

OPHTHALMOLOGY RESIDENCY

TRAINING REQUIREMENTS

(A) INTRODUCTION

Definition and Scope of the Specialty

- The surgical specialty of ophthalmology focuses on ophthalmic diseases and ocular surgery.

Duration of Education

- The education in ophthalmology must be 60 months in length. (Transitional Year/PGY1 year is required)

(B) PROGRAMME OVERVIEW

- 36 months (ACGME-I accredited for R1-R3)
- 24 months (JCST accredited for R4- R5)

(C) TRAINING REQUIREMENTS R1 – R3

ACGME-I's advanced specialty requirements can be found here: <http://www.acgme-i.org/web/requirements/specialtypr.html>

(D) TRAINING REQUIREMENTS R4 – R5

1. Foundational Requirements

The R4-R5 years must be in compliance with ACGME-I's Foundational Requirements.

Foundational requirements for all other specialties: <http://www.acgme-i.org/web/requirements/internationalfoundational.pdf>

2. Specialty Specific Requirements

A) Clinical experience and supervision

1. Overview – The program should provide ample opportunities to manage patients with one or more ophthalmic conditions in all of the following subspecialty areas (listed in 8), focusing on **integration** of clinical information, clinical judgement, application of medical knowledge, and integration of various ACGME competencies to deliver consistent and quality care as a general ophthalmologist. The Senior Resident should be able to diagnose a wide range of conditions across different sub-specialties. He should also be able to provide standard treatment for most common ophthalmic conditions, and provide initial therapy and refer appropriately for complex ophthalmic conditions best managed by an appropriate subspecialist.
2. Level of supervision – The program should provide ample opportunities for the Senior Resident to provide direct patient care. The degree of supervision should be periodically recalibrated based on his clinical performance – from direct to indirect to remote supervision. The Senior Resident is expected to supervise the Junior Resident, but always under indirect to remote supervision by a faculty.
3. Comprehensive ophthalmology – a key focus of the Senior Residency is longitudinal care of patients with multiple ophthalmic conditions, related or unrelated. The ability to integrate and prioritize care is crucial in the aging population where most patients suffer from multiple chronic ophthalmic conditions.
4. The PD must provide clear goals and objectives for each component of clinical experience. The PD is encouraged to use published framework such as the ICO list of subspecialty conditions, and tailor accordingly to local needs. (http://www.icoph.org/refocusing_education/curricula.html#ICO Residency Curriculum).

5. Subspecialty areas in ophthalmology include:
 - 5.1 Systemic medicine in relationship to ophthalmology
 - 5.2 Cornea and external eye diseases
 - 5.3 Glaucoma
 - 5.4 Uveitis and ocular inflammation
 - 5.5 Cataract and lens pathologies
 - 5.6 Vitreoretinal diseases
 - 5.7 Oculoplastics including orbit
 - 5.8 Paediatric Ophthalmology & Strabismology
 - 5.9 Neuro-Ophthalmology
 - 5.10 Refractive surgery
 - 5.11 Ocular oncology
 - 5.12 Ocular trauma

Surgical experience and supervision

6. Overview – the aim of surgical training of the Senior Residency is to consolidate surgical training in common surgical procedures performed by a general ophthalmologist, bringing the level of expertise from competent to proficient. It is not the intent of the Senior Residency to train subspecialty surgeries. The assessment of surgical proficiency should be competency based.
7. The following table stipulates the minimum surgical experience required for Senior Residency in Ophthalmology. Below these numbers, it is unlikely that the candidate could achieve proficiency in each of these procedures. The program should aim for sufficient surgical experience to achieve proficiency, which is typically higher, depending on the learner and the faculty.
8. Minimum surgical experience (performed as primary surgeon) required:

No.	Procedures	Min. No. in Snr Residency	Min. No. in Jnr Residency	Min. Total no. in Residency
1	Cataract (Phaco/ECCE)	120*	80	250
2	Pterygium conj graft	10		
3	Repair of eyelid laceration (Full thickness)			3
4	Tarsorrhaphy	3		
5	Laser PRP	50		
6	Macula laser	3 on real patients and 3 simulated		
7	Laser retinopexy	10		
8	Laser PI	20		
9	Laser capsulotomy	20		
10	Aqueous paracentesis	3		
11	Vitreous tap	5		
12	Intravitreal injection	20		
13	Cornea/Scleral T&S/corneal gluing	3		

*with video review of last consecutive 10 cases and audit of last 100 cases

B) Rotation and structure – The program shall consist of a longitudinal component of comprehensive care, and at least subspecialty care of at least 2 half-day sessions per week on average over the 2 years. Residents may spend a portion of the training period, either part-time or full-time, in another sponsoring institution. The program should strive to make available external rotation opportunities. The Program Director (PD) has flexibility to configure the rotations.

C) Didactics Sessions

The program must provide adequate teaching sessions including the following:

1. Didactics and tutorials including fundus angiogram and imaging round

2. Morbidity rounds
3. Grand rounds
4. The program should encourage residents to attend local and overseas conferences

D) Residents' Scholarly Activities

1. Education experience

- 1.1. Learner as educator, and
- 1.2. Learner as supervisor, and
- 1.3. Learner providing feedback

2. Research experience

- 2.1. Experience in clinical research such as clinical trials
- 2.2. Or, experience in animal research
- 2.3. Or, experience in bench research
- 2.4. Or, experience in health service or epidemiology research

3. Quality and system improvement and audits

- 3.1. Experience in clinical audits
- 3.2. Or experience in quality improvement projects
- 3.3. Or experience in adverse event reporting and root cause analysis

3. Resident Competencies

The Program must continue to emphasize and evaluate the following competencies: Professionalism, Communication Skills, Medical Knowledge, Patient Care and Technical Skills, Practice-Based Learning and Improvement and Systems-Based Practice domains in the senior residency year attaining a level of proficiency.

(E) LOG OF OPERATIVE / CLINICAL EXPERIENCE

All residents must keep a log of their operative / clinical experience in the designated case log system as imposed by the PDs.

(F) ASSESSMENT AND EXAMINATIONS

I. Supervisors Assessment

The supervisor's evaluation of the resident should be performed at least every 6 monthly using the designated form.

Formative Assessment

- Formative assessment and promotion – The PD has flexibility to design formative assessment system. The program must provide progress report at minimum six months' interval.
- The Program must continue to emphasize and evaluate the following competencies: Professionalism, Communication Skills, Medical Knowledge, Patient Care and Technical Skills, Practice-Based Learning and Improvement and Systems-Based Practice domains in the senior residency year attaining a level of proficiency. The RCTE form (optional) may be used to track these competencies. Alternative continued assessment structures may be used, subjected to approval by RAC.
- All Senior Residents must keep a learning port-folio, which must include rotations, supervisors, surgical cases performed with outcome, learning points from cases, presentations, courses attended and other academic activities such as research, teaching experience, audits and quality improvement projects, if any. The faculty may evaluate the learning port-folio from time to time as part of continued assessment.

II. Feedback

Residents should perform a yearly evaluation of teaching faculty and the training programme using the designated forms. Aggregated results must be submitted to the RAC and kept absolutely confidential.

III. Examinations

<i>R1</i>	<i>R2</i>	<i>R3</i>	<i>R4</i>	<i>R5</i>
		<i>M.Med (Ophthalmology)</i>	<i>ABMS-MCQ</i>	

(G) CHANGES IN TRAINEESHIP PERIOD AND LEAVE OF ABSENCE

I. Changes in Training Period

Residency should be continuous. If a training programme is interrupted for any reason whatsoever, the RAC may at its discretion, require the resident to undergo a further period of training in addition to the minimum requirements of the programme or terminate the residency altogether. All residents are required to conform to the residency training plan as approved by the RAC and complete all the exit and training requirements within the maximum candidature.

II. Leave Of Absence

All residents are to comply with the prevailing MOH policy on Leave of Absence.

III. Overseas Postings

Overseas attachment during Senior Residency training is not permitted with the exception of Radiation Oncology and Neurosurgery (*refer to JCST Circular 114/14*).