

## **Appendix 2: Otolaryngology Syllabus**

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The syllabus is organised by topics which are the presenting conditions of patients in relation to the specialty. Formative WBAs may be used to assess and provide feedback on any areas of clinical activity. However, other than for the critical conditions, index procedures or where they have been identified to address a concern, WBAs are optional and trainees, therefore, do not need to use WBAs to evidence their learning against each syllabus topic.

### **Standards for depth of knowledge during intermediate and final years surgical training**

In the two phases of specialty training the following methodology is used to define the relevant depth of knowledge required of the surgical trainee. Unless otherwise stated in this document, the knowledge and clinical skills listed below are expected to be at level 4 at the end of phase 2.

- 1 - knows of
- 2 - knows basic concepts
- 3 - knows generally
- 4 - knows specifically and broadly

### **Standards for clinical and technical skills**

The practical application of knowledge is evidenced through clinical and technical skills. Unless otherwise stated in this document, the clinical skills listed below are expected to be at level 4 at the end of phase 2.

#### 1. Has observed

Exit descriptor; at this level the trainee:

- Has adequate knowledge of the steps through direct observation.
- Demonstrates that he/she can handle instruments relevant to the procedure appropriately and safely.
- Can perform some parts of the procedure with reasonable fluency.

#### 2. Can do with assistance

Exit descriptor; at this level the trainee:

- Knows all the steps - and the reasons that lie behind the methodology.
- Can carry out a straightforward procedure fluently from start to finish.
- Knows and demonstrates when to call for assistance/advice from the supervisor (knows personal limitations).

#### 3. Can do whole but may need assistance

Exit descriptor; at this level the trainee:

- Can adapt to well-known variations in the procedure encountered, without direct input from the trainer.
- Recognises and makes a correct assessment of common problems that are encountered.
- Is able to deal with most of the common problems.
- Knows and demonstrates when he/she needs help.
- Requires advice rather than help that requires the trainer to scrub.

#### 4. Competent to do without assistance, including complications

Exit descriptor, at this level the trainee:

- With regard to the common clinical situations in the specialty, can deal with straightforward and difficult cases to a satisfactory level and without the requirement for external input.
- Is at the level at which one would expect a UK consultant surgeon to function.
- Is capable of supervising trainees.

**Please note the following abbreviations are used in the syllabus below.**

- P = Phase  
 SI = Special Interest  
 Ot = Otolology  
 Rh = Rhinology  
 HaN = Head and Neck  
 TaP = Thyroid and Parathyroid  
 La = Laryngology  
 PO = Paediatric Otolaryngology  
 GO = General Otolaryngology as a Special Interest

### PAEDIATRIC OTOLARYNGOLOGY

Topic	Foreign bodies in the ear canal and UADT	P2	P3	SI = PO	SI + GO
<b>Category</b>	Paediatric Otolaryngology				
<b>Sub-category:</b>	Foreign bodies in the ear nose and throat				
<b>Objective</b>	Safe definitive management of children with suspected and actual foreign bodies in the ear nose and pharynx; primary management of inhaled foreign bodies to facilitate safe transfer for tracheobronchoscopy if required. <i>This module gives some idea of the breadth and depth of required knowledge and surgical skills. This list should not be considered to be fully inclusive or exhaustive</i>				
<b>Knowledge</b>	Anatomy and physiology of the paediatric airway Recognition of anatomical differences between the adult and paediatric airway. Recognition of the clinical features of foreign bodies in the ear, nose, and throat Knowledge of the natural history and the complications associated with foreign bodies. Concept of the shared airway and differing anaesthetic techniques				
<b>Clinical Skills</b>	HISTORY AND EXAMINATION Ability to take a thorough history from the child/carer Otoscopy Anterior rhinoscopy Flexible pharyngolaryngoscopy  DATA INTERPRETATION				

	Assessment of plain radiography (e.g. chest x-ray and soft tissue neck x-ray).				
	<b>PATIENT MANAGEMENT</b> Recognition of the clinical signs of respiratory distress in children Emergency airway care in conjunction with anaesthetists and paediatricians.	3	3	4	4
<b>Technical Skills and Procedures</b>	Otomicroscopy and removal of foreign body	4	4	4	4
	Removal of nasal foreign body and examination with paediatric and rigid scopes	4	4	4	4
	Pharyngo-oesophagoscopy and foreign body removal	4	4	4	4
	Rigid bronchoscopy and foreign body removal from larynx and trachea	2	2	4	4

<b>Topic</b>	<b>Trauma to the ear, upper aero digestive tract and neck</b>	<b>P2</b>	<b>P3</b>	<b>SI = PO</b>
<b>Category</b>	Paediatric Otolaryngology			
<b>Sub-category:</b>	Trauma to the head and neck			
<b>Objective</b>	To be competent in the recognition of paediatric head and neck trauma and its management. To recognise when to refer complicated cases for further assessment and treatment. <i>This module gives some idea of the breadth and depth of required knowledge and surgical skills. This list should not be considered to be fully inclusive or exhaustive</i>			
<b>Knowledge</b>	Anatomy of the head and neck in children Recognition of anatomical differences between the adult and paediatric airway Mechanisms of trauma to the facial skeleton and soft tissues Know the causes and presentation of nasal septal haematoma Know the causes and presentation of ear trauma (external, middle and inner) Know the causes and presentation of trauma to the neck, pharynx and larynx Knowledge of common aetiologies and awareness of the possible presentations of non-accidental injury to the ENT department. Understand how child abuse is classified, how it may present to otolaryngologists and the mechanism of onward referral and management			

<b>Clinical Skills</b>	<p>HISTORY AND EXAMINATION</p> <p>Ability to take a thorough history from child/parent</p> <p>Assessment of the external nose and nasal airway</p> <p>Clinical examination of the ear</p> <p>Assessment of the neck including the airway</p> <p>Otoscopy</p> <p>DATA INTERPRETATION</p> <p>Age appropriate hearing test, tympanometry</p> <p>PATIENT MANAGEMENT</p> <p>Recognition of the signs of respiratory distress in a child</p> <p>Resuscitation of a child in hypovolaemic shock secondary to bleeding</p> <p>Aware of the local protocol for the reporting of suspected non-accidental injury</p>			
<b>Technical Skills and Procedures</b>	<p>Nasal fracture manipulation</p> <p>Laryngoscopy, Pharyngoscopy</p> <p>Drainage of septal haematoma</p> <p>Drainage of haematoma of pinna</p> <p>Exploration of neck</p> <p>Paediatric Tracheostomy</p>	2 2	3 2	4 4

<b>Topic</b>	<b>Epistaxis in a child</b>	<b>P2</b>	<b>P3</b>	<b>SI = PO</b>
<b>Category</b>	Paediatric Otolaryngology			
<b>Sub-category:</b>	Epistaxis			
<b>Objective</b>	Optimum recognition and management of children with epistaxis; This module gives some idea of the breadth and depth of required knowledge and surgical skills. This list should not be considered to be fully inclusive or exhaustive			
<b>Knowledge</b>	<p>Nasal anatomy &amp; physiology</p> <p>Pathophysiology, epidemiology, &amp; natural history of paediatric epistaxis</p> <p>Current approach to treatment of epistaxis to include awareness of the evidence base for current treatment regimens.</p> <p>Understand the aetiologies of paediatric epistaxis (local including nasopharyngeal angiofibroma, and systemic including coagulopathies)</p> <p>Know the relevant investigation and treatments of paediatric epistaxis</p>			
<b>Clinical Skills</b>	<p>HISTORY AND EXAMINATION</p> <p>Ability to take a thorough history from the child/carer</p> <p>Anterior Rhinoscopy</p> <p>Flexible Nasendoscopy</p> <p>DATA INTERPRETATION</p> <p>Interpretation of full blood count &amp; other haematological investigations; awareness of significance of coagulation tests</p> <p>PATIENT MANAGEMENT</p>			

	Medical and surgical management of epistaxis			
<b>Technical Skills and Procedures</b>	Nasal cautery	4	4	4
	EUA nose	4	4	4
	Appropriate nasal packing in a child (see also adult rhinology section)	4	4	4
	Paediatric SPA ligation	1	1	2
	Open and closed procedures for treatment of angiofibroma	1	1	1

Topic	<b>Rhinosinusitis; orbital and intracranial complications of rhinosinusitis</b>	P2	P3	SI = PO	SI = GO
<b>Category</b>	Paediatric Otolaryngology				
<b>Sub-category:</b>	Nose and Sinus infections				
<b>Objective</b>	Optimum recognition and management of children with rhinosinusitis; particularly complicated sinus disease e.g. subperiosteal abscess, intracranial sepsis. <i>This module gives some idea of the breadth and depth of required knowledge and surgical skills. This list should not be considered to be fully inclusive or exhaustive</i>				
<b>Knowledge</b>	Nasal anatomy & pathophysiology Epidemiology, natural history & presenting symptoms of rhinosinusitis in children Current approach to treatment of infective rhinosinusitis to include awareness of the evidence base for current treatment regimens. Recognition and competence in the emergency management of the complications of rhinosinusitis.				
<b>Clinical Skills</b>	HISTORY AND EXAMINATION Ability to take a thorough history from the child/carer Anterior Rhinoscopy Flexible Nasendoscopy Otoscopy DATA INTERPRETATION Awareness of imaging techniques Assessment of abnormalities on CT scanning of the paranasal sinuses and MR brain.  PATIENT MANAGEMENT Medical and surgical management of rhinosinusitis and its complications.	3	3	4	4
<b>Technical Skills and Procedures</b>	EUA Nose Endoscopic Nasal Polypectomy External drainage of subperiosteal abscess External drainage of the frontal sinus Endoscopic drainage of periorbital abscess External drainage of frontal sinus	4 2 1 1 1 1	4 3 3 2 4 1	4 4 4 2 4 2	4 4 4 2 4 2

Topic	Airway pathology in childhood	P2	P3	SI = PO
Category	Paediatric Otolaryngology			
Sub-category:	Airway Disorders			
Objective	Safe recognition of the main patterns of presentations and likely aetiologies of children with airway obstruction at birth, in infancy and in later childhood. Includes primary management to enable definitive treatment of main conditions. <i>This module gives some idea of the breadth and depth of required knowledge and surgical skills. This list should not be considered to be fully inclusive or exhaustive</i>			
Knowledge	Anatomy of the paediatric airway, and differences between the adult and child.			
	Physiology of airway obstruction (Poiseuille's law, Reynolds number)			
	Clinical features of airway obstruction			
	Clinical measures to determine severity of obstruction			
	Know the causes, presenting symptoms of airway pathology in children,			
	Know the treatment options and natural history of main conditions causing airway pathology in children at different ages e.g. laryngomalacia, vocal cord palsy, subglottic cysts, haemangioma, RRP, Laryngeal cleft, tracheobronchomalacia, acute epiglottitis and laryngotracheobronchitis (croup).			
	Understand the genetic disorders associated with airway pathology in children	2	2	4
	Understand the role of laryngopharyngeal reflux in airway pathology in children	2	2	4
Clinical Skills	HISTORY AND EXAMINATION			
	Ability to take a thorough history from the child/carer.			
	Assessment of the airway in a child			
	Flexible pharyngolaryngoscopy.			
	DATA INTERPRETATION			
	Assessment of pulse oximetry findings, assessment of radiography at a basic level e.g. recognition of gross abnormalities on chest radiograph and CT			
PATIENT MANAGEMENT	Medical management in the acute and elective situation e.g. steroids, adrenaline, reflux.	3	3	4
	Emergency airway care in conjunction with anaesthetist and paediatrician.	3	3	4
Technical Skills and Procedures	Paediatric flexible pharyngolaryngoscopy in the outpatients	4	4	4
	Paediatric tracheostomy emergency and elective	2	3	3
	Paediatric tracheostomy care including tube change	2	3	4
	Diagnostic rigid airway endoscopy	2	3	4
	Therapeutic rigid airway endoscopy.	1	1	3
	Laryngotracheal reconstruction	1	1	2

	Balloon dilatation for subglottic stenosis	1	1	2
	Management of subglottic cysts	1	1	2

Topic	The Drooling Child	P2	P3	SI = PO
Category	Paediatric Otolaryngology			
Sub-category:				
Objective	<i>To be competent at assessing a child who presents with the symptom of drooling, and to understand the principles behind management of these patients. This module gives some idea of the breadth and depth of required knowledge and surgical skills. This list should not be considered to be fully inclusive or exhaustive</i>			
Knowledge	Anatomy of the major and minor salivary glands			
	Anatomy of the oral cavity			
	Physiology of salivation			
Knowledge	Know the causes and predisposing factors (including syndromes) for drooling			
	Understand how multidisciplinary input is used in the management of drooling children.	3	3	4
Knowledge	Understand the principles of non medical, medical and surgical management of drooling children	3	3	4
	Undertake a comprehensive history and examination of a child who presents with drooling			
Clinical Skills	Be able to communicate an effective management plan to the patient and his or her carer			
	Work with colleagues from other specialities and disciplines to provide effective care for children presenting with drooling.	3	3	4
Technical Skills and Procedures	Tonsillectomy	4	4	4
	Adenoidectomy	4	4	4
	Flexible nasendoscopy	4	4	4
	Submandibular gland excision	2	2	2
	Transposition of submandibular ducts	1	1	2
	Neuromuscular blockade	1	1	2
	Sublingual gland excision	1	1	2
	Parotid and submandibular duct ligation	1	1	2
Botox to parotid and submandibular glands	1	1	2	

Topic	Acute tonsillitis, Diseases of the adenoids and their complications	P2	P3	SI = PO
Category	Paediatric Otolaryngology			
Sub-category:	Tonsils			
Objective	Definitive secondary-care management of adenotonsillar disease excluding OSA in otherwise healthy children. Management in syndromic and special needs children is often in a designated children's hospital. <i>This module gives some idea of</i>			

	<i>the breadth and depth of required knowledge and surgical skills. This list should not be considered to be fully inclusive or exhaustive</i>			
<b>Knowledge</b>	Anatomy of the oral cavity, oropharynx and nasopharynx Microbiology of the oral cavity, oropharynx and nasopharynx Epidemiology, classification, aetiology and natural history of adenotonsillar disease. Thorough understanding of the evidence base that underpins current treatment approaches. Awareness of controversies. Understanding of specific management requirements in the very young, special needs and syndromic children			
<b>Clinical Skills</b>	HISTORY AND EXAMINATION Ability to take a through history from child/parent. Otoscopy Examination of the oral cavity and oropharynx Ability to recognise the child with possible OSA.  DATA INTERPRETATION Clinical assessment of the nasal airway  PATIENT MANAGEMENT Medical and surgical treatment. Management of complications both of the disease (e.g. peritonsillar abscess) and of treatment			
<b>Technical Skills and Procedures</b>	Tonsillectomy Adenoidectomy Arrest of adenotonsillar bleeding as an emergency Suction adenoidectomy Tonsillotomy Experience with CPAP and other non invasive options	4 4 4 4 3 1	4 4 4 4 3 1	4 4 4 4 4 2

<b>Topic</b>	<b>ENT-related syndromes and cleft palate</b>	<b>P2</b>	<b>P3</b>	<b>SI = PO</b>
<b>Category</b>	Paediatric Otolaryngology			
<b>Sub-category:</b>	Congenital deformities affecting the head and neck			
<b>Objective</b>	Appropriate primary management of children with ENT related syndromes and cleft palate, awareness of the principles and challenges that underpin long-term care. <i>This module gives some idea of the breadth and depth of required knowledge and surgical skills. This list should not be considered to be fully inclusive or exhaustive</i>			
<b>Knowledge</b>	Embryology of the head and neck, including palate. Anatomy of the head and neck in children Recognition of the common ENT related syndromes and associations (e.g. Down's, Treacher Collins, Pierre Robin, Goldenhar, BOR, CHARGE, craniosynostosis). Knowledge of the ENT manifestations of the conditions listed above	3 3	3 3	4 4

	Knowledge of the general clinical problems encountered in these conditions with particular reference to safety of anaesthesia. Basic understanding of the underlying genetics of these conditions.	2 2	2 2	4 3
<b>Clinical Skills</b>	<b>HISTORY AND EXAMINATION</b> Ability to take a thorough history from the patient or carer. Targeted examination of the child based on knowledge of the ENT manifestations of the condition.  <b>DATA INTERPRETATION</b> Interpretation of age-appropriate assessment of hearing and overnight pulse oximetry Recognition of abnormalities on imaging  <b>PATIENT MANAGEMENT</b> Able to participate in the multidisciplinary approach to children with complex needs. Management of airway obstruction in children with craniofacial abnormalities in conjunction with anaesthetists . Management of OME in children with cleft palate or Downs syndrome	3 3 3	3 3 3	3 3 3
<b>Technical Skills and Procedures</b>	Myringotomy & ventilation tube insertion Flexible pharyngolaryngoscopy Rigid airway endoscopy Paediatric tracheostomy	4 4 4 1	4 4 4 2	4 4 4 3

<b>Topic</b>	<b>Congenital and acquired neck masses</b>	<b>P2</b>	<b>P3</b>	<b>SI = PO</b>
<b>Category</b>	Paediatric Otolaryngology			
<b>Sub-category:</b>	Neck Masses			
<b>Objective</b>	Safe recognition of main patterns of presentations of children with neck swellings at birth, in infancy and in later childhood. Includes primary management to enable definitive treatment of common conditions. <i>This module gives some idea of the breadth and depth of required knowledge and surgical skills. This list should not be considered to be fully inclusive or exhaustive</i>			
<b>Knowledge</b>	Anatomy of the head and neck and upper mediastinum. Applied embryology of thyroid gland with relation to thyroglossal cysts Applied embryology of the branchial arches. Anatomy of the neck spaces and understanding of the presentation, clinical features and primary management of abscesses and collections in these spaces Classification of vascular malformations and awareness of treatment options			

	<p>Knowledge of the clinical presentation and management of the commoner congenital abnormalities (e.g. cystic hygroma, teratoma, branchial abnormalities, thyroglossal cysts, lingual thyroid)</p> <p>Awareness of the infective causes of neck lumps in children. (e.g. TB, HIV, other viral)</p> <p>Management of persistent cervical lymphadenopathy and the appropriate use of investigations and surgical intervention.</p> <p>Knowledge of the possible airway complications of neck masses and their management.</p>	3	3	4
<b>Clinical Skills</b>	<p><b>HISTORY AND EXAMINATION</b></p> <p>Ability to take a thorough history from a patient or carer</p> <p>Systematic examination of the child with particular reference to the neck</p> <p>Be able to identify the signs of airway obstruction in a child</p> <p><b>DATA INTERPRETATION</b></p> <p>Be able to identify the most appropriate imaging options available e.g. sonography, CT, MR scanning.</p> <p>Interpretation of virology and microbiology investigations.</p> <p>Interpretation of head and neck images.</p>	3	3	4
	<p><b>PATIENT MANAGEMENT</b></p> <p>Be able to identify the most appropriate imaging options available e.g. sonography, CT, MR scanning.</p> <p>Surgical and non-surgical treatment options for the management of neck masses.</p> <p>Be able to work in a multidisciplinary team.</p>	3	3	4
<b>Technical Skills and Procedures</b>	Flexible pharyngolaryngoscopy	4	4	4
	Incision & drainage neck abscess	4	4	4
	Biopsy neck node	4	4	4
	Excision thyroglossal cyst	2	2	4
	Diagnostic rigid airway endoscopy	2	2	4
	Paediatric tracheostomy	2	2	3
	Experience with EXIT procedures and CHAOS	1	1	1

<b>Topic</b>	<b>Language delay and dysphonia in childhood</b>	<b>P2</b>	<b>P3</b>	<b>SI = PO</b>
<b>Category</b>	Paediatric Otolaryngology			
<b>Sub-category:</b>	Speech and language development			
<b>Objective</b>	Awareness of the aetiology of language delay. Awareness of congenital and acquired laryngeal disorders affecting speech. <i>This module gives some idea of the breadth and depth of required knowledge and surgical skills. This list should not be considered to be fully inclusive or exhaustive</i>			
<b>Knowledge</b>	Anatomy of the larynx in children and the physiology of voice production.			

	The normal developmental milestones with an emphasis on speech and language acquisition. Common causes of delayed speech Understanding of how hearing loss impacts on language acquisition Management of laryngeal pathologies. Understanding of age appropriate hearing tests. Understanding of the controversies in the management of tongue tie.	3	3	4
<b>Clinical Skills</b>	HISTORY AND EXAMINATION Ability to take a through history from child/carer Otoscopy Flexible pharyngolaryngoscopy  DATA INTERPRETATION Age appropriate hearing test Tympanometry  PATIENT MANAGEMENT Multidisciplinary approach in the management of children with speech and other developmental problems	3	3	4
<b>Technical Skills and Procedures</b>	Flexible nasendoscopy and pharyngolaryngoscopy Division of tongue tie Ventilation tube insertion	4 4 4	4 4 4	4 4 4

Topic	Head and neck malignancy in childhood	P2	P3	SI = PO
Category	Paediatric Otolaryngology			
Sub-category:	Oncology			
Objective	Awareness of the epidemiology, presentation and principles of management of malignant disease in the head and neck. <i>This module gives some idea of the breadth and depth of required knowledge and surgical skills. This list should not be considered to be fully inclusive or exhaustive</i>			
Knowledge	Knowledge of the common malignancies of the head and neck in childhood Knowledge of presentation, investigations and management options in childhood cancers.	3	3	4
	Understanding of issues relating to the management of the child and family with cancer including palliative care e.g. management of epistaxis and hearing loss. Understanding of the need for a multidisciplinary approach to childhood cancer and the need for early referral to a regional oncology centre when malignancy is suspected.	3	3	4
<b>Clinical Skills</b>	HISTORY AND EXAMINATION Ability to take a through history from child/carer Examination of the head and neck Examination of the cranial nerves			

	Otoscopy Flexible pharyngolaryngoscopy			
	PATIENT MANAGEMENT Multidisciplinary approach to the management of childhood cancer Know the range of diagnostic tests available particularly imaging	3	3	4
<b>Technical Skills and Procedures</b>	Flexible pharyngolaryngoscopy	4	4	4
	Neck node biopsy after liaison with regional oncology services	3	3	4
	Biopsy of tumours after liaison with regional oncology services	3	3	4
	Paediatric thyroid surgery	1	1	1
	Paediatric neck dissection	1	1	1
	Paediatric salivary gland surgery	1	1	1

<b>Topic</b>	<b>Congenital abnormalities of the ear</b>	<b>P2</b>	<b>P3</b>	<b>SI = PO</b>
<b>Category</b>	Paediatric Otolaryngology			
<b>Sub-category:</b>	Disorders of the external ear in children			
<b>Objective</b>	Recognition and classification of the principle congenital anomalies of the ear. <i>This module gives some idea of the breadth and depth of required knowledge and surgical skills. This list should not be considered to be fully inclusive or exhaustive</i>			
<b>Knowledge</b>	Understanding of the anatomy & embryology of the ear and related structures Physiology of hearing Knowledge of the clinical problems associated with dysplasia of the ear			
	Knowledge of common grading systems for microtia and atresia. Knowledge of bone anchored auricular prosthesis and autologous pinna reconstruction.	2 2	2 2	4 4
<b>Clinical Skills</b>	HISTORY AND EXAMINATION Ability to take a thorough history from the child/carer Inspection of the external ear and recognition of main anomalies; Otoscopy Clinical assessment of hearing			
	DATA INTERPRETATION Age-appropriate assessment of hearing; Tympanometry; PATIENT MANAGEMENT Demonstrate the ability to present the options for the rehabilitation of hearing loss in microtia; Appropriate referral for ear reconstruction/prostheses;	3 3	3 3	4 4

	Counselling of child and carers with microtia and other major anomalies of the external ear.			
<b>Technical Skills and Procedures</b>	Otomicroscopy	4	4	4
	Excision of preauricular sinus	2	2	4
	Excision of simple lesions in and around the external ear	4	4	4
	Surgery for prominent ears	2	2	2
	Bone anchored hearing aid	1	1	1
	Surgical management of 1 <sup>st</sup> branchial arch anomalies	1	1	1
	Implant placement for prosthetic ear in microtia	1	1	1
	Other implants for hearing loss including ME implants	1	1	1

<b>Topic</b>	<b>Congenital deafness</b>	<b>P2</b>	<b>P3</b>	<b>SI = PO</b>
<b>Category</b>	Paediatric Otolaryngology			
<b>Sub-category:</b>	Deafness excluding otitis media and its complications			
<b>Objective</b>	Awareness of the epidemiology and presentation of deafness, knowledge of range of causes, awareness of diagnostic and investigative strategies and knowledge of the principles that underpin rehabilitation including amplification and cochlear implantation. <i>This module gives some idea of the breadth and depth of required knowledge and surgical skills. This list should not be considered to be fully inclusive or exhaustive</i>			
<b>Knowledge</b>	Embryology of the ear including congenital deformities of the ear and their relationship to deafness Physiology of hearing Knowledge of the molecular basis of genetic, syndromic and non-syndromic deafness Knowledge of acquired causes including congenital infections (e.g. CMV, rubella) Fundamental understanding of age appropriate audiological testing including universal neonatal screening (OAE,ABR). Appropriate investigations for the congenitally deaf child (bilateral or unilateral) e.g. TORCH screen, dipstix for haematuria, MRI, genetic review Multidisciplinary approach to the rehabilitation of the deaf child (bilateral and unilateral). Knowledge of rehabilitative options including hearing aids Knowledge of candidacy criteria for cochlear implantation and nature of surgery involved. Awareness of the range of investigative options available including imaging (sonography, CT, MR scanning)	3	3	4
<b>Clinical Skills</b>	<b>HISTORY AND EXAMINATION</b> Ability to take a thorough history from child/parent. Otoscopy Clinical assessment of hearing  <b>DATA INTERPRETATION</b> Age appropriate hearing test			

	Tympanometry	3	3	4
	PATIENT MANAGEMENT Appropriate referral for hearing aids			
<b>Technical Skills and Procedures</b>	Microscopic examination of the ear	4	4	4
	Myringotomy & ventilation tube	4	4	4
	Cochlear implant	1	1	1

Topic	The Dizzy Child	P2	P3	SI = PO
<b>Category</b>	Paediatric Otolaryngology			
<b>Sub-category:</b>	Dizziness			
<b>Objective</b>	To be competent in the assessment, investigation and management of a child presenting with dizziness			
<b>Knowledge</b>	Anatomy of the ear and vestibular system Physiology of balance Knowledge of the causes of balance disorders in children	3	3	3
	Knowledge of the genetic causes of hearing loss associated with vestibular symptoms e.g. Ushers, NF2, Jervell-Lange-Nielson Knowledge of appropriate investigations and subsequent management of vestibular disorders	3	3	3
<b>Clinical Skills</b>	HISTORY AND EXAMINATION Ability to take a thorough history from the child/carer Otoscopy Clinical assessment of vestibular function e.g. Dix Hallpike, head thrust, Unterbergers Neurological examination including cranial nerves			
	DATA INTERPRETATION Age appropriate hearing test Tympanogram			
	Interpretation of vestibular testing-posturography, calorics, VEMP's	3	3	4
	Identification of significant abnormalities from diagnostic imaging e.g. MRI, CT	3	3	4
	PATIENT MANAGEMENT Explanation of diagnosis to child and family Commencement of conservative, medical or surgical management of underlying vestibular pathology Appropriate referral to allied health professionals or other specialities	4 3	4 3	4 4
<b>Technical Skills and Procedures</b>	Myringotomy and ventilation tube insertion	4	4	4
	Cholesteatoma surgery	2	2	2

Topic	Otitis media (acute, chronic and with effusion) and complications and conditions of the external auditory canal	P2	P3	SI = PO
Category	Paediatric Otolaryngology			
Sub-category:	Otitis media and its complications			
Objective	Definitive secondary-care management of middle and external ear disease and its complications. <i>This module gives some idea of the breadth and depth of required knowledge and surgical skills. This list should not be considered to be fully inclusive or exhaustive</i>			
Knowledge	Anatomy of the external and middle ear cleft and surrounding structures Physiology of hearing Epidemiology, classification, aetiology and natural history of each variant of otitis media. Know the indications for imaging Know the evidence base which underpins current treatment approaches. Demonstrate an understanding of the surgical management of cholesteatoma and the complications of otitis media Knowledge of the indications for, and surgical principles of, bone anchored hearing aids and middle ear implants.			
Clinical Skills	HISTORY AND EXAMINATION Ability to take a through history from child/parent Otoscopy Neurological examination including cranial nerves Clinical assessment of hearing.  DATA INTERPRETATION Age appropriate hearing tests (including ABR, OAE, VRA, play audiometry) Tympanometry Identification of significant abnormalities from diagnostic imaging e.g. CT scan, MRI Laboratory investigations e.g. blood tests, bacteriology results  PATIENT MANAGEMENT Medical, conservative and surgical management Appropriate referrals and team working for children with complications of acute otitis media			
Technical Skills and Procedures	Otomicroscopy and aural toilet Ventilation tube insertion Myringoplasty Ossiculoplasty Cortical Mastoidectomy Cholesteatoma surgery Bone anchored hearing aid	4 4 3 1 4 2 1	4 4 4 1 4 2 1	4 4 4 2 4 2 2

<b>Topic</b>	<b>Facial palsy in childhood</b>	<b>P2</b>	<b>P3</b>	<b>SI = PO</b>
<b>Category</b>	Paediatric Otolaryngology			
<b>Sub-category:</b>	Facial Palsy			
<b>Objective</b>	Safe primary management of children with facial palsy, recognition of clinical pathologies that present with facial palsy. <i>This module gives some idea of the breadth and depth of required knowledge and surgical skills. This list should not be considered to be fully inclusive or exhaustive</i>			
<b>Knowledge</b>	Anatomy of the facial nerve, and related structures knowledge of the aetiologies (congenital and acquired) of facial palsy. Knowledge of the initial investigations and management of a child with facial palsy Knowledge of the natural history of childhood facial palsy. Know when to refer to tertiary centre. Awareness of the range of diagnostic tests and the principles that govern their use e.g. electroneuronography, imaging of the facial nerve	2	2	3
<b>Clinical Skills</b>	<b>HISTORY AND EXAMINATION</b> Ability to take a history from child/parent Otoscopy Examination of the head and neck Assessment of the cranial nerves in children and grading of facial palsy Clinical assessment of hearing  <b>DATA INTERPRETATION</b> Interpretation of specific investigations e.g. electroneuronography  <b>PATIENT MANAGEMENT</b> Pharmacological management (e.g. steroids, anti-viral agents) Eye protection	2	2	4
<b>Technical Skills and Procedures</b>	Myringotomy and ventilation tube insertion Cortical mastoidectomy & Drainage of mastoid abscess Cholesteatoma surgery	4 4 2	4 4 2	4 4 2

Topic	Rhinitis	P2	P3	SI = PO
<b>Category</b>	Paediatric Otolaryngology			
<b>Sub-category:</b>	Inflammatory nasal disease (including allergic rhinitis)			
<b>Objective</b>	Optimum recognition and management of children with rhinitis. <i>This module gives some idea of the breadth and depth of required knowledge and surgical skills. This list should not be considered to be fully inclusive or exhaustive</i>			
<b>Knowledge</b>	Anatomy and embryology of the nose and sinuses. Nasal physiology Knowledge of the pathophysiology, epidemiology, symptomatology and natural history of rhinitis Know the basic science of allergy Knowledge of the scientific principles of common investigations e.g skin prick tests, RAST	3	3	4
	Knowledge of the evidence base for current treatment of allergic rhinitis Knowledge of imaging techniques; assessment of abnormalities on CT scanning of the paranasal sinuses Understanding of scientific basis and methodology behind desensitisation in allergy	3	3	4
<b>Clinical Skills</b>	HISTORY AND EXAMINATION Ability to take a thorough history from the child/carer Anterior Rhinoscopy Flexible Nasendoscopy Otoscopy			
	DATA INTERPRETATION Skin prick tests for allergies; Blood tests for allergies; immunological tests, ciliary function tests.  PATIENT MANAGEMENT Conservative, medical and surgical management of rhinitis	2	3	4
<b>Technical Skills and Procedures</b>	Turbinate surgery	4	4	4
	EUA Nose & PNS	4	4	4
	Nasal biopsy	4	4	4
	Advanced FESS in paediatric patient	1	1	2

Topic	Nasal Obstruction	P2	P3	SI = PO
Category	Paediatric Otolaryngology			
Sub-category:	Nasal Polyps in Children			
Objective	To be competent at the diagnosis of inflammatory nasal disease, the differential diagnosis and management of inflammatory nasal disease. <i>This module gives some idea of the breadth and depth of required knowledge and surgical skills. This list should not be considered to be fully inclusive or exhaustive</i>			
Knowledge	Anatomy and embryology of the nose and sinuses. Nasal physiology Knowledge of the aetiology, clinical features and management of nasal polyps in children including their association with cystic fibrosis Knowledge of the aetiologies of nasal obstruction at birth, in infancy and in later childhood e.g. choanal atresia, rhinitis, encephocele, glioma, angiofibroma. Knowledge of the investigations (including imaging) and treatment of the above conditions. Knowledge of related systemic conditions involving the nose e.g. Wegeners granulomatosis			
Clinical Skills	HISTORY AND EXAMINATION Ability to take a thorough history from the child or carer Anterior Rhinoscopy Flexible Nasendoscopy Otoscopy  DATA INTERPRETATION Assessment of abnormalities on CT scanning of the paranasal sinuses 2. Immunological tests, ciliary function tests  PATIENT MANAGEMENT Medical and surgical management of nasal polyposis Investigation of nasal masses			
Technical Skills and Procedures	Endoscopic Nasal Polypectomy Endoscopic sinonasal surgery Nasal biopsy Examination nose and PNS Choanal atresia surgery Surgery to congenital pyriform aperture stenosis Open and closed procedures for angiofibroma Nasal stenting	3 2 2 4 4 1 1 1 1	3 2 2 4 4 1 1 1 1	4 2 4 4 2 1 2 1

<b>Topic</b>	<b>Obstructive sleep apnoea</b>	<b>P2</b>	<b>P3</b>	<b>SI = PO</b>
<b>Category</b>	Paediatric Otolaryngology			
<b>Sub-category:</b>	Airway obstruction in childhood			
<b>Objective</b>	Optimum recognition and management of children with possible obstructive sleep apnoea. <i>This module gives some idea of the breadth and depth of required knowledge and surgical skills. This list should not be considered to be fully inclusive or exhaustive</i>			
<b>Knowledge</b>	Anatomy of the upper airway Physiology of sleep Knowledge of multi-level obstruction Knowledge of the concept of sleep disordered breathing Knowledge of the complications of upper airway obstruction Knowledge of appropriate investigations and treatment. Knowledge of the relevance of co-morbidities Assessment of low versus high risk patients and appropriate referral	3	3	3
<b>Clinical Skills</b>	HISTORY AND EXAMINATION Ability to take a thorough history from the child/carer Examination of the oral cavity, oropharynx and chest wall Anterior Rhinoscopy Flexible Nasendoscopy  DATA INTERPRETATION Interpretation of sleep studies ECG/CXR/echo manifestations  PATIENT MANAGEMENT Conservative, medical and surgical management of OSA	1	1	1
<b>Technical Skills and Procedures</b>	EUA PNS and adenoidectomy Tonsillectomy Paediatric tracheostomy	4 4 2	4 4 2	4 4 3

## HEAD AND NECK

Topic	Adenoid and tonsillar pathology in adults	P2	P3	SI = HaN
Category	Head and Neck			
Sub-category:	None			
Objective	<i>To understand the aetiology, presenting signs, symptoms and management of benign adenotonsillar and pharyngeal disease. This module gives some indication of the breadth and depth of required knowledge and surgical skills. The list should not be considered to be fully inclusive or exhaustive.</i>			
Knowledge	Demonstrate a detailed knowledge of the anatomy, physiology, pathology & microbiology of the oro and nasopharynx incl relevant anatomical relationships Know the presenting signs and symptoms of benign adenotonsillar & pharyngeal disease Know the complications of adenotonsillar infection. Understand the investigation, differential diagnosis and complications of adenotonsillar hypertrophy Know the 'red flag' indicators of malignant disease of the pharynx			
Clinical Skills	Demonstrate expertise at eliciting an appropriate clinical history and physical signs of benign adenotonsillar and pharyngeal disease and the complications of treatment including those involving the airway Diagnosis and medical management of post-operative haemorrhage following adenotonsillar surgery			
Technical Skills and Procedures	Incision and drainage of peritonsillar abscess. Manage the compromised airway due to hypertrophy Tonsillectomy and adenoidectomy in adults Surgical management of post-operative bleeding following adenotonsillar surgery	4 4 4 4	4 4 4 4	4 4 4 4

Topic	Airway obstruction in adults	P2	P3	SI = HaN
Category	Head and Neck			
Sub-category:	None			
Objective	<i>To understand the aetiology, presenting signs, symptoms and management of patients presenting with upper airway disorders in the emergency situation in adults. This module gives some indication of the breadth and depth of required. Knowledge and surgical skills. The list should not be considered to be fully inclusive or exhaustive.</i>			
Knowledge	Demonstrate a detailed knowledge of the anatomy & physiology of the larynx, trachea, pharynx and oral cavity Understand the microbiology and pathology of disorders of the upper aerodigestive tract.			

	<p>Understand the classification of diseases that may present with airway obstruction.</p> <p>Understand the principles of patient management of patients presenting with airway obstruction.</p> <p>Know the different methods of securing an airway safely (surgical &amp; non surgical) in an emergency setting</p> <p>Understand the indications &amp; techniques for surgical debulking of upper airway malignancies</p> <p>Understand the principles of the use of cricothyroidotomy and tracheostomy during a Can't Intubate, Can't Oxygenate Event.</p>			
<b>Clinical Skills</b>	<p>Be able to elicit an appropriate clinical history and correctly interpret physical signs.</p> <p>Be aware of the role of appropriate investigation in the management of airway obstruction</p> <p>Demonstrate the ability to work effectively with anaesthetists and those involved in critical care who manage the 'shared airway'.</p> <p>Demonstrate expertise in the safe assessment of patients with critical airways.</p>			
<b>Technical Skills and Procedures</b>	<p>Be competent at performing the following diagnostic procedures; fiberoptic nasopharyngoscopy, direct laryngoscopy, microlaryngoscopy, bronchoscopy, pharyngo oesophagoscopy</p> <p>Be competent at performing endotracheal intubation</p> <p>Be proficient at performing a surgical tracheostomy in the elective &amp; emergency setting both under general and local anaesthesia</p> <p>Percutaneous tracheostomy</p> <p>Be competent at foreign body removal from the airway in adults</p> <p>Debulking procedures (laser/microdebrider)</p> <p>Tracheostomy change</p> <p>Emergency Front of Neck Airway procedures including cricothyroidotomy and tracheostomy</p>	<p>4</p> <p>3</p> <p>4</p> <p>1</p> <p>4</p> <p>2</p> <p>4</p> <p>4</p>	<p>4</p> <p>3</p> <p>4</p> <p>1</p> <p>4</p> <p>2</p> <p>4</p> <p>4</p>	<p>4</p> <p>4</p> <p>4</p> <p>3</p> <p>4</p> <p>4</p> <p>4</p> <p>4</p>

<b>Topic</b>	<b>Aetiology and management of craniocervical trauma in adults</b>	<b>P2</b>	<b>P3</b>	<b>SI = HaN</b>
<b>Category</b>	Head and Neck			
<b>Sub-category:</b>	None			
<b>Objective</b>	<i>To understand the aetiology, presenting signs, symptoms and management of a patient with craniocervical trauma. This module gives some indication of the breadth and depth of required knowledge and surgical skills. The list should not be considered to be fully inclusive or exhaustive.</i>			
<b>Knowledge</b>	<p>Understand the anatomy of the head and neck</p> <p>Understand the pathophysiological effects of blunt, penetrating and high and low velocity projectile trauma to the bones and soft tissues of the head and neck</p> <p>Understand the Le Fort classification of facial fractures and their effects.</p>	<p>3</p> <p>3</p>	<p>4</p> <p>4</p>	<p>4</p> <p>4</p>

	Understand the classification of fractures of the mandible and their effects	3	3	3
	Understand the classification of fractures of the temporal bone and their effects.	3	4	4
	Understand the consequences and potential complications of injury to structures in the neck, in the 3 horizontal entry zones of the neck.	3	4	4
	Understand the principles underpinning the appropriate investigation of a patient with a penetrating injury of the neck	3	4	4
	Understand the principles of the Glasgow Coma Scale and the management of the patient with an altered level of consciousness.	4	4	4
	Understand the principles of management of traumatic injury to the head	3	4	4
	and neck, including the indications for urgent surgical exploration and the priorities underpinning the planning of investigation and management.			
	Understand the need for a multidisciplinary approach to management of craniocervical trauma	3	4	4
	Understand the pathophysiology of chemical and thermal burn injury to the upper aerodigestive tract & principles of management	3	4	4
<b>Clinical Skills</b>	Be able to elicit an appropriate clinical history from a patient with craniocervical trauma (or from a third party witness).	3	4	4
	Be able to demonstrate the relevant clinical signs from a patient with craniocervical trauma.	3	4	4
	Be able to appropriately order and interpret the results of investigations in a patient with craniocervical trauma.	3	4	4
	Be able to coordinate the assembly of an appropriate multidisciplinary team to manage a patient with craniocervical trauma.	3	4	4
<b>Technical Skills and Procedures</b>	Tracheostomy	4	4	4
	Endotracheal intubation	2	3	4
	Be able to explore the traumatized neck and secure bleeding vessels.	3	4	4
	Be able to manage penetrating injury to the viscera of the upper aerodigestive tract	3	4	4
	Be able to undertake microsurgical reanastomosis of divided nerves where appropriate	1	1	2

Topic	Disorders of swallowing	P2	P3	SI = HaN
Category	Head and Neck			
Sub-category:	None			
Objective	<i>To understand the aetiology, presenting signs, symptoms and management of common disorders of swallowing, including dysphagia, globus pharyngeus ,neurological swallowing disorders, reflux disease, odynophagia and aspiration. This module gives some indication of the breadth and depth of required knowledge and surgical skills. The list should not be considered to be fully inclusive or exhaustive</i>			
Knowledge	<p>Know the anatomy of the pharynx, and physiology of swallowing.</p> <p>Know the causes of odynophagia.</p> <p>Know the various hypotheses relating to the aetiology of dysphagia.</p> <p>Understand the investigation and imaging of a patient with dysphagia.</p> <p>Understand the principles of medical and surgical management of dysphagia</p> <p>Understand the pathophysiology of aspiration, its complications and the principles of management</p> <p>Understand the aetiology and management of globus pharyngeus</p> <p>Understand the aetiology and management of laryngopharyngeal reflux</p> <p>Understand the aetiology and management of Eosinophilic oesophagitis</p>			
Clinical Skills	<p>Elicit an appropriate clinical history and clinical signs.</p> <p>Be able to examine the pharynx and oesophagus with endoscopes in outpatients</p> <p>Be able to work in cooperation with Speech &amp; language therapists in the management of dysphagia</p> <p>Be aware of 'red flag' symptoms in the differential diagnosis of dysphagia</p> <p>Interpretation of videofluoroscopic swallowing studies</p>			
Technical Skills and Procedures	<p>Flexible fiberoptic nasopharyngolaryngoscopy</p> <p>Fiberoptic endoscopic evaluation of swallowing studies</p> <p>Endoscopic examination of pharynx, larynx and oesophagus under general anaesthesia</p> <p>Removal of foreign bodies from the pharynx, larynx and oesophagus under general anaesthesia</p> <p>Endoscopic pharyngeal pouch surgery</p> <p>Open pharyngeal pouch surgery</p>	<p>4</p> <p>3</p> <p>4</p> <p>4</p> <p>3</p> <p>1</p>	<p>4</p> <p>3</p> <p>4</p> <p>4</p> <p>3</p> <p>1</p>	<p>4</p> <p>4</p> <p>4</p> <p>4</p> <p>4</p> <p>4</p>

Topic	Aetiology and management of cervical sepsis	P2	P3	SI = HaN
Category	Head and Neck			
Sub-category:	None			
Objective	<i>To understand the aetiology, presenting signs, symptoms and management of a patient with cervical sepsis. This module gives some indication of the breadth and depth of required knowledge and surgical skills. The list should not be considered to be fully inclusive or exhaustive.</i>			
Knowledge	<p>Know the anatomy of the fascial compartments of the neck. Understand the pathogenesis(including congenital abnormalities) and clinical presentation of deep neck space infections.</p> <p>Know the microbiology of deep neck space infections.</p> <p>Understand the principles of medical and surgical management of deep neck space infection, including image guided drainage procedures.</p> <p>Understand the complications of deep neck space infections and their management.</p>	3	4	4
Clinical Skills	<p>Be able to elicit an appropriate history from a patient with deep cervical sepsis.</p> <p>Be able to demonstrate the relevant clinical signs from a patient with deep cervical sepsis.</p> <p>Be able to order and interpret the results of appropriate investigations, including imaging and microbiological cultures, in a patient with deep cervical sepsis.</p> <p>Be able to undertake treatment of a patient with deep cervical sepsis or complications thereof.</p>	3 3	4 4	4 4
Technical Skills and Procedures	<p>Be proficient in rigid endoscopic examination of the upper aerodigestive tract</p> <p>Be proficient in management of the compromised upper airway in deep cervical sepsis, including tracheostomy.</p> <p>Manage the patient in conjunction with anaesthetists/intensivists</p> <p>Be competent in the incision and drainage of a deep cervical abscess, as well as demonstrating awareness of the complications of such procedures.</p>	3 3 3 4	4 4 4 4	4 4 4 4

<b>Topic</b>	<b>Aetiology and management of congenital abnormalities of the head and neck affecting adults (including branchial &amp; thyroglossal cysts, pharyngeal diverticulae, cleft lip &amp; palate)</b>	<b>P2</b>	<b>P3</b>	<b>SI = HaN</b>
<b>Category</b>	Head and Neck			
<b>Sub-category:</b>	None			
<b>Objective</b>	<i>To understand the aetiology, presenting signs, symptoms and management of a patient with congenital abnormality of the head and neck. This module gives some indication of the breadth and depth of required knowledge and surgical skills. This section complements the paediatric section as most of the problems will present there. The list should not be considered to be fully inclusive or exhaustive.</i>			
<b>Knowledge</b>	<p>Understand the embryology of the head and neck.            Know the anatomy of the neck.            Understand the morphology and classification of pharyngeal diverticulae.            Understand the pathophysiological effects of pharyngeal diverticulae and the principles underlying their management            Understand the theories relating to the pathogenesis of branchial arch abnormalities including branchial cyst, collaural fistula, external ear malformations, thyroglossal duct related malformations, cervical sinuses and fistulae.(i.e. branchial cleft abnormalities)            Understand the principles of management of branchial arch abnormalities including branchial cyst, collaural fistula, external ear malformations, thyroglossal duct related malformations, cervical sinuses and fistulae.            Know of syndromes associated with congenital abnormalities of the head and neck            Understand the morphology and classification of dentoalveolar malformations and the principles underlying their management.            Understand the morphology and classification of congenital abnormalities of the larynx, trachea and oesophagus and the principles underlying their management.            Understand the morphology, classification of and pathophysiological effects of cleft lip and palate, and the principles of management thereof.            Understand the investigation of congenital abnormalities of the head and neck including imaging and examination under anaesthesia.</p>	3	3	3
<b>Clinical Skills</b>	<p>Be able to elicit an appropriate history from a patient with a congenital abnormality of the head and neck.            Be able to demonstrate the relevant clinical signs from a patient with a congenital abnormality of the head and neck.            Be able to undertake appropriately ordered investigation of a congenital abnormality of the head and neck.            Be able to interpret imaging of congenital abnormalities of the head and neck.</p>	3	3	3

	Understand the role of a multidisciplinary team in the management of congenital abnormalities of the head and neck.			
<b>Technical Skills and Procedures</b>	Be able to perform appropriately directed examination under anaesthesia, including endoscopic assessment of a congenital abnormality of the head and neck.	3	4	4
	Be able to excise a pharyngeal diverticulum using endoscopic techniques.	2	3	4
	Be able to perform surgery to remove abnormalities of the thyroglossal duct.	3	4	4
	Be able to perform a tracheostomy under general and local anaesthesia.	3	4	4
	Be able to excise a branchial cyst.	3	4	4
	Be able to excise a branchial fistula	1	1	3

<b>Topic</b>	<b>Cervical lymphadenopathy in adults</b>	<b>P2</b>	<b>P3</b>	<b>SI = HaN</b>
<b>Category</b>	Head and Neck			
<b>Sub-category:</b>	None			
<b>Objective</b>	<i>To understand the aetiology, presenting symptoms &amp; signs and management of patients presenting with cervical lymphadenopathy. This module gives some indication of the breadth and depth of required knowledge and surgical skills. The list should not be considered to be fully inclusive and exhaustive.</i>			
<b>Knowledge</b>	<p>Demonstrate knowledge of the aetiology &amp; pathology of cervical lymphadenopathy including manifestations of systemic disease.</p> <p>Be able to order the appropriate investigations of neck masses</p> <p>Understand the anatomy of the neck, and distribution of cervical lymph nodes. Classify the lymphatic levels of the neck according to the MSK classification.</p> <p>Demonstrate knowledge of the differing histological and microbiological causes of cervical lymphadenopathy.</p> <p>Presentation, aetiology, investigations and pattern of metastatic spread of upper aerodigestive tract, salivary gland, cutaneous and thyroid malignancies.</p> <p>Demonstrate knowledge of the presentation, aetiology, investigations and principles of management of lymphoreticular disease as it applies to the head and neck.</p> <p>Principles of management of patients with cervical lymphadenopathy including specifically the management of the unknown primary malignant neck lump.</p> <p>Demonstrate knowledge of the indications for medical &amp; surgical management and the complications of management.</p>			
<b>Clinical Skills</b>	Be able to take a relevant detailed history and interpret clinical signs correctly.			

<b>Technical Skills and Procedures</b>	Fine needle aspiration cytology	2	4	4
	Outpatient and in-patient endoscopy of the UADT.	4	4	4
	Excision of cervical lymph nodes and deal with the complications	3	4	4
	Radical neck dissection	2	2	3
	Selective neck dissection	2	4	4
	Modified radical neck dissection	1	1	3

<b>Topic</b>	<b>Head and neck malignancies in the upper aerodigestive tract excluding the oral cavity</b>	<b>P2</b>	<b>P3</b>	<b>SI = HaN</b>
<b>Category</b>	Head and Neck			
<b>Sub-category:</b>	None			
<b>Objective</b>	<i>To understand the aetiology of head and neck malignancies in the upper aerodigestive tract, presenting signs, symptoms and management of patients presenting with HNC. This module gives some indication of the breadth and depth of required. Knowledge and surgical skills. The list should not be considered to be fully inclusive or exhaustive</i>			
<b>Knowledge</b>	<p>Understand the classification of head and neck malignancies in particular squamous carcinoma as it is the commonest type (HNC) and know the principles of TNM staging.</p> <p>Know the pathology of HNC</p> <p>Understand the presenting signs and symptoms of head and neck cancer.</p> <p>Understand the various hypotheses relating to the aetiology of squamous cell cancer including the cellular basis of oncogenesis.</p> <p>Understand the pattern of spread of malignant disease.</p> <p>Understand how HNC is managed in the multidisciplinary setting.</p> <p>Know the indications for imaging in HNC and the use of relevant imaging modalities.</p> <p>Understand the functional consequences of head and neck cancer, and its treatment.</p> <p>Understand the principles involved in and evidence for the various medical and surgical methods of treatment available for head and neck cancer.</p> <p>Understand the role of surgical and medical treatment in palliative management of patients</p> <p>Understand the indications for reconstructive and rehabilitative surgery (including surgical voice restoration) in HNC</p> <p>Know of the various reconstructive options available in HNC</p> <p>Be aware of national and local guidelines for the management of HNC</p> <p>Know the complications of surgical and non-surgical treatment of HNC and the multidisciplinary management of these complications</p> <p>Understand the basic science underpinning chemotherapy &amp; radiotherapy</p>			

	Understand the principles of treatment of chemotherapy and radiotherapy and different techniques and regimes			
<b>Clinical Skills</b>	Elicit a relevant clinical history and clinical signs including being able to perform an appropriate examination.	3	4	4
	Be able to work within the MDT, and recognise the contributions made by all team members.	3	4	4
	Demonstrate good communication skills with other professionals.	3	4	4
	Be able to break bad news sensitively and appropriately to patients and their families	3	4	4
	Demonstrate competence in the management of acute complications of head and neck surgery	3	4	4
<b>Technical Skills and Procedures</b>	Be able to perform the following diagnostic procedures; microlaryngoscopy, pharyngo-oesophagoscopy, tonsillectomy, examination of postnasal space, bronchoscopy, Fine Needle Aspiration Cytology (FNAC)	4	4	4
	Total laryngectomy	2	2	4
	Radical neck dissection	2	2	3
	Selective neck dissection	4	4	4
	Modified radical neck dissection	1	1	3
	Open and endoscopic excision of pharyngeal tumours	2	2	3
	Transoral laser surgery	2	2	4
	Reconstructive surgery with myocutaneous (pedicled) flaps	2	2	2
	Reconstructive surgery with free tissue transfer	2	2	2
	Be able to manage safely acute complications of head and neck surgery	4	4	4
	Be able to replace a tracheoesophageal valve in clinic.	4	4	4

<b>Topic</b>	<b>Investigation and management of the neck lump</b>	<b>P2</b>	<b>P3</b>	<b>SI = HaN</b>
<b>Category</b>	Head and Neck			
<b>Sub-category:</b>	None			
<b>Objective</b>	<i>To understand the aetiology, presenting symptoms &amp; signs and management of patients presenting with a neck lump. This module gives some indication of the breadth and depth of required knowledge and surgical skills. The list should not be considered to be fully inclusive or exhaustive.</i>			
<b>Knowledge</b>	Understand the anatomy of the neck, and distribution of cervical lymph nodes. Classify the lymphatic levels of the neck according to the MSK(Memorial Sloane Kettering) classification. Know the differential diagnosis of a neck lump. Demonstrate knowledge of the aetiology & pathology of cervical lymphadenopathy including manifestations of systemic disease. Understand the presentation, aetiology, investigations and pattern of metastatic spread of upper aerodigestive tract, salivary gland, cutaneous and thyroid malignancies.			

	<p>Understand the appropriate investigation of neck masses and specifically the management of the unknown primary malignant lump.</p> <p>Demonstrate knowledge of the presentation, aetiology, investigations and principles of management of lymphoma and leukaemia as it applies to the head and neck.</p> <p>Understand the principles of medical and surgical management of patients with a neck lump</p> <p>Demonstrate knowledge of the potential complications of management.</p>			
<b>Clinical Skills</b>	<p>Be able to take a relevant detailed history, perform appropriate examination and interpret clinical signs correctly.</p> <p>Demonstrate a rational approach to investigation of a neck lump</p>			
<b>Technical Skills and Procedures</b>	<p>Perform FNAC</p> <p>Outpatient and inpatient endoscopy of the Upper aerodigestive tract</p> <p>Perform excision biopsy of cervical lymph nodes and deal with the complications.</p> <p>Radical neck dissection</p> <p>Selective neck dissection</p> <p>Modified radical neck dissection</p> <p>Branchial cyst excision and management of complications</p>	<p>4</p> <p>4</p> <p>4</p> <p>2</p> <p>4</p> <p>1</p> <p>3</p>	<p>4</p> <p>4</p> <p>4</p> <p>2</p> <p>4</p> <p>1</p> <p>4</p>	<p>4</p> <p>4</p> <p>4</p> <p>3</p> <p>4</p> <p>3</p> <p>4</p>

<b>Topic</b>	<b>Neoplastic salivary gland disease</b>	<b>P2</b>	<b>P3</b>	<b>SI = HaN</b>
<b>Category</b>	Head and Neck			
<b>Sub-category:</b>	None			
<b>Objective</b>	<i>To understand the aetiology, presenting signs, symptoms and management of neoplastic salivary gland disease. This module gives some indication of the breadth and depth of required knowledge and surgical skills. The list should not be considered to be fully inclusive or exhaustive.</i>			
<b>Knowledge</b>	<p>Know the anatomy &amp; physiology of the major &amp; minor salivary glands &amp; their relations.</p> <p>Know the anatomy of the neck.</p> <p>Know the anatomy of the oral cavity.</p> <p>Know the pathology of salivary gland tumours.</p> <p>Understand the classification of salivary gland tumours.</p> <p>Know the presenting symptoms &amp; signs of salivary gland tumours.</p> <p>Understand the modalities (cytological &amp; imaging) available for investigating salivary gland tumours</p> <p>Know the differential diagnosis of salivary gland tumours and inflammatory swellings.</p> <p>Understand the principles of management of salivary gland tumours.</p> <p>Understand the potential consequences of salivary gland</p>			

	<p>surgery and the complications of surgery</p> <p>Understand the principles of management (surgical &amp; non surgical) of malignant salivary gland disease</p> <p>Understand the role of reconstructive and palliative surgery in the management of malignant salivary gland disease</p>			
<b>Clinical Skills</b>	<p>Be able to elicit an appropriate clinical history and interpret physical signs correctly</p> <p>Demonstrate the ability to detect 'red flag' symptoms &amp; signs of malignant disease.</p> <p>Order the most appropriate imaging modality</p> <p>Manage patients with malignant disease in a multidisciplinary team</p>			
<b>Technical Skills and Procedures</b>	<p>FNAC</p> <p>Set up and use facial nerve monitor</p> <p>Be able to perform a submandibular gland excision</p> <p>Biopsy of a minor salivary gland tumour</p> <p>Be able to perform a superficial parotidectomy</p> <p>Total parotidectomy</p> <p>Radical neck dissection</p> <p>Selective neck dissection</p> <p>Modified radical neck dissection</p> <p>Facial nerve grafting</p> <p>Facio-hypoglossal anastomosis</p>	<p>4</p> <p>4</p> <p>4</p> <p>4</p> <p>4</p> <p>1</p> <p>2</p> <p>4</p> <p>1</p> <p>1</p> <p>1</p>	<p>4</p> <p>4</p> <p>4</p> <p>4</p> <p>4</p> <p>1</p> <p>2</p> <p>4</p> <p>1</p> <p>1</p> <p>1</p>	<p>4</p> <p>4</p> <p>4</p> <p>4</p> <p>4</p> <p>4</p> <p>3</p> <p>4</p> <p>3</p> <p>1</p> <p>1</p>

<b>Topic</b>	<b>Non-neoplastic salivary gland disease</b>	<b>P2</b>	<b>P3</b>	<b>SI = HaN</b>
<b>Category</b>	Head and Neck			
<b>Sub-category:</b>	None			
<b>Objective</b>	<p><i>To understand the aetiology, presenting signs, symptoms and management of benign salivary gland disease. This module gives some indication of the breadth and depth of required. Knowledge and surgical skills. The list should not be considered to be fully inclusive or exhaustive.</i></p>			
<b>Knowledge</b>	<p>Know the anatomy and physiology of the major and minor salivary glands.</p> <p>Understand the pathological processes, both local &amp; systemic, that can affect the salivary glands.</p> <p>Understand the classification of benign salivary gland disease including infection, inflammatory diseases, drugs and benign tumours</p> <p>Know the various imaging modalities for investigation of benign salivary gland disease.</p> <p>Understand the principles of patient management.</p> <p>Know the medical and surgical management of salivary gland disease, and the complications of surgery</p>			

<b>Clinical Skills</b>	Be able to elicit an appropriate clinical history and interpret clinical signs correctly. Be able to order the appropriate special investigations and correctly interpret images including plain radiographs, computerized tomography and Magnetic resonance imaging. Be able to counsel patients on the particular risks of salivary gland surgery.			
<b>Technical Skills and Procedures</b>	Be able to excise a submandibular calculus Be able to perform submandibular gland excision Excision of ranula Minor salivary gland biopsy Parotidectomy for inflammatory disease	4 4 1 4 1	4 4 1 4 1	4 4 3 4 3

<b>Topic</b>	<b>Thyroid and parathyroid disease</b>	<b>P2</b>	<b>P3</b>	<b>SI= TaP</b>
<b>Category</b>	Head and Neck			
<b>Sub-category:</b>	None			
<b>Objective</b>	<i>To understand the aetiology, presenting signs, symptoms and management of Thyroid and Parathyroid disorders. This module gives some indication of the breadth and depth of required knowledge and surgical skills. The list should not be considered to be fully inclusive or exhaustive.</i>			
<b>Knowledge</b>	Understand the embryology, physiology, biochemistry and anatomy of the thyroid gland Understand the embryology, physiology, biochemistry and anatomy of the parathyroid glands. Understand the pathophysiology of endocrine dysfunction of the thyroid and parathyroid glands. Understand the classification of thyroid neoplasia. Including TNM Understand the principles of investigation of a patient with endocrine dysfunction of the thyroid gland. Understand the principles of investigation of a patient with endocrine dysfunction of the parathyroid glands. Understand the principles of investigation of a patient with a parathyroid or thyroid mass Understand principles of medical and surgical management of endocrine dysfunction of the thyroid and parathyroid glands, including the peri operative management of thyrotoxicosis. Understand principles of medical and surgical management of neoplasia of the thyroid and parathyroid glands, including post operative complications. Understand the need to work as part of an MDT in management of malignant thyroid disease. Be aware of national and local guidelines for the management of thyroid malignancy.			

	Understand the necessary genetic and endocrine testing required for thyroid malignancies that may be associated with multiple endocrine neoplasia (MEN) syndromes.			
<b>Clinical Skills</b>	Be able to elicit an appropriate clinical history from a patient with thyroid or parathyroid gland disease. Be able to demonstrate relevant clinical signs in a patient with thyroid or parathyroid gland disease			
	Thyroid Investigation protocols for thyroid cancer CT MR and PET scanning in thyroid disease Interpretation of thyroid function tests FNAC Core biopsy of thyroid US of thyroid Interpretation of isotope scans MDT discussion of thyroid cases Management of post thyroidectomy hypocalcaemia Management of post thyroidectomy hoarseness	3	3	4
	Parathyroid Investigation protocols for parathyroid disease CT MR and PET scanning in parathyroid disease Interpretation of Ca PTH and Vitamin D levels FNAC Core biopsy US of the neck Interpretation of Isotope scans MDT discussion of parathyroid cases Management of post thyroidectomy hypocalcaemia Management of hoarseness post parathyroidectomy including management of vocal cord palsy	3	3	4
		3	3	4
		1	1	2
		2	2	4
		2	2	4
		3	3	4
		2	2	2
		2	2	4
		2	2	4
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		2	2	4
		2	2	4
		1	1	4
		2	4	4
		1	1	4
		1	1	4
		1	1	4
	4	4	4	
<b>Technical Skills and Procedures</b>	Thyroid lobectomy	2	2	4
	Total Thyroidectomy	2	2	4
	Surgical treatment of retrosternal thyroid enlargement	2	2	4
	Revision thyroid surgery	2	2	4
	Extended operations in the neck for advanced thyroid cancer including operations on the trachea, oesophagus and larynx	1	1	4
	Exploration of the neck for post thyroidectomy bleeding	2	4	4
	Level 1-5 ND	1	1	4
	Level VI ND	1	1	4
	Re-exploration of the thyroid bed for residual or recurrent cancer	1	1	4
	Be able to obtain appropriate samples for fine needle cytology or core biopsy from a patient with a thyroid or parathyroid mass	4	4	4
	Parathyroid Parathyroidectomy	1	1	4

	Parathyroid surgery: reoperation	1	1	4
	Re exploration of the neck for post operative haemorrhage	1	1	4
	Transcervical thymectomy	1	1	2

Topic	Oral pathology	P2	P3	SI = HaN
<b>Category</b>	Head and Neck			
<b>Sub-category:</b>	None			
<b>Objective</b>	<i>To understand the aetiology, presenting signs, symptoms and management of patients presenting with disorders of the oral cavity. This module gives some indication of the breadth and depth of required knowledge and surgical skills. The list should not be considered to be fully inclusive or exhaustive.</i>			
<b>Knowledge</b>	<p>Understand the anatomy of the oral cavity</p> <p>Know the normal flora of the oral cavity and how oral disease can alter oral flora</p> <p>Understand the physiology of the oral phases of swallowing</p> <p>Know the physiology of salivary function</p> <p>Understand the consequences of oral disease on swallowing</p> <p>Understand the consequences of salivary gland dysfunction on oral health</p> <p>Know the causes of drooling and the principles of management thereof.</p> <p>Understand the aetiology, pathophysiology, presenting symptoms and signs of dental caries</p> <p>Know the pathophysiology, presenting symptoms &amp; signs and management of mucosal oral disease including infection, inflammation, soft tissue and bony conditions</p> <p>Understand the aetiology of oral cancer</p> <p>Know the presenting symptoms and signs of oral cancer</p> <p>Understand the principles of management of oral cancer</p> <p>Understand the long and short term effects of chemotherapy and radiotherapy on oral health</p> <p>Understand the appropriate modalities for imaging oral disease</p>			
<b>Clinical Skills</b>	<p>Be able to elicit an appropriate clinical history and interpret physical signs correctly</p> <p>Demonstrate the ability to detect 'red flag' symptoms &amp; signs of malignant disease.</p> <p>Order the most appropriate imaging modality</p> <p>Be able to interpret plain images of the oral cavity and associated bony structures</p> <p>Manage patients with malignant disease in a multidisciplinary team</p> <p>Be able to diagnose dental related sepsis presenting in the neck or paranasal sinuses</p>	3	4	4

<b>Technical Skills and Procedures</b>	Perform a biopsy of an oral lesion	4	4	4
	Remove and treat benign oral lesions	4	4	4
	Partial glossectomy	1	1	3
	Submandibular duct transposition for drooling	1	1	1
	Dental extractions	1	1	1
	Closure of oroantral fistulae	1	1	1
	Mandibulotomy and excision of floor of mouth lesion	1	1	1

<b>Topic</b>	<b>Sleep related breathing disorders</b>	<b>P2</b>	<b>P3</b>
<b>Category</b>	Head and Neck		
<b>Sub-category:</b>	None		
<b>Objective</b>	<i>To understand the aetiology, presenting signs, symptoms and management of sleep related breathing disorders . This module gives some indication of the breadth and depth of required knowledge and surgical skills. The list should not be considered to be fully inclusive or exhaustive.</i>		
<b>Knowledge</b>	<p>Know the aetiology, presenting signs and symptoms of sleep related breathing disorders, including snoring, obstructive sleep apnoea / hypopnoea and central sleep apnoea in adults.</p> <p>Know of the pathophysiological sequelae of sleep related breathing disorders including snoring, obstructive sleep apnoea / hypopnoea and central sleep apnoea</p> <p>Understand the principles of assessment and investigation of sleep related breathing disorders, including sleep nasendoscopy and sleep studies / polysomnography.</p> <p>Understand the principles of management of sleep related breathing disorders including CPAP, mandibular advancement prostheses, nasal and pharyngeal surgery, tracheostomy and drug therapy.</p> <p>Understand the principles of midface and mandibular advancement surgery.</p>		
<b>Clinical Skills</b>	<p>Be able to elicit an appropriate clinical history and identify relevant clinical signs in a patient with a sleep related breathing disorder.</p> <p>Be able to make a correct diagnosis from the results of assessment and investigation of a patient with a sleep related breathing disorder, and synthesise an appropriate plan for their clinical management.</p>		
<b>Technical Skills and Procedures</b>	<p>Be able to perform palatal surgery for snoring/OSAS</p> <p>Be able to perform surgery to correct nasal airway obstruction.</p> <p>Be able to perform sleep nasendoscopy or out patient flexible fiberoptic nasendoscopy</p> <p>Tracheostomy</p>	4 4 4 4	4 4 4 4

Topic	Laryngology and Voice Disorders	P2	P3	SI = La
Category	Head and Neck			
Sub-category:	Laryngology. Airway surgery			
Objective	<i>To understand the aetiology, presenting signs, symptoms and management of common voice and chronic airway disorders. This module gives some idea of the breadth and depth of required knowledge and surgical skills. This list should not be considered to be fully inclusive or exhaustive</i>			
Knowledge	Understand the physics of sound			
	Understand the embryology of the larynx and congenital malformations of the larynx			
	Understand the maturational / developmental changes of the larynx			
	Understand the anatomy, neuroanatomy and movements of the larynx			
	Understand the physiology of phonation and articulation			
	Understand the classification of dysphonias and the various hypotheses relating to the aetiology of dysphonias.	3	3	4
	Understand the classification of disorders of articulation	2	2	4
	Understand principles of videostroboscopic examination of the larynx, laryngography and analysis of pitch and periodicity of speech (including photodocumentation)	2	2	4
	Understand the principles of the medical and surgical management of patients with dysphonia (including instrumentation).	2	2	4
	Know the principles of Speech and Language Therapy	2	2	3
	Know the classification & aetiology of inflammatory and neoplastic laryngeal disorders	3	3	4
	Laser Physics	2	2	4
	Laser safety	4	4	4
	Understand the principles of anaesthesia in Laser surgery	2	2	4
	Understand the principles of laryngotracheal reconstruction in adults	2	2	4
	Understand the aetiology, pathophysiology and treatment of Vocal cord palsy	4	3	4
Understand the aetiology, pathophysiology and treatment of Age related vocal cord atrophy	4	3	4	
Understand the material science in vocal cord injection materials	2	2	4	
Laryngeal reinnervation	2	2	4	
Laryngeal transplantation	2	2	4	
Clinical Skills	Elicit an appropriate clinical history from and demonstrate clinical signs in a dysphonic patient			
	Communication skills with Speech & Language therapists and ability to work in a multidisciplinary team.	2	2	4
	Transnasal oesophagoscopy	2	2	3
	EMG in clinical decision making	2	2	2

	Imaging studies of the larynx, trachea and oesophagus	2	2	4
	Vocal function testing	2	2	4
<b>Technical Skills and Procedures</b>	Laryngeal examination with mirrors and flexible fiberoptic endoscope in an outpatient setting	4	4	4
	Suspension Microlaryngoscopy	4	4	4
	Videostroboscopic laryngoscopy in an outpatient setting	3	3	4
	Microscopic / endoscopic laryngeal surgery and intralaryngeal injection techniques	2	2	4
	Isshiki type 1-4 thyroplasty	1	1	4
	Arytenoid adduction and reduction.	1	1	3
	Type 2 thyroplasty for spasmodic dysphonia	1	1	2
	Vocal cord injection	2	2	4
	Laryngeal electromyography	1	1	2
	Laryngofissure	1	1	2
	Laser Thyroarytenoid myoneurectomy	1	1	2
	Laser supraglottoplasty	1	1	2
	Laser microflap and mini microflap surgery	1	1	1
	Office laser phonosurgery	1	1	1
	Transnasal KTP laser under local anaesthetic	1	1	1
Laryngeal reinnervation procedures	1	1	1	

<b>Topic</b>	<b>Tracheostomy Care Module (Adult)</b>	<b>P2</b>	<b>P3</b>	<b>SI = HaN</b>
<b>Category</b>	Head & Neck			
<b>Sub-category:</b>	Airway management			
<b>Objective</b>	<i>To be able to manage patients with short and long term tracheostomies in an emergency, elective &amp; community setting and provide an expert resource to other health professionals in the management of tracheostomies</i>			
<b>Knowledge</b>	Anatomy of larynx, trachea and neck Physiology of respiration Indications for tracheostomy In depth knowledge of different types of tracheostomy tubes and relative indications for use Role of health professionals in the multidisciplinary management of patients with tracheostomy Local and national guidelines for tracheostomy management Indications for surgical & percutaneous tracheostomy Principles of weaning			
<b>Clinical Skills</b>	Tracheostomy care; suction, inner tube care, humidification Appropriate selection of correct tube to suit patient Supervision of weaning and extubation Troubleshooting in a variety of situations Management of persistent trachea cutaneous fistula Management of patients with failed extubation			

	Multi-disciplinary management of patients with long term tracheostomy tubes			
<b>Technical Skills and Procedures</b>	Flexible nasendoscopy	4	4	4
	Management of blocked & displaced tube	4	4	4
	Tracheostomy change	4	4	4
	Repair of persistent tracheo cutaneous fistula	3	3	4

## OTOLOGY

Topic	Non-infective, acquired lesions of the pinna and external ear canal	P2	P3	SI = Ot
<b>Category</b>	Otology			
<b>Sub-category:</b>	Non infective conditions of the external ear			
<b>Objective</b>	<i>To understand the aetiology, pathology, presentation and management of non-infective conditions of the external ear. This module gives some idea of the breadth and depth of required knowledge and surgical skills. This list should not be considered to be fully inclusive or exhaustive</i>			
<b>Knowledge</b>	Anatomy, physiology and pathology of the external ear and relationship of disease to the temporal bone. Systemic conditions affecting external ear Dermatological conditions of the external ear Pharmacology of medications used in treatment Aetiology, pathology, presentation and management of benign Tumours of the pinna and external ear canal Aetiology, pathology, presentation and management of malignant Tumours of the pinna and external ear canal Aetiology of acquired atresia of the external auditory meatus Pathogenesis of effects of ionizing radiation of the ear and temporal bone Aetiology, pathology, presentation and management of osteoma / exostosis Management of foreign bodies Understand the implications and management of trauma to the pinna Management including medical and surgical options as appropriate	3 3	3 3	4 3
<b>Clinical Skills</b>	HISTORY AND EXAMINATION Obtain appropriate history Clinical examination Otoscopy microscopy  DATA INTERPRETATION Interpretation of audiological investigations Awareness and interpretation of radiological investigations	3	3	4

<b>Technical Skills and Procedures</b>	Aural toilet including microsuction and application of dressings	4	4	4
	Biopsy of lesion of external ear	4	4	4
	Oncological resection of tumours of the pinna	3	3	3
	Reconstructive surgery of the pinna	1	1	2
	Meatoplasty	2	2	4
	Removal of osteoma/exostosis	1	1	2
	Otomicroscopy and removal of FBs	4	4	4
	Drainage of haematoma of pinna	4	4	4
Suturing of pinna	4	4	4	

Topic	Infective conditions of the pinna and external ear canal	P2	P3	SI = Ot
<b>Category</b>	Otology			
<b>Sub-category:</b>	Infective conditions of the external ear and pinna including otitis externa, furunculosis, otomycosis, viral infections, chondritis & cellulitis			
<b>Objective</b>	<i>To understand the aetiology, pathology, presentation and management of infective conditions of the external ear. This module gives some idea of the breadth and depth of required knowledge and surgical skills. This list should not be considered to be fully inclusive or exhaustive</i>			
<b>Knowledge</b>	Anatomy, physiology and pathology of the external ear and relationship of disease to the temporal bone. The pathogenesis of infective disorders of the external ear and pinna Necrotising otitis externa Microbiology of external ear and conditions affecting the pinna Knowledge of antimicrobial and antiviral agents and relevant pharmacology of medications used in treatment. Differential diagnosis of infective/inflammatory conditions Management including medical and surgical options as appropriate			
<b>Clinical Skills</b>	HISTORY AND EXAMINATION Obtain appropriate history Clinical examination Otoscopy Microscopy  DATA INTERPRETATION Awareness and interpretation of radiological investigations Awareness and interpretation of microbiological investigations	3	3	3
<b>Technical Skills and Procedures</b>	Microscopy Suction clearance Biopsy of lesion of external ear canal Drainage of abscess	4 4 4 4	4 4 4 4	4 4 4 4



Topic	Acute otitis media and sequelae	P2	P3	SI = Ot
Category	Otology			
Sub-category:	Middle ear			
Objective	To understand the aetiology, presenting signs, symptoms and management of acute infection of the middle ear. This module gives some indication of the breadth and depth of required knowledge and surgical skills. This list should not be considered to be fully inclusive or exhaustive			
Knowledge	Anatomy, physiology and pathology of the ear and temporal bone The microbiology related to acute ear infections. Complications of acute otitis media including mastoiditis, lateral sinus thrombosis, meningitis and intracranial abscess Indications for laboratory and radiological investigations Differential diagnosis of acute otitis media and complications. Medical and surgical management options Relevant pharmacology of medications used in medical treatment			
Clinical Skills	HISTORY AND EXAMINATION Obtain appropriate history Clinical examination including neurological assessment Otoscopy Microscopy Audiological assessment  DATA INTERPRETATION Interpretation of radiological investigations  PATIENT MANAGEMENT To work where appropriate in a multidisciplinary team & liaise with other professional and organisations The importance of teamwork in managing critically ill patients			
Technical Skills and Procedures	Microsuction Myringotomy and grommet insertion Cortical mastoidectomy and access mastoidectomy	4 4 4	4 4 4	4 4 4

Topic	Chronic suppurative otitis media and sequelae	P2	P3	SI = Ot
Category	Otology			
Sub-category:	Middle ear			
Objective	<i>To understand the aetiology, presenting signs, symptoms and management of chronic infection/inflammation of the middle ear. This module gives some indication of the breadth and depth of required knowledge and surgical skills. This list should not be considered to be fully inclusive or exhaustive</i>			
Knowledge	Anatomy, physiology and pathology of the ear and temporal bone Definition and classification of chronic middle ear disease, including cholesteatoma, retraction pockets, perforations, otitis media with effusion and myringitis. Aetiology and pathophysiology of chronic middle ear disease The microbiology related to chronic middle ear disease Complications of chronic middle ear disease (including intracranial			

	sepsis) Principles and practice of audiology including pure tone audiometry, tympanometry Principles of specialist audiological investigations including speech audiometry, otoacoustic emissions and evoked response audiometry. Indications for radiological investigations Pharmacology of medications used in medical treatment Medical and surgical management options			
<b>Clinical Skills</b>	HISTORY AND EXAMINATION Obtain appropriate history Clinical examination including neurological assessment Otoscopy Microscopy Audiological assessment  DATA INTERPRETATION Interpretation of audiological investigations Interpretation of radiological investigations	3	3	4
<b>Technical Skills and Procedures</b>	Microsuction Myringotomy and grommet insertion T tube insertion Grommet removal Aural polypectomy Myringoplasty Cortical mastoidectomy and access mastoidectomy Modified radical mastoidectomy Combined approach tympanoplasty Ossiculoplasty	4 4 4 4 4 4 4 3 1 1	4 4 4 4 4 4 4 3 1 1	4 4 4 4 4 4 4 4 4 4

<b>Topic</b>	<b>Adult hearing loss</b>	<b>P2</b>	<b>P3</b>	<b>SI = Ot</b>
<b>Category</b>	Otology			
<b>Sub-category:</b>	Deafness in adults			
<b>Objective</b>	<i>To understand the aetiology, presenting signs, symptoms and management of adults who present with conductive, mixed, progressive or sudden onset of sensorineural deafness. This module gives some indication of the breadth and depth of required knowledge, clinical and surgical skills. This list should not be considered to be fully inclusive or exhaustive</i>			
<b>Knowledge</b>	Embryology of the ear Anatomy, physiology and pathology of the ear and auditory pathways. Principles of acoustics and measurement of sound. Principles and practice of audiology including pure tone audiometry, speech audiometry and electrophysiological tests and other objective tests of hearing including oto-acoustic emissions Indications for radiological investigation of hearing loss The genetics of otological diseases Differential diagnosis, aetiology and management of conductive	3	4 4 4 4 4 3	4 4 4 4 4 4

	<p>hearing loss including external/middle ear disorders and otosclerosis.</p> <p>Differential diagnosis, aetiology and management of sensorineural hearing loss including noise induced hearing loss, presbycusis, Meniere's disease autoimmune diseases and retro-cochlear pathology.</p> <p>Aetiology, investigation and management of acute sensorineural hearing loss</p> <p>Central auditory processing disorders, auditory neuropathy, obscure auditory dysfunction</p> <p>Auditory rehabilitation including the use of hearing aids and other assistive devices.</p> <p>Social and psychological issues of deafness</p> <p>Principles of non-auditory communication</p> <p>Principles of surgical reconstruction.</p> <p>Management of severe/ profound hearing loss.</p> <p>Principles of and indications for cochlear implants, middle ear implants and bone anchored hearing aids.</p> <p>Principles of preventative audiology and hearing conservation</p>	3	3	4
	<p>Auditory rehabilitation including the use of hearing aids and other assistive devices.</p> <p>Social and psychological issues of deafness</p> <p>Principles of non-auditory communication</p> <p>Principles of surgical reconstruction.</p> <p>Management of severe/ profound hearing loss.</p> <p>Principles of and indications for cochlear implants, middle ear implants and bone anchored hearing aids.</p> <p>Principles of preventative audiology and hearing conservation</p>	3	3	4
	<p>Social and psychological issues of deafness</p> <p>Principles of non-auditory communication</p> <p>Principles of surgical reconstruction.</p> <p>Management of severe/ profound hearing loss.</p> <p>Principles of and indications for cochlear implants, middle ear implants and bone anchored hearing aids.</p> <p>Principles of preventative audiology and hearing conservation</p>	3	3	3
	<p>Management of severe/ profound hearing loss.</p> <p>Principles of and indications for cochlear implants, middle ear implants and bone anchored hearing aids.</p> <p>Principles of preventative audiology and hearing conservation</p>	3	3	4
	<p>Principles of preventative audiology and hearing conservation</p>			
<b>Clinical Skills</b>	<p>HISTORY AND EXAMINATION</p> <p>Obtain appropriate history</p> <p>Clinical examination</p> <p>Otoscopy</p> <p>Microscopy</p> <p>Audiological assessment</p> <p>DATA INTERPRETATION</p> <p>Interpretation of audiological investigations</p> <p>Interpretation of radiological investigations</p> <p>Interpretation of laboratory investigations</p> <p>PATIENT MANAGEMENT</p> <p>Demonstrate communication skills and empathy</p> <p>Be able to advise the patient of the treatment options, discuss risks and potential benefits, potential complications</p> <p>To work where appropriate in a multidisciplinary team &amp; liaise with other professional and organisations</p> <p>Principles of a holistic approach to the management of hearing loss</p> <p>Genetic counselling</p>	3	3	4
	<p>Genetic counselling</p>	2	2	3
<b>Technical Skills and Procedures</b>	<p>Perform pure tone audiometry, tympanometry</p> <p>Microscopy</p> <p>Microsuction</p> <p>Myringotomy + grommet insertion</p> <p>Exploratory tympanotomy</p> <p>Myringoplasty</p> <p>Ossiculoplasty</p> <p>Stapedotomy/stapedectomy</p> <p>Cochlear implantation</p>	3	4	4
	<p>Microscopy</p>	4	4	4
	<p>Microsuction</p>	4	4	4
	<p>Myringotomy + grommet insertion</p>	4	4	4
	<p>Exploratory tympanotomy</p>	3	3	4
	<p>Myringoplasty</p>	4	4	4
	<p>Ossiculoplasty</p>	1	1	4
	<p>Stapedotomy/stapedectomy</p>	1	1	2
	<p>Cochlear implantation</p>	1	1	1

Middle ear implantation	1	1	1
Insertion of Bone anchored hearing aid abutment	2	2	3
Closure of perilymph leak	1	1	4
The surgical approaches to the CP angle	1	1	1
Acoustic neuroma surgery	1	1	1

Topic	Tinnitus	P2	P3	SI = Ot
<b>Category</b>	Otology			
<b>Sub-category:</b>	Tinnitus			
<b>Objective</b>	<i>To understand the aetiology, presenting signs, symptoms and management of tinnitus. This module gives some indication of the breadth and depth of required knowledge, clinical and surgical skills. This list should not be considered to be fully inclusive or exhaustive</i>			
<b>Knowledge</b>	Anatomy, physiology and pathology of the ear and auditory pathways.	2	2	4
	Psycho-acoustical tests, pitch and loudness match, minimum masking level, residual inhibition			
	The various hypotheses relating to the aetiology of tinnitus both objective and subjective	3	3	4
	Knowledge of objective causes of tinnitus e.g. palatal myoclonus, tumours, arteriovenous malformations			
	The psychological effects of tinnitus			
	Principles of tinnitus retraining and rehabilitation and the principles of support and counselling	3	3	4
	Principles of hearing aid(s) and masking			
<b>Clinical Skills</b>	HISTORY AND EXAMINATION Obtain appropriate history Clinical examination Otoscopy			
	DATA INTERPRETATION Interpretation of radiology	3	3	4
	PATIENT MANAGEMENT Demonstrate communication skills and empathy. Be able to advise the patient of the treatment options, discuss risks and potential benefits. To liaise with other organisations and professionals including audiologists, hearing therapists and clinical psychologists			
<b>Technical Skills and Procedures</b>	Perform pure tone audiometry, tympanometry	3	4	4

Topic	Facial palsy	P2	P3	SI = Ot
Category	Otology			
Sub-category:	Facial Paralysis			
Objective	<i>To understand the aetiology, presenting signs, symptoms and management of facial nerve palsy. This module gives some indication of the breadth and depth of required knowledge, clinical and surgical skills. This list should not be considered to be fully inclusive or exhaustive</i>			
Knowledge	<p>The anatomy and physiology of facial nerve and related structures</p> <p>The aetiology, classification and neuro-physiology of facial paralysis</p> <p>Indications for investigations including radiology, electrophysiology and laboratory tests.</p> <p>Facial nerve grading</p> <p>Management of acute and chronic facial nerve palsy</p> <p>Management and prevention of ocular complications</p> <p>Principles of peri-operative facial nerve monitoring</p> <p>Principles of rehabilitation for facial paralysis</p>	2	2	4
Clinical Skills	<p>HISTORY AND EXAMINATION</p> <p>Obtain appropriate history</p> <p>Clinical examination including assessment of facial nerve function</p> <p>Otoscopy</p> <p>DATA INTERPRETATION</p> <p>Neuro-physiological tests of inner ear function and facial nerve</p> <p>Interpretation of radiological tests</p> <p>Interpretation of laboratory investigations</p> <p>PATIENT MANAGEMENT</p> <p>Demonstrate communication skills and empathy</p> <p>Appreciate the psychological effects of facial disfigurement</p> <p>Be able to advise the patient of the treatment options, and liaise with other health care professionals.</p>	2 3	2 3	2 3
Technical Skills and Procedures	<p>Setup and use of intra-operative facial nerve monitor</p> <p>Cortical mastoidectomy</p> <p>Modified radical mastoidectomy</p> <p>Full decompression of facial nerve</p> <p>Facial nerve anastomosis</p> <p>Resection of facial neuroma</p>	4 4 3 1 1 1	4 4 3 1 1 1	4 4 3 1 1 1

Topic	Disorders of balance	P2	P3	SI = Ot
Category	Otology			
Sub-category:				
Objective	To understand the aetiology, presenting signs, symptoms and management of patients with disordered balance. This module gives some indication of the breadth and depth of required knowledge, clinical and surgical skills. The list should not be considered to be fully inclusive or exhaustive.			
Knowledge	Anatomy and physiology related to maintenance of balance including the vestibular system, visual, locomotor, central nervous and cardiovascular systems The pathology and various hypotheses relating to the aetiology and management of sudden vestibular failure, Meniere's disease, benign paroxysmal vertigo, vestibular schwannoma, pharmacological and metabolic side effects The handicaps related to age related sensory and proprioceptive degeneration Psychological aspects of dizziness Appropriate investigations for balance disorders including audiological, radiological, laboratory and vestibular tests. The law as it relates to disorders of balance The principles of vestibular rehabilitation The principles of particle repositioning manoeuvres Medical, non-surgical and surgical treatment options			
Clinical Skills	HISTORY AND EXAMINATION Obtain appropriate history Clinical examination including neurological assessment Otoscopy  DATA INTERPRETATION Interpretation of audiological tests Interpretation of vestibular tests Interpretation of radiological and laboratory tests  PATIENT MANAGEMENT Demonstrate communication skills and empathy Be able to advise the patient of the treatment options, discuss risks and potential benefits, potential complications To work where appropriate in a multidisciplinary team & liaise with other professional and organisations			
Technical Skills and Procedures	Perform particle re-positioning manoeuvres Myringotomy and grommet insertion Intratympanic instillation of drugs Cortical mastoidectomy Decompression of endolymphatic sac Closure of perilymph fistula Labyrinthectomy Vestibular neurectomy Singular neurectomy	4 4 1 4 1 1 1 1 1	4 4 1 4 1 1 1 1 1	4 4 4 4 2 4 1 1 1

	Superior SCC dehiscence repair	1	1	1
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Topic	Lateral skull base tumours	P2	P3	SI = Ot
<b>Category</b>	Otology			
<b>Sub-category:</b>	Head and neck neoplasia			
<b>Objective</b>	<i>To understand the aetiology, presenting signs, symptoms and management of lateral skull base neoplasia. This module gives some indication of the breadth and depth of required knowledge, clinical and surgical skills. The list should not be considered to be fully inclusive or exhaustive.</i>			
<b>Knowledge</b>	Anatomy of the skull base and neck Anatomy of the inner, middle and external ear Anatomy of the cranial nerves Pathology and pathogenesis of skull base tumours The relevant clinical neurological, vascular, radiological, biological, immunological and serological investigations The genetics of skull base tumours including vestibular schwannomas and genetic counselling. The clinical presentation of skull base tumours The surgical and non-surgical management options. The surgical approaches to the CP angle and skull base	3       3	3       3	4       4
<b>Clinical Skills</b>	HISTORY AND EXAMINATION Obtain appropriate history Clinical examination including neurological assessment Otoscopy  DATA INTERPRETATION Interpretation of audiological tests Interpretation of vestibular tests Interpretation of radiological and laboratory tests  PATIENT MANAGEMENT Demonstrate communication skills and empathy Be able to advise the patient of the treatment options, discuss risks and potential benefits, potential complications Principles of patient management including multidisciplinary team working	       3	       3	       4
<b>Technical Skills and Procedures</b>	Surgical approaches to the lateral skull base Tympanotomy Resection of glomus tympanicum Management of complications of lateral skull base surgery including CSF leak, lateral sigmoid thrombosis and facial palsy.	1 3 1 1	1 3 1 1	1 4 2 3

## RHINOLOGY

Topic	Epistaxis	P2	P3	SI = Rh
<b>Category</b>	Rhinology			
<b>Sub-category:</b>	None			
<b>Objective</b>	<i>To understand the aetiology, presenting symptoms and signs and management of epistaxis. There should be detailed understanding of the presenting features, complications, diagnosis, and management of these problems. This list should not be considered to be fully inclusive or exhaustive</i>			
<b>Knowledge</b>	<p>Know the anatomy of the nose</p> <p>Understanding of local and systemic aetiologies of epistaxes</p> <p>Detailed knowledge of the anatomy and physiology of nasal vasculature</p> <p>Detailed understanding of the presenting symptoms and signs of epistaxes</p> <p>Detailed knowledge of management including first aid measures, nasal cautery, packing and operative techniques in the management of epistaxes</p> <p>Know the complications of epistaxes and the management of them.</p> <p>Understanding of the role of radiology and embolization in managing epistaxis</p>			
<b>Clinical Skills</b>	<p>Demonstrate expertise in taking an appropriate clinical history.</p> <p>Ability to elicit physical signs both local and systemic if appropriate</p> <p>Awareness of relevant haematological and imaging investigations.</p> <p>Awareness of management principles in patient with epistaxis</p> <p>Ability to resuscitate critically ill patient</p>			
<b>Technical Skills and Procedures</b>	<p>Diagnostic nasendoscopy</p> <p>Packing of nose</p> <p>Removal of nasal packing</p> <p>Cautery of nasal septum</p> <p>Ethmoid Artery ligation</p> <p>Sphenopalatine artery ligation</p> <p>Maxillary artery ligation</p> <p>External Carotid artery ligation</p> <p>Approach to ICA epistaxis</p>	<p>4</p> <p>4</p> <p>4</p> <p>4</p> <p>4</p> <p>3</p> <p>1</p> <p>1</p> <p>1</p>	<p>4</p> <p>4</p> <p>4</p> <p>4</p> <p>4</p> <p>4</p> <p>1</p> <p>1</p> <p>1</p>	<p>4</p> <p>4</p> <p>4</p> <p>4</p> <p>4</p> <p>4</p> <p>4</p> <p>2</p> <p>2</p>

Topic	Nasal trauma and deformity	P2	P3	SI = Rh
Category	Rhinology			
Sub-category:	None			
Objective	<i>To understand the presenting features, diagnosis, complications and management of nasal trauma and deformity. This module gives some idea of the breadth and depth of required knowledge and surgical skills. This list should not be considered to be fully inclusive or exhaustive.</i>			
Knowledge	Know the anatomy of the nose, paranasal sinuses and facial skeleton. Understanding of the mechanisms of trauma responsible for nasal and facial injuries. Understanding of objective assessment of airway e.g. rhinomanometry Knowledge of the appropriate imaging techniques Knowledge of the specific complications of nasal trauma Knowledge of the management of nasal trauma Knowledge of the management of nasal deformity Glasgow Coma Scale			
Clinical Skills	Ability to take a relevant history and perform an appropriate clinical examination Knowledge of the relevant special investigations and correct interpretation eg rhinomanometry Ability to adequately resuscitate the critically ill patient			
Technical Skills and Procedures	Fracture nose reduction Insertion septal button Packing of nose Management of traumatically induced epistaxis (see epistaxis section) Septoplasty Septorhinoplasty Surgical repair septal perforation-open and endonasal	4 4 4 4 4 3 1	4 4 4 4 4 4 1	4 4 4 4 4 4 4

Topic	Acute and chronic rhinosinusitis	P2	P3	SI = Rh	SI= GO
Category	Rhinology				
Sub-category:	None				
Objective	<i>To understand the aetiology, pathophysiology, and microbiology. There should be detailed understanding of the presenting features, complications, diagnosis, and management of these infections. This module gives some idea of the breadth and depth of required knowledge and surgical skills. This list should not be considered to be fully inclusive or exhaustive.</i>				

<b>Knowledge</b>	Detailed knowledge of anatomy and physiology of the nose and paranasal sinuses Know the microbiology of acute and chronic rhinosinusitis understanding of special investigations to inform the diagnosis Understanding of the management of acute and chronic rhinosinusitis. Knowledge of the indications for, techniques of, and complications of surgical management Knowledge of the complications of sinusitis and their management.				
<b>Clinical Skills</b>	Demonstrate an ability to take an appropriate history and perform a nasal examination with a speculum and endoscope. Awareness of the indications for and ability to interpret imaging including CT and MRI Awareness of indications for other special investigations including microbiology, immunology etc				
<b>Technical Skills and Procedures</b>	Preparation of the nose for endoscopic surgery Nasendoscopy Antral washout – direct vision Inferior meatal antrostomy – direct vision + endoscopic Middle meatal antrostomy – endoscopic Nasal polypectomy – endoscopic including microdebrider Middle turbinate partial excision Uncinectomy – endoscopic Anterior ethmoidectomy - endoscopic Caldwell-Luc – direct vision External ethmoidectomy Posterior ethmoidectomy – endoscopic Sphenoidotomy – endoscopic Opening the frontal recess – endoscopic Balloon sinuplasty Surgical management of intra-orbital bleeding Extended frontal sinus procedures Osteoplastic flap Modified endoscopic medial maxillectomy Frontal sinusotomy types 1 2 and 3	4 4 2 2 4 4 4 4 4 4 2 1 2 1 1 1 2 1 1 1 1	4 4 4 2 4 4 4 4 4 4 4 2 2 3 2 1 4 1 1 4 1	4 4 4 4 4 4 4 4 4 4 4 4 4 4 3 4 1 2 4 2 3	4 4 4 4 4 4 4 4 4 2 2 4 2 1 4 4 1 1 1 1

<b>Topic</b>	<b>Nose and sinus inflammation including allergy</b>	<b>P2</b>	<b>P3</b>	<b>SI = Rh</b>
<b>Category</b>	Rhinology			
<b>Sub-category:</b>	None			
<b>Objective</b>	<i>To understand the aetiology and pathophysiology of nasal &amp; paranasal sinus inflammation. There should be detailed understanding of the presenting features, complications, diagnosis, and management of these infections. This module gives some idea of the breadth and depth of required knowledge and surgical skills. This list should not be considered to be fully inclusive or exhaustive.</i>			

<b>Knowledge</b>	<p>Detailed knowledge of anatomy and physiology of the nose and paranasal sinuses</p> <p>Understanding of the aetiologies underlying inflammation of the nose and sinuses.</p> <p>Basic science of allergy</p> <p>Know the role of allergy in the pathophysiology of inflammation of the nose and sinuses.</p> <p>Understanding of the special investigations used in the assessment of nasal allergy.</p> <p>Understanding of the imaging modalities to assess the nose and sinuses</p> <p>Knowledge of the role of management of allergy, and drug treatment in nasal and sinus inflammation.</p> <p>Knowledge of the indications for, techniques of and complications of surgical management</p> <p>Knowledge of systemic conditions that can cause sinonasal inflammation</p> <p>Understanding of scientific basis and methodology of desensitisation</p>	3	3	4
<b>Clinical Skills</b>	<p>Ability to take an appropriate history and perform endoscopic examination of the nose and sinuses.</p> <p>Ability to interpret the result of allergy testing including skin prick testing</p> <p>Know which haematological investigations &amp; radiological imaging are appropriate.</p>			
<b>Technical Skills and Procedures</b>	<p>Preparation of the nose for endoscopic surgery</p> <p>Nasendoscopy</p> <p>Antral washout – direct vision</p> <p>Inferior meatal antrostomy – direct vision + endoscopic</p> <p>Middle meatal antrostomy – endoscopic</p> <p>Nasal polypectomy – endoscopic including microdebrider</p> <p>Turbinate surgery</p> <p>Uncinectomy – endoscopic</p> <p>Anterior ethmoidectomy - endoscopic</p> <p>Caldwell-Luc – direct vision</p> <p>External ethmoidectomy</p> <p>Posterior ethmoidectomy – endoscopic</p> <p>Sphenoidotomy – endoscopic</p> <p>Opening the frontal recess – endoscopic</p> <p>Balloon sinuplasty</p> <p>Surgical management of intra-orbital bleeding</p>	4	4	4

Topic	<b>Congenital abnormalities of the nose and sinuses</b>	P2	P3	SI = Rh
Category	Rhinology			
Sub-category:	None			
Objective	<i>To understand the aetiology, clinical features and management of congenital nasal abnormalities. To understand how these may be associated with other syndromes. This module gives some idea of the breadth and depth of required knowledge and surgical skills. This list should not be considered to be fully inclusive or exhaustive.</i>			
Knowledge	Knowledge of the anatomy and physiology of the nose and paranasal sinuses. Knowledge of the embryology of the nose and sinuses. Knowledge of those conditions associated with congenital nasal abnormalities. Understanding of how to manage congenital nasal abnormalities in both the elective and emergency settings. Understanding of imaging modalities appropriate to the investigation of congenital abnormality Principles of genetics relating to congenital abnormalities	2	2	2
Clinical Skills	Ability to take an appropriate history from the parent and child and perform relevant general and specific rhinological examination. Examination including endoscopic			
Technical Skills and Procedures	Nasendoscopy Examination under anaesthesia Surgical management of choanal atresia Endoscopic and open approaches to midline congenital lesions	4 4 1 1	4 4 1 1	4 4 2 2

Topic	<b>Facial pain</b>	P2	P3	SI
Category	Rhinology			
Sub-category:	None			
Objective	<i>To understand the aetiologies, characteristics and management of conditions presenting with facial pain, including those causes not arising in the upper aerodigestive tract</i>			
Knowledge	Anatomy and physiology of the head and neck, including the face, TMJ, dentition and cervical spine Understand the differential diagnosis of facial pain including organic and functional causes Understand the various treatment modalities, both medical and surgical Understanding of the pharmacology of drugs used in the management of facial pain Awareness of the multidisciplinary approach to management	3	3	4
Clinical Skills	Ability to take a relevant history of facial pain Ability to perform an appropriate ENT, neurological and locomotor examination Understanding of the appropriate radiological investigations			

	Appropriate management to include onward referral for pharmacological, surgical and counselling therapies			
<b>Technical Skills and Procedures</b>	Outpatient endoscopy of upper aerodigestive tract	4	4	4
	Examination under anaesthesia	4	4	4
	Biopsy - external nose	4	4	4
	Biopsy – internal nose	4	4	4

<b>Topic</b>	<b>Pituitary disease</b>	<b>P2</b>	<b>P3</b>	<b>SI = Rh</b>
<b>Category</b>	Rhinology			
<b>Sub-category:</b>	None			
<b>Objective</b>	To understand the aetiology, classification, clinical features and management of pituitary disease. This module gives some idea of the breadth and depth of required knowledge and surgical skills. This list should not be considered to be fully inclusive or exhaustive.			
<b>Knowledge</b>	Understanding of the anatomy of the nose, paranasal sinuses and parasellar regions Knowledge of the Pathophysiology of the hypothalamic-pituitary axis and associated disorders Understanding of the principles of perioperative care Knowledge of indications for the endonasal and craniotomy approaches Surgical complications	2	2	4
<b>Clinical Skills</b>	Ability to take a relevant history and perform an appropriate clinical examination Knowledge of the relevant pituitary investigations and correct interpretation of them.			
<b>Technical Skills and Procedures</b>	Transsphenoidal approach to the pituitary fossa	1	1	2

<b>Topic</b>	<b>Disorders of Olfaction</b>	<b>P2</b>	<b>P3</b>	<b>SI = Rh</b>
<b>Category</b>	Rhinology			
<b>Sub-category:</b>	Olfaction			
<b>Objective</b>	<i>To understand the aetiology, clinical presentation and management of olfactory disorders. This module gives some idea of the breadth and depth of required knowledge and surgical skills. This list should not be considered to be fully inclusive or exhaustive.</i>			
<b>Knowledge</b>	Know the anatomy of the olfactory nerve including intracranial connections. Know the physiology of olfaction Know the classification of olfactory dysfunction Know the causes of olfactory dysfunction Understand the scientific basis for the assessment of olfactory dysfunction Know of the commonly used tests of olfaction Know the anatomy and physiology of taste			

	Know the causes of taste dysfunction			
<b>Clinical Skills</b>	Be competent at taking a comprehensive history and examination from a patient presenting with olfactory and/ or taste dysfunction. Be competent at performing a formal assessment of olfaction using appropriate validated assessment techniques Be competent at ordering and interpreting appropriate imaging to investigate olfactory dysfunction			
<b>Technical Skills and Procedures</b>	Nasendoscopy	4	4	4
	Examination of nose and postnasal space	4	4	4
	Nasal biopsy	4	4	4

<b>Topic</b>	<b>Sinonasal neoplasms including anterior skull base tumours</b>	<b>P2</b>	<b>P3</b>	<b>SI = Rh</b>
<b>Category</b>	Sinonasal neoplasms			
<b>Sub-category:</b>	None			
<b>Objective</b>	<i>To understand the aetiology, clinical presentation and management of benign and malignant tumours of the nose and paranasal sinuses. This module gives some idea of the breadth and depth of required knowledge and surgical skills. This list should not be considered to be fully inclusive or exhaustive.</i>			
<b>Knowledge</b>	Knowledge of the anatomy of the nose and paranasal sinuses. Knowledge of the distribution of cervical lymph nodes Understanding of the pattern of spread of malignancy in the head and neck Knowledge of the different histological types of neoplasm in the nose, paranasal sinuses and skull base. Understanding of the principles of medical and surgical management of neoplasms of the nose and sinuses. Knowledge of the complications of both the diseases and their management. Understanding of the multidisciplinary approach to the management of sinonasal/skull base tumours	3	3	4
<b>Clinical Skills</b>	Ability to take a relevant history, perform an appropriate examination and interpret clinical findings correctly Demonstrate a rational approach to special investigations Participation in a multi-disciplinary team approach to management of sinonasal neoplasms			
<b>Technical Skills and Procedures</b>	Examination of nose under anaesthesia	4	4	4
	Biopsy of nose - external	4	4	4
	Biopsy of nose – internal	4	4	4
	Anterior skull base approaches including endoscopic	1	1	4
	Endoscopic medial maxillectomy	2	2	4
	Lateral rhinotomy	1	1	4
	Endoscopic excision nasal and sinus tumours	1	1	4
	Maxillectomy	1	1	1
	Midfacial degloving	1	1	1
	Bicoronal flap approach	1	1	1

	Endoscopic repair of anterior skull base csf leak	1	1	2
	Osteoplastic flap approach	1	1	1
	Craniofacial resection	1	1	1

Topic	CSF LEAKS / SKULL BASE DEFECT	P2	P3	SI = Rh
Category	Advanced Rhinology			
Sub-category:	None			
Objective	To understand the aetiologies, pathophysiology and clinical features of nasal polyps. There should be a detailed knowledge of the diagnostic features, management and complications. This module gives some idea of the breadth and depth of required knowledge and surgical skills. This list should not be considered to be fully inclusive or exhaustive.			
Knowledge	Anatomy of nose and paranasal sinuses Knowledge of aetiology of CSF leaks and meningoencephaloceles relevant to ENT Understanding of pathophysiology and complications of CSF leaks /skull base defects Understanding of the management of CSF leaks/skull base defects Understanding of principles of diagnosis and management of CSF leaks and skull base defects			
Clinical Skills	Ability to take an appropriate history and perform an examination including nasal endoscopy. Awareness of and ability to interpret CT/MR imaging and other relevant assessments Lumbar puncture and lumbar drain management Ability to work in a multidisciplinary team	1 2	1 2	2 4
Technical Skills and Procedures	Endoscopic repair with free grafts for small defects Management of larger defects with pedicled nasal flaps Harvesting of nasoseptal flap	1 1 1	1 1 1	4 3 3

Topic	Extended endonasal skull base procedures	P2	P3	SI = Rh
4	Advanced Rhinology			
Sub-category:				
Objective	<i>To understand the aetiology, clinical presentation and management of benign and malignant tumours of the nose and paranasal sinuses. This module gives some idea of the breadth and depth of required knowledge and surgical skills. This list should not be considered to be fully inclusive or exhaustive</i>			
Knowledge	Knowledge of the anatomy of the nose, paranasal sinuses, and skull base Knowledge of tumours/disorders of skull base in the regions of the anterior and posterior fossa and pterygopalatine fossa Understanding of the selection of approaches, both endonasal and transcranial. Principles of perioperative management Complications of surgery and principles of management.	3 3 2 2	3 3 2 2	4 4 2 4

	Understanding of the multidisciplinary approach to the management of sinonasal/skull base tumours			
<b>Clinical Skills</b>	Principles of assessment and perioperative management of midline tumours	2	2	4
	Ability to interpret relevant CT and MR & angiography /embolization images	2	2	4
	Principles of lumbar puncture and lumbar drainage	2	2	4
	Participation in a multi-disciplinary team approach to management of skull base lesions	2	2	4
<b>Technical Skills and Procedures</b>	Examination of nose under anaesthesia	4	4	4
	Biopsy of nose - external	4	4	4
	Biopsy of nose – internal	4	4	4
	SPA ligation	3	4	4
	endonasal transmaxillary approach to pterygopalatine fossa	1	1	2
	Vidian neurectomy	1	1	2
	Anterior skull base approaches including endoscopic	1	1	2
	Endoscopic medial maxillectomy	1	1	2
	Lateral rhinotomy	1	1	3
	Endoscopic excision skull base tumours (team)	1	1	1
	Midfacial degloving approach to the sinuses	1	1	1
	Endoscopic repair of anterior / posterior skull base	1	1	2
	Repair csf leak	1	1	3
	Craniofacial resection	1	1	1
Craniotomy	1	1	1	

<b>Topic</b>	<b>Orbital disorders</b>	<b>P2</b>	<b>P3</b>	<b>SI = Rh</b>
<b>Category</b>	Advanced Rhinology			
<b>Sub-category:</b>	Intraorbital			
<b>Objective</b>	<i>To understand the aetiologies, characteristics and management of conditions presenting with facial pain, including those causes not arising in the upper aerodigestive tract. This module gives some idea of the breadth and depth of required knowledge and surgical skills. This list should not be considered to be fully inclusive or exhaustive.</i>			
<b>Knowledge</b>	Anatomy and physiology of the orbit and its contents			
	Assessment of visual loss and knowledge of tests of visual and orbital function			
	Understanding of thyroid eye disease	3	3	4
	Understanding of disorders of the optic nerve as relevant to otolaryngologists	3	3	4
	Knowledge of the surgical approaches both open and endoscopic to the orbit	3	3	4
<b>Clinical Skills</b>	Ability to take a relevant history form a patient with an orbital disorder			
	Ability to perform an appropriate ENT, neurological and ophthalmic examination			
	Understanding of the appropriate radiological and special	3	3	4

	investigations of visual and orbital function Ability to work in a team with ophthalmological colleagues	2	2	4
<b>Technical Skills and Procedures</b>	Nasal endoscopy	4	4	4
	Lateral canthotomy	2	3	4
	Medial orbital endoscopic decompression	2	3	4
	Medial open orbital decompression	2	3	4
	Optic nerve decompression	1	1	3

Topic	Orbital disorders	P2	P3	SI = Rh
<b>Category</b>	Surgical Management of Epiphora			
<b>Sub-category:</b>	Rhinology			
<b>Objective</b>	<i>To understand the aetiology and pathophysiology of epiphora. There should be detailed understanding of the presenting features, diagnosis, and management of this disorder. This module gives some idea of the breadth and depth of required knowledge and surgical skills. This list should not be considered to be fully inclusive or exhaustive.</i>			
<b>Knowledge</b>	Anatomy of the lacrimal system Intranasal anatomy Physiology of lacrimation Causes of epiphora 'Red Flag' symptoms			
<b>Clinical Skills</b>	Take a comprehensive history from a patient presenting with epiphora Relevant ophthalmic examination Syringing of lacrimal system and understanding of results Dye disappearance test Understand indications for relevant investigations Team working with ophthalmologist	3 1 1 2 2	3 1 1 2 2	3 1 1 3 4
<b>Technical Skills and Procedures</b>	Nasal endoscopy EUA Nose Endonasal DCR	4 4 2	4 4 2	4 4 4

Topic	Septorhinoplasty	P2	P3
<b>Category</b>	Rhinology		
<b>Sub-category:</b>	Facial Plastics		
<b>Objective</b>	<i>To understand the presenting features, assessment, management and complications of nasal and septal deformity. This module gives some idea of the breadth and depth of required knowledge and surgical skills. This list should not be considered to be fully inclusive or exhaustive.</i>		
<b>Knowledge</b>	Understanding of the anatomy of the nose, paranasal sinuses and facial skeleton. Understanding of the embryology of the nose Understanding of the mechanisms of trauma responsible for nasal and facial injuries. Understanding of methods of assessment of the facial skeleton		

	Knowledge of surgical techniques including use of grafts Knowledge of the specific complications of nasal surgery		
<b>Clinical Skills</b>	Ability to take a relevant history and perform an appropriate clinical examination Ability to assess photographs and devise a surgical plan including onwards referral as appropriate		
<b>Technical Skills and Procedures</b>	Septoplasty Septorhinoplasty including use of grafts Appropriate dressing and packing of nose	4 4 4	4 4 4

<b>Topic</b>	<b>Congenital abnormalities of the face</b>	<b>P2</b>	<b>P3</b>
<b>Category</b>	Rhinology		
<b>Sub-category:</b>	Facial Plastics		
<b>Objective</b>	To understand the aetiology, clinical features and management of congenital facial abnormalities. To understand how these may be associated with other syndromes. This module gives some idea of the breadth and depth of required knowledge and surgical skills. This list should not be considered to be fully inclusive or exhaustive.		
<b>Knowledge</b>	Knowledge of the anatomy and physiology of the facial structures. Knowledge of the embryology of the face including the nose, palate and neck. Knowledge of those conditions associated with congenital facial abnormalities. Understanding of how to manage congenital facial abnormalities in both the elective & emergency settings. Principles of genetics and counselling	2	2
<b>Clinical Skills</b>	Ability to take an appropriate history from the parent and child and perform relevant examinations. Nasendoscopy if appropriate		
<b>Technical Skills and Procedures</b>	Examination under anaesthesia Excision facial skin lesion including reconstructive techniques Septorhinoplasty in cleft patients	4 4 1	4 4 1

<b>Topic</b>	<b>Cosmetic Surgery</b>	<b>P2</b>	<b>P3</b>
<b>Category</b>	Rhinology		
<b>Sub-category:</b>	Facial Plastics		
<b>Objective</b>	To understand the presentation and analysis of cosmetic deformity of the face. This involves a detailed understanding of the anatomy of the skin and deeper structures and knowledge of the different facial aesthetic units. This module gives some idea of the breadth and depth of required knowledge and surgical skills. This list should not be considered to be fully inclusive or exhaustive.		
<b>Knowledge</b>	Understanding of the anatomical areas and aesthetic units that make up the face.		

	<p>Knowledge of relaxed skin tension lines</p> <p>Understanding of the blood supply and innervation of the face.</p> <p>Knowledge of the planes of dissection available.</p> <p>Knowledge of the methods used to analyse facial features.</p> <p>Knowledge of the various procedures used in cosmetic facial surgery.</p> <p>Knowledge of the limitations and complications of cosmetic facial surgery</p>		
<b>Clinical Skills</b>	<p>Ability to take a relevant history and perform an appropriate clinical examination</p> <p>Ability to assess facial deformity and devise a management plan</p>		
<b>Technical Skills and Procedures</b>	<p>Nasendoscopy</p> <p>Resection of nasal lesion</p> <p>Be able to reconstruct defects with local flaps</p> <p>Be able to reconstruct defects using Distant flaps</p> <p>Excision skin lesion</p> <p>Harvesting and use of split and full thickness skin grafts</p> <p>Facelift</p> <p>Tissue expansion techniques</p> <p>Neuromuscular blockade</p>	<p>4</p> <p>4</p> <p>2</p> <p>1</p> <p>4</p> <p>4</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p>	<p>4</p> <p>4</p> <p>2</p> <p>1</p> <p>4</p> <p>4</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p>

<b>Topic</b>	<b>Skin Cancer</b>	<b>P2</b>	<b>P3</b>
<b>Category</b>	Skin cancer		
<b>Sub-category:</b>	Facial plastics		
<b>Objective</b>	<i>To understand the aetiology, clinical presentation and management of benign and malignant tumours of the skin. This module gives some idea of the breadth and depth of required knowledge and surgical skills. This list should not be considered to be fully inclusive or exhaustive.</i>		
<b>Knowledge</b>	<p>Know the anatomy and cellular composition of the skin.</p> <p>Know the zones of the face and relaxed skin contour lines.</p> <p>Know the physiology of skin.</p> <p>Understand the principles of carcinogenesis</p> <p>Know of the different types of skin cancer and their classification.</p> <p>Know the presenting features and appearance of different types of skin cancer.</p> <p>Know the causes and predisposing factors of skin cancer.</p> <p>Know of the staging of different types of skin cancer.</p> <p>Know of the treatment of different types of skin cancer.</p> <p>Understand the rationale for the strategies to prevent skin cancer.</p>		
<b>Clinical Skills</b>	<p>Be able to take a comprehensive history and examination from a patient presenting with symptoms of skin cancer</p> <p>Manage all patients within a multidisciplinary setting when indicated.</p> <p>Be able to recommend correct treatment options to patients</p> <p>Order appropriate imaging.</p>	<p>4</p> <p>3</p> <p>3</p> <p>4</p>	<p>4</p> <p>3</p> <p>3</p> <p>4</p>
<b>Technical Skills and Procedures</b>	<p>Skin biopsy</p> <p>Excision of skin cancer and primary closure</p> <p>Excision of skin cancer and reconstruction with local axial or random pattern flaps or grafts</p> <p>Harvesting and use of split and full thickness skin grafts</p> <p>Be able to reconstruct defects using Distant flaps</p>	<p>4</p> <p>4</p> <p>2</p> <p>4</p> <p>1</p>	<p>4</p> <p>4</p> <p>2</p> <p>4</p> <p>1</p>

<b>Topic</b>	<b>Reconstruction</b>	<b>P2</b>	<b>P3</b>	<b>SI = Rh</b>
<b>Category</b>	Rhinology			
<b>Sub-category:</b>	Facial Plastics			
<b>Objective</b>	<i>To understand the methods available for facial reconstruction including, skin, muscle, cartilage, bone and implants. This involves a detailed understanding of the anatomy of the skin and deeper structures and in particular the blood supply of the tissues involved. Knowledge of the basic types of skin grafts, local flaps, regional flaps and free flaps is necessary. This module gives some idea of the breadth and depth of required knowledge and surgical skills. This list should not be considered to be fully inclusive or exhaustive.</i>			
<b>Knowledge</b>	Understanding of the applied anatomy of the head and neck Understanding of the blood supply and innervation of the head and neck and of local, regional and free grafts. Knowledge of the different types of flap available and the indications for their use Knowledge of the implants and prosthetic devices available.			
<b>Clinical Skills</b>	Ability to take a relevant history and perform an appropriate clinical examination Ability to assess cosmetic and functional deficits and devise a management plan including onward referral as appropriate			
<b>Technical Skills and Procedures</b>	Resection of nasal lesion Reconstruction of nasal cosmetic units Lip-wedge resection Excision skin lesion Suture skin Reconstruction with axial and random pattern local flaps Split and full thickness skin grafts Tissue expansion techniques Dermal fillers	4 2 2 4 4 2 4 1 1	4 2 2 3 4 2 4 1 1	4 3 2 3 4 3 4 2 2