyelid weight	OP 4.8.13
	Assist with or observe insertion of eyelid weight for facial palsy	OP 4.8.14
Ultrasound	Utilise A-scan mode to determine the quantitative nature of structures in the eye	OU 3.4
	Utilise the three primary B-scan probe orientations to perform and report standardised examination of the globe	OU 3.6
	Perform ophthalmic ultrasound on patients with oncologic disease	OU 4.3
Paediatric	Perform cryotherapy for Rb	PO 3.3.2

	Perform enucleation for Rb	PO 3.3.3
	Perform laser surgery for Rb	PO 3.3.2
	Perform intraocular lens implantation for management of cataract	PO 6.4.7
	Perform lensectomy for paediatric cataract	PO 6.4.7
	Perform vitrectomy for paediatric cataract	PO 6.4.7
	Perform intraocular lens implantation	PO 6.7.4

	Perform cycloablation for management of paediatric glaucoma	PO 5.3.1
	Perform goniotomy for management of paediatric glaucoma	PO 5.3.1
	Perform implant surgery for management of paediatric glaucoma	PO 5.3.1
	Perform trabeculectomy for management of paediatric glaucoma	PO 5.3.1
	Perform trabeculotomy for management of paediatric glaucoma	PO 5.3.1
Refractive	Assist with or observe PRK	RS 3.1.1
	Assist with or observe LASEK	RS 3.1.1
	Assist with or observe LASIK	RS 3.1.1
	Assist with or observe incisional keratotomy	RS 3.1.1
	Assist with or observe corneal inlay	RS 3.1.1
	Assist with or observe intraocular refractive surgery for cataract extraction	RS 3.1.2
	Assist with or observe intraocular refractive surgery for clear lens	RS 3.1.2
	Assist with or observe intraocular refractive surgery for phakic IOL	RS 3.1.2
Vitreoretinal	Manage cataract following vitrectomy surgery	VR 4.5.5
	Assist with removal of silicone oil from posterior chamber with or without	VR 4.5.6

	Perform cryopexy to seal retinal break/s with or without intravitreal gas injection	VR 4.5.8
	Assist with removal of segmental scleral buckle in buckle extrusion	VR 4.5.9

Table 3 – Surgical procedures of which trainees must have some understanding (*)

Curriculum Performance Standard	*Procedure*	*Reference in Curriculum Performance Standards*
Cataract	Perform intracapsular cataract extraction (ICCE)	CT 4.5.3
Cornea	Assist with or observe stromal micropuncture	CE 4.5.15
	Assist with or observe cryotherapy for the treatment of trichiasis	CE 4.5.16
	Assist with or observe partial conjunctival flap procedure	CE 4.5.18
	Assist with or observe Gundersen conjunctival flap procedure	CE 4.5.19
	Assist with or observe the use of excimer laser phototherapeutic keratectomy (PTK) for disorders of the epithelium and anterior stroma	CE 4.5.20
Ocular Motility	Perform tenotomy	OM 4.6.4
	Perform marginal myotomy	OM 4.6.4
	Perform tucking	OM 4.6.5
Oculoplastics / Orbit	Assist with or observe endonasal DCR	OP 4.8.15
	Assist with or observe revision DCR	OP 4.8.16
	Assist with or observe repair of lid lacerations including bi-canalicular stenting	OP 4.8.17
	Assist with or observe cosmetic upper and lower lid reduction	OP 4.8.18
	Assist with or observe mid-face lift	OP 4.8.19
	Assist with or observe alternative techniques for eyebrow lift	OP 4.8.20
	Assist with or observe repair of orbital floor fractures following facial trauma	OP 4.8.21

	Assist with or observe complex orbital fractures	OP 4.8.22
	Assist with or observe skin resurfacing	OP 4.8.23

Vitreoretinal	Use vitreous biopsy to identify retinal lymphoma	VR 3.4.1
	Use fine needle biopsy to identify melanoma	VR 3.4.2
	Perform endolaser treatment during vitreous surgery	VR 4.4.7