THE ROYAL COLLEGE OF SURGEONS OF EDINBURGH

Royal College of Surgeons of England
ADVANCING SURGICAL CARE

ROYAL COLLEGE OF PHYSICIANS AND SURGEONS OF GLASGOW

RCSI

Joint Surgical Colleges Fellowship Examination

Syllabus – Otolaryngology

July 2019

The Joint Surgical Colleges Fellowship Examination (JSCFE) syllabus defines the breadth and depth of knowledge, professionalism and clinical skills to be attained by surgeons in training. It specifies the levels of expertise to be anticipated at entry and at the various stages in training and defines the standards of competence expected on completion of the training programmes. The JSCFE adopts this standard as the one against which assessment will be made. The examination will assess various elements of applied knowledge, diagnostic skills, clinical judgment and professionalism.

Clinical Management
The examination is set at the level of knowledge and standard required of a recognised specialist (day one NHS UK/Ireland consultant standard) in the generality of the specialty. Given the range of cases, the spectrum of complexity and the ability to deal with variations and complications within the practice of this specialty, a candidate should be able to demonstrate that their training / experience is such that they can safely manage both common and more complex clinical problems.

Operative skills
While the examination does not formally assess technical operating ability the JSCFE considers it inappropriate to admit a candidate to the examination if there is any doubt as to their technical skills.

Professionalism and Probity
The development of a mature and professional approach in clinical practice is essential for safe and successful patient care. Attitudes towards patients and colleagues, work ethic, ability to deal with stressful issues and the effectiveness of communication skills in providing supportive care for patients and their families are the professional qualities expected of successful candidates in this examination.

Contents

Introduction

The Intercollegiate Surgical Curriculum Programme (ISCP) provides the framework for systematic training from completion of the foundation years through to consultant level in the UK. It achieves this through a syllabus that lays down the standards of specialty-based knowledge, clinical judgment, technical and operative skills, and professional skills and behaviour, which must be acquired at each stage in order to progress. The curriculum is web based and is accessed through www.iscp.ac.uk. The website contains the most up to date version of the curriculum and each of the ten surgical specialty syllabuses. The 10 specialties include General Surgery, Vascular surgery, Urology, Paediatric surgery, Cardiothoracic Surgery, Trauma and Orthopaedic surgery, Oral and Maxillofacial surgery (OMFS), Plastic surgery, Neurosurgery and Otolaryngology (ENT). They all share many aspects of the early years of surgical training in common, but naturally become increasingly singular as training in each discipline becomes more advanced. Each syllabus will emphasise the commonalities and elucidate in detail the requirements for training in the different specialties.

This syllabus is designed for candidates who have declared Otolaryngology as their specialty interest. The standard expected is that of a newly appointed (Day 1) Consultant in the UK who is capable of independently (without direct supervision) providing care and management in the generality of Otolaryngology.

Prior to sitting this examination it will be expected that the candidate will have gained competence in a wide range of knowledge and skills including the basic sciences which are common to all surgical specialties. These topics are defined in the syllabus for the MRCS examination (https://www.intercollegiatemrcsexams.org.uk/). This must be supplemented by the topics from the Otolaryngology specialty syllabus as outlined below.

Eligibility Criteria

Candidates would normally have passed the MRCS examination of one of the four Surgical Royal Colleges.

Alternatively, candidates would have successfully completed a locally registered, *higher* surgical training programme.

It is expected that candidates will produce documentary evidence of having completed a minimum of 4 years surgical training following award of MRCS or equivalent.

The final decision on eligibility for admission to the examination will lie with the Intercollegiate Specialty Board.

Surgeons applying for this examination would be expected to demonstrate:

- Theoretical and practical knowledge related to surgery in general and to their specialty practice
- Technical and operative skills
- Clinical skills and judgment
- Generic professional and leadership skills
- An understanding of the values that underpin the profession of surgery and the responsibilities that come with being a member of the profession
- The special attributes needed to be a surgeon
- A commitment to their ongoing personal and professional development and practice using reflective practice and other educational processes
- An understanding and respect for the multi-professional nature of healthcare and their role within it

The syllabus is modular in format, with content that covers the major areas of highly specialised practice that are relevant to Otolaryngology. Each syllabus is intended to allow the successful candidate to develop an area of clinical interest and expertise upon appointment to a consultant post. Some will require further training in order to achieve the competences necessary for some of the rarer complex procedures.

Syllabus Structure

The syllabus lays down the standards of specialty-based knowledge, clinical judgment, technical and operative skills, and professional skills and behaviour that must be acquired prior to sitting the examination. The syllabus comprises the following components:

- The key topics with which a candidate will need to be familiar
- Standards for depth of knowledge
- Standards for clinical and technical skills

The Professional Behaviour and Leadership Skills syllabus is mapped to the Leadership framework as laid out by the Academy of Medical Royal Colleges and the Framework for Appraisal and Assessment derived from Good Medical Practice.

The Professional Behaviour and Leadership skills section of the syllabus is common to all surgical specialties and is based on Good Medical Practice as set out by the General Medical Council (GMC) in the UK.

Leadership Framework –
https://www.aomrc.org.uk/wp-content/uploads/2016/05/NHS_Leadership_Framework_11.pdf

Appraisal Framework –
https://www.gmc-uk.org/-/media/documents/The_Good_medical_practice_framework_for_appraisal_and_revalidation___DC5707.pdf_56235089.pdf

The Scope and Practice of Otolaryngology

The principal areas of practice in Otolaryngology are:

- Head & Neck Surgery
- Rhinology including facial plastics
- Otology and Oto-neurology
- Paediatric Otolaryngology

Standards for depth of knowledge and competence assessed by the examination

The following methodology is used to define the relevant depth of knowledge required of the candidate. Each topic has a competence level ascribed to it for knowledge ranging from 1 to 4:

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. Each topic has a competence level ascribed to it in the areas of clinical and technical skills ranging from 1 to 4:

1. Has observed

   At this level the candidate:
   - 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

   At this level the candidate:
   - 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

   At this level the candidate:
   - 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

   At this level the candidate:
   - 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.
   - The level at which one would expect a UK/Ireland consultant surgeon to function.
   - Is capable of supervising trainees.

The Syllabus for Otolaryngology

Paediatric Otolaryngology

Topic	Foreign bodies in the ear canal and UADT	Areas in which simulation should be used to develop relevant skills
Category	Paediatric Otolaryngology	
Sub-category:	Foreign bodies in the ear nose and throat	
Objective	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. *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	4 Anatomy and physiology of the paediatric airway 4 Recognition of anatomical differences between the adult and paediatric airway. 4 Recognition of the clinical features of foreign bodies in the ear, nose, and throat 4 Knowledge of the natural history and the complications associated with foreign bodies. 4 Concept of the shared airway and differing anaesthetic techniques	
Clinical Skills	HISTORY AND EXAMINATION 4 Ability to take a thorough history from the child/carer 4 Otoscopy 4 Anterior rhinoscopy 4 Flexible pharyngolaryngoscopy DATA INTERPRETATION 4 Assessment of plain radiography (e.g. chest x-ray and soft tissue neck x-ray). PATIENT MANAGEMENT 4. Recognition of the clinical signs of respiratory distress in children 3. Emergency airway care in conjunction with anaesthetists and paediatricians.	
Technical Skills and Procedures	4 Otomicroscopy and removal of foreign body 4 Removal of nasal foreign body and examination with paediatric and rigid scopes 4 Pharyngo-oesophagoscopy and foreign body removal 2 Rigid bronchoscopy and foreign body removal from larynx and trachea	Desirable MLB Bronchoscopy and removal of foreign body

Topic	Trauma to the ear, upper aero digestive tract and neck	Areas in which simulation should be used to develop relevant skills
Category	Paediatric Otolaryngology	
Sub-category:	Trauma to the head and neck	
Objective	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. *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	4 Anatomy of the head and neck in children 4 Recognition of anatomical differences between the adult and paediatric airway 4 Mechanisms of trauma to the facial skeleton and soft tissues 4 Know the causes and presentation of nasal septal haematoma 4 Know the causes and presentation of ear trauma (external, middle and inner) 4 Know the causes and presentation of trauma to the neck, pharynx and larynx 4 Knowledge of common aetiologies and awareness of the possible presentations of non-accidental injury to the ENT department. 4 Understand how child abuse is classified, how it may present to otolaryngologists and the mechanism of onward referral and management	
Clinical Skills	HISTORY AND EXAMINATION 4 Ability to take a thorough history from child/parent 4 Assessment of the external nose and nasal airway 4 Clinical examination of the ear 4 Assessment of the neck including the airway 4 Otoscopy DATA INTERPRETATION 4 Age appropriate hearing test, tympanometry PATIENT MANAGEMENT 4 Recognition of the signs of respiratory distress in a child 4 Resuscitation of a child in hypovolaemic shock secondary to bleeding 4 Aware of the local protocol for the reporting of suspected non-accidental injury	
Technical Skills and Procedures	4 Nasal fracture manipulation 4 Laryngoscopy, Pharyngoscopy 4 Drainage of septal haematoma 4 Drainage of haematoma of pinna 3 Exploration of neck 3 Paediatric Tracheostomy	

Topic	Epistaxis in a child	Areas in which simulation should be used to develop relevant skills
Category	Paediatric Otolaryngology	
Sub-category:	Epistaxis	
Objective	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*	
Knowledge	4 Nasal anatomy & physiology 4 Pathophysiology, epidemiology, & natural history of paediatric epistaxis 4 Current approach to treatment of epistaxis to include awareness of the evidence base for current treatment regimens. 4 Understand the aetiologies of paediatric epistaxis (local including nasopharyngeal angiofibroma, and systemic including coagulopathies) 4 Know the relevant investigation and treatments of paediatric epistaxis	
Clinical Skills	HISTORY AND EXAMINATION 4 Ability to take a thorough history from the child/carer 4 Anterior Rhinoscopy 4 Flexible Nasendoscopy DATA INTERPRETATION 4 Interpretation of full blood count & other haematological investigations; awareness of significance of coagulation tests PATIENT MANAGEMENT 4 Medical and surgical management of epistaxis	
Technical Skills and Procedures	4 Nasal cautery 4 EUA nose 4 Appropriate nasal packing in a child (see also adult rhinology section)	

Topic	**Rhinosinusitis; orbital and intracranial complications of rhinosinusitis**	**Areas in which simulation should be used to develop relevant skills**
Category	Paediatric Otolaryngology	
Sub-category:	Nose and Sinus infections	
Objective	Optimum recognition and management of children with rhinosinusitis; particularly complicated sinus disease e.g. subperiosteal abscess, intracranial sepsis. *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	4 Nasal anatomy & pathophysiology 4 Epidemiology, natural history & presenting symptoms of rhinosinusitis in children 4 Current approach to treatment of infective rhinosinusitis to include awareness of the evidence base for current treatment regimens. 4 Recognition and competence in the emergency management of the complications of rhinosinusitis	
Clinical Skills	HISTORY AND EXAMINATION 4 Ability to take a thorough history from the child/carer 4 Anterior Rhinoscopy 4 Flexible Nasendoscopy 4 Otoscopy DATA INTERPRETATION 4 Awareness of imaging techniques 3 Assessment of abnormalities on CT scanning of the paranasal sinuses and MR brain PATIENT MANAGEMENT 4 Medical and surgical management of rhinosinusitis and its complications	
Technical Skills and Procedures	4 EUA Nose 2 Endoscopic Nasal Polypectomy 3 External drainage of subperiosteal abscess 2 External drainage of the frontal sinus	

Topic	Airway pathology in childhood	Areas in which simulation should be used to develop relevant skills
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. *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	4 Anatomy of the paediatric airway, and differences between the adult and child. 4 Physiology of airway obstruction (Poiseulles law, Reynolds number) 4 Clinical features of airway obstruction 4 Clinical measures to determine severity of obstruction 4 Know the causes, presenting symptoms of airway pathology in children, 4 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, tracheobronchmalacia, acute epiglottitis and laryngotracheobronchitis (croup). 2 Understand the genetic disorders associated with airway pathology in children 2 Understand the role of laryngopharyngeal reflux in airway pathology in children	
Clinical Skills	HISTORY AND EXAMINATION 4 Ability to take a thorough history from the child/carer. 4 Assessment of the airway in a child 4 Flexible pharyngolaryngoscopy DATA INTERPRETATION 4 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 4 Medical management in the acute and elective situation e.g. steroids, adrenaline, reflux 3 Emergency airway care in conjunction with anaesthetist and paediatrician	Strongly recommended APLS
Technical Skills and Procedures	4 Paediatric flexible pharyngolaryngoscopy in the outpatients 3 Paediatric tracheostomy emergency and elective 4 Paediatric tracheostomy care including tube change 3 Diagnostic rigid airway endoscopy 2 Therapeutic rigid airway endoscopy	Desirable Paediatric tracheostomy For paediatric specialists Airway reconstruction

Topic	The drooling child	Areas in which simulation should be used to develop relevant skills
Category	Paediatric Otolaryngology	
Sub-category:		
Objective	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*	
Knowledge	4 Anatomy of the major and minor salivary glands 4 Anatomy of the oral cavity 4 Physiology of salivation 4 Know the causes and predisposing factors (including syndromes) for drooling 3 Understand how multidisciplinary input is used in the management of drooling children. 3 Understand the principles of non medical, medical and surgical management of drooling children	
Clinical Skills	4 Undertake a comprehensive history and examination of a child who presents with drooling 4 Be able to communicate an effective management plan to the patient and his or her carer 3 Work with colleagues from other specialties and disciplines to provide effective care for children presenting with drooling	
Technical Skills and Procedures	4 Tonsillectomy 4 Adenoidectomy 4 Flexible nasoendoscopy 2 Submandibular gland excision 1 Transposition of submandibular ducts 1 Neuromuscular blockade 1 Sublingual gland excision 1 Parotid and submandibular duct ligation	

Topic	Acute tonsillitis, Diseases of the adenoids and their complications	Areas in which simulation should be used to develop relevant skills
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. *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	4 Anatomy of the oral cavity, oropharynx and nasopharynx 4 Microbiology of the oral cavity, oropharynx and nasopharynx 4 Epidemiology, classification, aetiology and natural history of adenotonsillar disease 4 Thorough understanding of the evidence base that underpins current treatment approaches. Awareness of controversies. 4 Understanding of specific management requirements in the very young, special needs and syndromic children	
Clinical Skills	HISTORY AND EXAMINATION 4 Ability to take a through history from child/parent 4 Otoscopy 4 Examination of the oral cavity and oropharynx 4 Ability to recognise the child with possible OSA DATA INTERPRETATION 4 Clinical assessment of the nasal airway PATIENT MANAGEMENT 4 Medical and surgical treatment. 4 Management of complications both of the disease (eg peritonsillar abscess) and of treatment	
Technical Skills and Procedures	4 Tonsillectomy 4 Adenoidectomy 4 Arrest of adenotonsillar bleeding as an emergency	Desirable Adenotonsillectomy Arrest of tonsillar haemorrhage

Topic	ENT-related syndromes and cleft palate	Areas in which simulation should be used to develop relevant skills
Category	Paediatric Otolaryngology	
Sub-category:	Congenital deformities affecting the head and neck	
Objective	Appropriate primary management of children with ENT related syndromes and cleft palate, awareness of the principles and challenges that underpin long-term care. *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	4 Embryology of the head and neck, including palate 4 Anatomy of the head and neck in children 3 Recognition of the common ENT related sydromes and associations (e.g. Down's, Treacher Collins, Pierre Robin, Goldenhar, BOR, CHARGE, craniosynostosis) 3 Knowledge of the ENT manifestations of the conditions listed above 2 Knowledge of the general clinical problems encountered in these conditions with particular reference to safety of anaesthesia 2 Basic understanding of the underlying genetics of these conditions	
Clinical Skills	HISTORY AND EXAMINATION 4 Ability to take a thorough history from the patient or carer. 4 Targeted examination of the child based on knowledge of the ENT manifestations of the condition DATA INTERPRETATION 4 Interpretation of age-appropriate assessment of hearing and overnight pulse oximetry 3 Recognition of abnormalities on imaging PATIENT MANAGEMENT 3 Able to participate in the multidisciplinary approach to children with complex needs 3 Management of airway obstruction in children with craniofacial abnormalities in conjunction with anaesthetists 4 Management of OME in children with cleft palate or Downs syndrome	
Technical Skills and Procedures	4 Myringotomy & ventilation tube insertion 4 Flexible pharyngolaryngoscopy 4 Rigid airway endoscopy 3 Paediatric tracheostomy	

Topic	Congenital and acquired neck masses	Areas in which simulation should be used to develop relevant skills
Category	Paediatric Otolaryngology	
Sub-category:	Neck Masses	
Objective	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. *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	4 Anatomy of the head and neck and upper mediastinum 4 Applied embryology of thyroid gland with relation to thyroglossal cysts 4 Applied embryology of the branchial arches. 4 Anatomy of the neck spaces and understanding of the presentation, clinical features and primary management of abscesses and collections in these spaces 3 Classification of vascular malformations and awareness of treatment options 3 Knowledge of the clinical presentation and management of the commoner congenital abnormalities (e.g. cystic hygroma, teratoma, branchial abnormalities, thyroglossal cysts, lingual thyroid) 4 Awareness of the infective causes of neck lumps in children. (e.g.TB, HIV, other viral) 4 Management of persistent cervical lymphadenopathy and the appropriate use of investigations and surgical intervention. 4 Knowledge of the possible airway complications of neck masses and their management	
Clinical Skills	HISTORY AND EXAMINATION 4 Ability to take a thorough history from a patient or carer 4 Systematic examination of the child with particular reference to the neck 4 Be able to identify the signs of airway obstruction in a child DATA INTERPRETATION 4 Be able to identify the most appropriate imaging options available e.g. sonography, CT, MR scanning 4 Interpretation of virology and microbiology investigations 3 Interpretation of head and neck images PATIENT MANAGEMENT 4 Be able to identify the most appropriate imaging options available e.g. sonography, CT, MR scanning 4 Surgical and non-surgical treatment options for the management of neck masses 3 Be able to work in a multidisciplinary team	

Technical Skills and Procedures	4 Flexible pharyngolaryngoscopy 4 Incision & drainage neck abscess 4 Biopsy neck node 2 Excision thyroglossal cyst 4 Diagnostic rigid airway endoscopy 3 Paediatric tracheostomy	

Topic	**Language delay and dysphonia in childhood**	**Areas in which simulation should be used to develop relevant skills**
Category	Paediatric Otolaryngology	
Sub-category:	Speech and language development	
Objective	Awareness of the aetiology of language delay. Awareness of congenital and acquired laryngeal disorders affecting speech. *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	4 Anatomy of the larynx in children and the physiology of voice production 4 The normal developmental milestones with an emphasis on speech and language acquisition 4 Common causes of delayed speech 4 Understanding of how hearing loss impacts on language acquisition 3 Management of laryngeal pathologies 4 Understanding of age appropriate hearing tests 4 Understanding of the controversies in the management of tongue tie	
Clinical Skills	HISTORY AND EXAMINATION 4 Ability to take a through history from child/carer 4 Otoscopy 4 Flexible pharyngolaryngoscop. DATA INTERPRETATION 4 Age appropriate hearing test 3 Tympanometry PATIENT MANAGEMENT 3 Multidisciplinary approach in the management of children with speech and other developmental problems	
Technical Skills and Procedures	4 Flexible nasoendoscopy and pharyngolaryngscopy 4 Division of tongue tie 4 Ventilation tube insertion	

Topic	Head and neck malignancy in childhood	Areas in which simulation should be used to develop relevant skills
Category	Paediatric Otolaryngology	
Sub-category:	Oncology	
Objective	Awareness of the epidemiology, presentation and principles of management of malignant disease in the head and neck. *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	3 Knowledge of the common malignancies of the head and neck in childhood 4 Knowledge of presentation, investigations and management options in childhood cancers 3 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 4 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	
Clinical Skills	HISTORY AND EXAMINATION 4 Ability to take a through history from child/carer 4 Examination of the head and neck 4 Examination of the cranial nerves 4 Otoscopy 4 Flexible pharyngolaryngoscopy PATIENT MANAGEMENT 4 Multidisciplinary approach to the management of childhood cancer 3 Know the range of diagnostic tests available particularly imaging	
Technical Skills and Procedures	4 Flexible pharyngolaryngoscopy 3 Neck node biopsy after liaison with regional oncology services 3 Biopsy of tumours after liaison with regional oncology services	

Topic	Congenital abnormalities of the ear	Areas in which simulation should be used to develop relevant skills
Category	Paediatric Otolaryngology	
Sub-category:	Disorders of the external ear in children	
Objective	Recognition and classification of the principle congenital anomalies of the 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*	
Knowledge	4 Understanding of the anatomy & embryology of the ear and related structures 4 Physiology of hearing 4 Knowledge of the clinical problems associated with dysplasia of the ear 2 Knowledge of common grading systems for microtia and atresia 2 Knowledge of bone anchored auricular prosthesis and autologous pinna reconstruction	
Clinical Skills	HISTORY AND EXAMINATION 4 Ability to take a thorough history from the child/carer 4 Inspection of the external ear and recognition of main anomalies 4 Otoscopy 4Clinical assessment of hearing DATA INTERPRETATION 4 Age-appropriate assessment of hearing 4 Tympanometery PATIENT MANAGEMENT 3 Demonstrate the ability to present the options for the rehabilitation of hearing loss in microtia 4 Appropriate referral for ear reconstruction/prostheses 3 Counselling of child and carers with microtia and other major anomalies of the external ear	
Technical Skills and Procedures	4 Otomicroscopy 2 Excision of preauricular sinus 4 Excision of simple lesions in and around the external ear 2 Surgery for prominent ears 2 Bone anchored hearing aid	

Topic	Congenital deafness	Areas in which simulation should be used to develop relevant skills
Category	Paediatric Otolaryngology	
Sub-category:	Deafness excluding otitis media and its complications	
Objective	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. *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	4 embryology of the ear including congenital deformities of the ear and their relationship to deafness 4 Physiology of hearing 4 knowledge of the molecular basis of genetic, syndromic and non-syndromic deafness 4 Knowledge of acquired causes including congenital infections (e.g. CMV, rubella) 4 Fundamental understanding of age appropriate audiological testing including universal neonatal screening (OAE,ABR) 4 Appropriate investigations for the congenitally deaf child (bilateral or unilateral) e.g. TORCH screen, dipstix for haematuria, MRI, genetic review 4 Multidisciplinary approach to the rehabilitation of the deaf child (bilateral and unilateral) 4 Knowledge of rehabilitative options including hearing aids 4 Knowledge of candidacy criteria for cochlear implantation and nature of surgery involved 3 Awareness of the range of investigative options available including imaging (sonography, CT, MR scanning)	
Clinical Skills	HISTORY AND EXAMINATION 4 Ability to take a thorough history from child/parent 4 Otoscopy 4 Clinical assessment of hearing DATA INTERPRETATION 4 Age appropriate hearing test 4 Tympanometry PATIENT MANAGEMENT 4 Appropriate referral for hearing aids	
Technical Skills and Procedures	4 Microscopic examination of the ear 4 Myringotomy & ventilation tube 1 Cochlear implant	

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

Topic	**Otitis media (acute, chronic and with effusion) and complications and conditions of the external auditory canal**	**Areas in which simulation should be used to develop relevant skills**
Category	Paediatric Otolaryngology	
Sub-category:	Otitis media and its complications	
Objective	Definitive secondary-care management of middle and external ear disease and its 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	4 Anatomy of the external and middle ear cleft and surrounding structures 4 Physiology of hearing 4 Epidemiology, classification, aetiology and natural history of each variant of otitis media 4 Know the indications for imaging 4 Know the evidence base which underpins current treatment approaches 4 Demonstrate an understanding of the surgical management of cholesteatoma and the complications of otitis media 4 Knowledge of the indications for, and surgical principles of, bone anchored hearing aids and middle ear implants	
Clinical Skills	HISTORY AND EXAMINATION 4 Ability to take a through history from child/parent 4 Otoscopy 4 Neurological examination including cranial nerves 4 Clinical assessment of hearing DATA INTERPRETATION 4 Age appropriate hearing tests (including ABR, OAE, VRA, play audiometry) 4 Tympanometry 4 Identification of significant abnormalities from diagnostic imaging e.g. CT scan, MRI 4 Laboratory investigations e.g. blood tests, bacteriology results PATIENT MANAGEMENT 4 Medical, conservative and surgical management 4 Appropriate referrals and team working for children with complications of acute otitis media	
Technical Skills and Procedures	4 Otomicroscopy and aural toilet 4 Ventilation tube insertion 4 Myringoplasty 1 Ossiculoplasty 4 Cortical Mastoidectomy 2 Cholesteatoma surgery 2 Bone anchored hearing aid	Strongly recommended Temporal bone dissection (annual, Progression through training)

Topic	Facial palsy in childhood	Areas in which simulation should be used to develop relevant skills
Category	Paediatric Otolaryngology	
Sub-category:	Facial Palsy	
Objective	Safe primary management of children with facial palsy, recognition of clinical pathologies that present with facial palsy. *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	4 Anatomy of the facial nerve, and related structures 4 knowledge of the aetiologies (congenital and acquired) of facial palsy 4 Knowledge of the initial investigations and management of a child with facial palsy 4 Knowledge of the natural history of childhood facial palsy 4 Know when to refer to tertiary centre 2 Awareness of the range of diagnostic tests and the principles that govern their use e.g. electroneuronography, imaging of the facial nerve	
Clinical Skills	HISTORY AND EXAMINATION 4 Ability to take a history from child/parent 4 Otoscopy 4 Examination of the head and neck 4 Assessment of the cranial nerves in children and grading of facial palsy 4 Clinical assessment of hearing DATA INTERPRETATION 2 Interpretation of specific investigations eg electroneuronography PATIENT MANAGEMENT 4 Pharmacological management (e.g steroids, anti-viral agents) 4 Eye protection	
Technical Skills and Procedures	4 Myringotomy and ventilation tube insertion 4 Cortical mastoidectomy & Drainage of mastoid abscess 2 Cholesteatoma surgery	Strongly recommended Temporal bone dissection (annual, Progression through training)

Topic	Rhinitis	Areas in which simulation should be used to develop relevant skills
Category	Paediatric Otolaryngology	
Sub-category:	Inflammatory nasal disease (including allergic rhinitis)	
Objective	Optimum recognition and management of children with rhinitis. *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	4 Anatomy and embryology of the nose and sinuses 4 Nasal physiology 4 Knowledge of the pathophysiology, epidemiology, symptomatology and natural history of rhinitis 3 Know the basic science of allergy 4 Knowledge of the scientific principles of common investigations e.g skin prick tests, RAST 4 Knowledge of the evidence base for current treatment of allergic rhinitis 4 Knowledge of imaging techniques; assessment of abnormalities on CT scanning of the paranasal sinuses 3 Understanding of scientific basis and methodology behind desensitisation in allergy	
Clinical Skills	HISTORY AND EXAMINATION 4 Ability to take a thorough history from the child/carer 4 Anterior Rhinoscopy 4 Flexible Nasendoscopy 4 Otoscopy DATA INTERPRETATION 4 Skin prick tests for allergies, Blood tests for allergies 2 immunological tests, ciliary function tests PATIENT MANAGEMENT 4 Conservative, medical and surgical management of rhinitis	
Technical Skills and Procedures	4 Turbinate surgery 4 EUA Nose & PNS 4 Nasal biopsy	

Topic	Nasal Obstruction	Areas in which simulation should be used to develop relevant skills
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. *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	4 Anatomy and embryology of the nose and sinuses 4 Nasal physiology 4 Knowledge of the aetiology, clinical features and management of nasal polyps in children including their association with cystic fibrosis 4 Knowledge of the aetiologies of nasal obstruction at birth, in infancy and in later childhood e.g. choanal atresia, rhinitis, encephocele, glioma, angiofibroma 4 Knowledge of the investigations (including imaging) and treatment of the above conditions 4 Knowledge of related systemic conditions involving the nose e.g. Wegeners granulomatosis	
Clinical Skills	HISTORY AND EXAMINATION 4 Ability to take a thorough history from the child or carer 4 Anterior Rhinoscopy 4 Flexible Nasendoscopy 4 Otoscopy DATA INTERPRETATION 4 Assessment of abnormalities on CT scanning of the paranasal sinuses 2 Immunological tests, ciliary function tests PATIENT MANAGEMENT 4 Medical and surgical management of nasal polyposis 3 Investigation of nasal masses	
Technical Skills and Procedures	2 Endoscopic Nasal Polypectomy 2 Endoscopic sinonasal surgery 4 Nasal biopsy 4 Examination nose and PNS 1 Choanal atresia surgery	

Topic	Obstructive sleep apnoea	Areas in which simulation should be used to develop relevant skills
Category	Paediatric Otolaryngology	
Sub-category:	Airway obstruction in childhood	
Objective	Optimum recognition and management of children with possible obstructive sleep apnoea. *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	4 Anatomy of the upper airway 3 Physiology of sleep 4 Knowledge of multi-level obstruction 4 Knowledge of the concept of sleep disordered breathing 4 Knowledge of the complications of upper airway obstruction 4 Knowledge of appropriate investigations and treatment. 4 Knowledge of the relevance of co-morbidities 4 Assessment of low versus high risk patients and appropriate referral	
Clinical Skills	HISTORY AND EXAMINATION 4 Ability to take a thorough history from the child/carer 4 Examination of the oral cavity, oropharynx and chest wall 4 Anterior Rhinoscopy 4 Flexible Nasendoscopy DATA INTERPRETATION 4 Interpretation of sleep studies 1 ECG/CXR/echo manifestations PATIENT MANAGEMENT 4 Conservative, medical and surgical management of OSA	
Technical Skills and Procedures	4 EUA PNS and adenoidectomy 4 Tonsillectomy 3 Paediatric tracheostomy	

HEAD AND NECK

Topic	Adenoid and tonsillar pathology in adults	Areas in which simulation should be used to develop relevant skills
Category	Head and Neck	
Sub-category:	None	
Objective	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.*	
Knowledge	4 Demonstrate a detailed knowledge of the anatomy, physiology, pathology & microbiology of the oro and nasopharynx incl relevant anatomical relationships 4 Know the presenting signs and symptoms of benign adenotonsillar & pharyngeal disease 4 Know the complications of adenotonsillar infection 4 Understand the investigation, differential diagnosis and complications of adenotonsillar hypertrophy 4 Know the 'red flag' indicators of malignant disease of the pharynx	
Clinical Skills	4 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 4 Diagnosis and medical management of post-operative haemorrhage following adenotonsillar surgery	
Technical Skills and Procedures	4 Incision and drainage of peritonsillar abscess 4 Manage the compromised airway due to hypertrophy 4 Tonsillectomy and adenoidectomy in adults 4 Surgical management of post-operative bleeding following adenotonsillar surgery	Desirable Ts +/- As Arrest tonsillar haemorrhage

Topic	Airway obstruction in adults	Areas in which simulation should be used to develop relevant skills
Category	Head and Neck	
Sub-category:	None	
Objective	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.*	
Knowledge	4 Demonstrate a detailed knowledge of the anatomy & physiology of the larynx, trachea, pharynx and oral cavity 4 Understand the microbiology and pathology of disorders of the upper aerodigestive tract 4 Understand the classification of diseases that may present with airway obstruction 4 Understand the principles of patient management of patients presenting with airway obstruction 4 Know the different methods of securing an airway safely (surgical & non-surgical) in an emergency setting 4 Understand the indications & techniques for surgical debulking of upper airway malignancies	
Clinical Skills	4 Be able to elicit an appropriate clinical history and correctly interpret physical signs 4 Be aware of the role of appropriate investigation in the management of airway obstruction 4 Demonstrate the ability to work effectively with anaesthetists and those involved in critical care who manage the 'shared airway' 4 Demonstrate expertise in the safe assessment of patients with critical airways	
Technical Skills and Procedures	4 Be competent at performing the following diagnostic procedures; fibreoptic nasopharyngoscopy, direct laryngoscopy, microlaryngoscopy, bronchoscopy, pharyngo oesophagoscopy 3 Be competent at performing endotracheal intubation 4 Be proficient at performing a surgical tracheostomy in the elective & emergency setting both under general and local anaesthesia 1 Percutaneous tracheostomy 4 Be competent at foreign body removal from the airway in adults 2 Debulking procedures (laser/microdebrider) 4 Tracheostomy change	Strongly recommended Tracheostomy Pharyngoscopy Laryngoscopy Removal of foreign bodies

Topic	Aetiology and management of craniocervical trauma in adults	Areas in which simulation should be used to develop relevant skills
Category	Head and Neck	
Sub-category:	None	
Objective	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.*	
Knowledge	4 Understand the anatomy of the head and neck 4 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 4 Understand the Le Fort classification of facial fractures and their effects 3 Understand the classification of fractures of the mandible and their effects 4 Understand the classification of fractures of the temporal bone and their effects 4 Understand the consequences and potential complications of injury to structures in the neck, in the 3 horizontal entry zones of the neck 4 Understand the principles underpinning the appropriate investigation of a patient with a penetrating injury of the neck 4 Understand the principles of the Glasgow Coma Scale and the management of the patient with an altered level of consciousness 4 Understand the principles of management of traumatic injury to the head and neck, including the indications for urgent surgical exploration and the priorities underpinning the planning of investigation and management 4 Understand the need for a multidisciplinary approach to management of craniocervical trauma 4 Understand the pathophysiology of chemical and thermal burn injury to the upper aerodigestive tract & principles of management	
Clinical Skills	4 Be able to elicit an appropriate clinical history from a patient with craniocervical trauma (or from a third party witness) 4 Be able to demonstrate the relevant clinical signs from a patient with craniocervical trauma 4 Be able to appropriately order and interpret the results of investigations in a patient with craniocervical trauma 4 Be able to coordinate the assembly of an appropriate multidisciplinary team to manage a patient with craniocervical trauma	
Technical Skills and Procedures	4 Tracheostomy 3 Endotracheal intubation 4 Be able to explore the traumatised neck and secure bleeding vessels 4 Be able to manage penetrating injury to the viscera of the upper aerodigestive tract 1 Be able to undertake microsurgical reanastomosis of divided nerves where appropriate	Strongly recommended Tracheostomy Neck exploration Endotracheal intubation Desirable Neural anastomosis

Topic	Disorders of swallowing	Areas in which simulation should be used to develop relevant skills
Category	Head and Neck	
Sub-category:	None	
Objective	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*	
Knowledge	4 Know the anatomy of the pharynx, and physiology of swallowing 4 Know the causes of odynophagia 4 Know the various hypotheses relating to the aetiology of dysphagia 4 Understand the investigation and imaging of a patient with dysphagia 4 Understand the principles of medical and surgical management of dysphagia 4 Understand the pathophysiology of aspiration, its complications and the principles of management 4 Understand the aetiology and management of globus pharyngeus 4 Understand the aetiology and management of laryngopharyngeal reflux	
Clinical Skills	4 Elicit an appropriate clinical history and clinical signs 4 Be able to examine the pharynx and oesophagus with endoscopes in outpatients 4 Be able to work in cooperation with Speech & language therapists in the management of dysphagia 4 Be aware of 'red flag' symptoms in the differential diagnosis of dysphagia 2 Interpretation of videofluoroscopic swallowing studies	
Technical Skills and Procedures	4 Flexible fibreoptic nasopharyngolaryngoscopy 3 Fibreoptic endoscopic evaluation of swallowing studies 4 Endoscopic examination of pharynx, larynx and oesophagus under general anaesthesia 4 Removal of foreign bodies from the pharynx, larynx and oesophagus under general anaesthesia 3 Endoscopic pharyngeal pouch surgery 1 Open pharyngeal pouch surgery	Strongly recommended Pharyngoscopy Laryngoscopy Removal of foreign bodies

Topic	Aetiology and management of cervical sepsis	Areas in which simulation should be used to develop relevant skills
Category	Head and Neck	
Sub-category:	None	
Objective	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.*	
Knowledge	4 Know the anatomy of the fascial compartments of the neck 4 Understand the pathogenesis(including congenital abnormalities) and clinical presentation of deep neck space infections 4 Know the microbiology of deep neck space infections 4 Understand the principles of medical and surgical management of deep neck space infection, including image guided drainage procedures 4 Understand the complications of deep neck space infections and their management	
Clinical Skills	4 Be able to elicit an appropriate history from a patient with deep cervical sepsis 4 Be able to demonstrate the relevant clinical signs from a patient with deep cervical sepsis 4 Be able to order and interpret the results of appropriate investigations, including imaging and microbiological cultures, in a patient with deep cervical sepsis 4 Be able to undertake treatment of a patient with deep cervical sepsis or complications thereof	
Technical Skills and Procedures	4 Be proficient in rigid endoscopic examination of the upper aerodigestive tract 4 Be proficient in management of the compromised upper airway in deep cervical sepsis, including tracheostomy 4 Manage the patient in conjunction with anaesthetists/intensivists 4 Be competent in the incision and drainage of a deep cervical abscess, as well as demonstrating awareness of the complications of such procedures	Strongly recommended Tracheostomy Neck exploration

Topic	**Aetiology and management of congenital abnormalities of the head and neck affecting adults (including branchial & thyroglossal cysts, pharyngeal diverticulae, cleft lip & palate)**	**Areas in which simulation should be used to develop relevant skills**
Category	Head and Neck	
Sub-category:	None	
Objective	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.*	
Knowledge	4 Understand the embryology of the head and neck 4 Know the anatomy of the neck 4 Understand the morphology and classification of pharyngeal diverticulae 4 Understand the pathophysiological effects of pharyngeal diverticulae and the principles underlying their management 4 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.(ie branchial cleft abnormalities) 4 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 4 Know of syndromes associated with congenital abnormalities of the head and neck 3 Understand the morphology and classification of dentoalveolar malformations and the principles underlying their management 4 Understand the morphology and classification of congenital abnormalities of the larynx, trachea and oesophagus and the principles underlying their management 4 Understand the morphology, classification of and pathophysiological effects of cleft lip and palate, and the principles of management thereof 4 Understand the investigation of congenital abnormalities of the head and neck including imaging and examination under anaesthesia	
Clinical Skills	4 Be able to elicit an appropriate history from a patient with a congenital abnormality of the head and neck 4 Be able to demonstrate the relevant clinical signs from a patient with a congenital abnormality of the head and neck 4 Be able to undertake appropriately ordered investigation of a congenital abnormality of the head and neck 3 Be able to interpret imaging of congenital abnormalities of the head and neck 4 Understand the role of a multidisciplinary team in the management of congenital abnormalities of the head and neck	

Technical Skills and Procedures	4 Be able to perform appropriately directed examination under anaesthesia, including endoscopic assessment of a congenital abnormality of the head and neck 3 Be able to excise a pharyngeal diverticulum using endoscopic techniques 4 Be able to perform surgery to remove abnormalities of the thyroglossal duct 4 Be able to perform a tracheostomy under general and local anaesthesia 4 Be able to excise a branchial cyst 1 Be able to excise a branchial fistula	Strongly recommended Tracheostomy Pharyngoscopy Laryngoscopy Neck exploration

Topic	**Cervical lymphadenopathy in adults**	**Areas in which simulation should be used to develop relevant skills**
Category	Head and Neck	
Sub-category:	None	
Objective	To understand the aetiology, presenting symptoms & 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.*	
Knowledge	4 Demonstrate knowledge of the aetiology & pathology of cervical lymphadenopathy including manifestations of systemic disease 4 Be able to order the appropriate investigations of neck masses 4 Understand the anatomy of the neck, and distribution of cervical lymph nodes. Classify the lymphatic levels of the neck according to the MSK classification 4 Demonstrate knowledge of the differing histological and microbiological causes of cervical lymphadenopathy 4 Presentation, aetiology, investigations and pattern of metastatic spread of upper aerodigestive tract, salivary gland, cutaneous and thyroid malignancies 4 Demonstrate knowledge of the presentation, aetiology, investigations and principles of management of lymphoreticular disease as it applies to the head and neck 4 Principles of management of patients with cervical lymphadenopathy including specifically the management of the unknown primary malignant neck lump 4 Demonstrate knowledge of the indications for medical & surgical management and the complications of management	
Clinical Skills	4 Be able to take a relevant detailed history and interpret clinical signs correctly	
Technical Skills and Procedures	4 Fine needle aspiration cytology 4 Outpatient and in-patient endoscopy of the UADT 4 Excision of cervical lymph nodes and deal with the complications 2 Radical neck dissection 4 Selective neck dissection 1 Modified radical neck dissection	Strongly recommended Neck dissection

Topic	**Head and neck malignancies in the upper aerodigestive tract excluding the oral cavity**	**Areas in which simulation should be used to develop relevant skills**
Category	Head and Neck	
Sub-category:	None	
Objective	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*	
Knowledge	4 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 4 Know the pathology of HNC 4 Understand the presenting signs and symptoms of head and neck cancer 4 Understand the various hypotheses relating to the aetiology of squamous cell cancer including the cellular basis of oncogenesis 4 Understand the pattern of spread of malignant disease 4 Understand how HNC is managed in the multidisciplinary setting 4 Know the indications for imaging in HNC and the use of relevant imaging modalities 4Understand the functional consequences of head and neck cancer, and its treatment 4 Understand the principles involved in and evidence for the various medical and surgical methods of treatment available for head and neck cancer 4 Understand the role of surgical and medical treatment in palliative management of patients 4 Understand the indications for reconstructive and rehabilitative surgery (including surgical voice restoration) in HNC 4 Know of the various reconstructive options available in HNC 4 Be aware of national and local guidelines for the management of HNC 4 Know the complications of surgical and non-surgical treatment of HNC and the multidisciplinary management of these complications 3 Understand the basic science underpinning chemotherapy & radiotherapy 3 Understand the principles of treatment of chemotherapy and radiotherapy and different techniques and regimes	
Clinical Skills	4 Elicit a relevant clinical history and clinical signs including being able to perform an appropriate examination 4 Be able to work within the MDT, and recognise the contributions made by all team members 4 Demonstrate good communication skills with other professionals 4 Be able to break bad news sensitively and appropriately to patients and their families 4 Demonstrate competence in the management of acute complications of head and neck surgery	Strongly recommended for those specialising in head & neck Desirable Advanced communication skills

Technical Skills and Procedures	4 Be able to perform the following diagnostic procedures; microlaryngoscopy, pharyngo-oesophagoscopy, tonsillectomy, examination of postnasal space, bronchoscopy, Fine Needle Aspiration Cytology (FNAC) 1 Total laryngectomy 2 Radical neck dissection 4 Selective neck dissection 1 Modified radical neck dissection 2 Open and endoscopic excision of pharyngeal tumours 2 Transoral laser surgery 2 Reconstructive surgery with myocutaneous (pedicled) flaps 1 Reconstructive surgery with free tissue transfer 4 Be able to manage safely acute complications of head and neck surgery 4 Be able to replace a tracheooesophageal valve in clinic	Strongly recommended Pharyngosocpy, Laryngoscopy Tracheostomy Neck dissection (progression through training) Laser safety Desirable (Strongly recommended for those specialising in H&N) Tumour resections Pedicled and free flaps

Topic	Investigation and management of the neck lump	Areas in which simulation should be used to develop relevant skills
Category	Head and Neck	
Sub-category:	None	
Objective	To understand the aetiology, presenting symptoms & 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.*	
Knowledge	4 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. 4 Know the differential diagnosis of a neck lump 4 Demonstrate knowledge of the aetiology & pathology of cervical lymphadenopathy including manifestations of systemic disease 4 Understand the presentation, aetiology, investigations and pattern of metastatic spread of upper aerodigestive tract, salivary gland, cutaneous and thyroid malignancies 4 Understand the appropriate investigation of neck masses and specifically the management of the unknown primary malignant lump 4 Demonstrate knowledge of the presentation, aetiology, investigations and principles of management of lymphoma and leukaemia as it applies to the head and neck 4 Understand the principles of medical and surgical management of patients with a neck lump 4 Demonstrate knowledge of the potential complications of management	
Clinical Skills	4 Be able to take a relevant detailed history, perform appropriate examination and interpret clinical signs correctly 4 Demonstrate a rational approach to investigation of a neck lump	
Technical Skills and Procedures	4 Perform FNAC 4 Outpatient and inpatient endoscopy of the Upper aerodigestive tract 4 Perform excision biopsy of cervical lymph nodes and deal with the complications 2 Radical neck dissection 4 Selective neck dissection 1 Modified radical neck dissection 4 Branchial cyst excision and management of complications	Strongly recommended Pharyngoscopy Laryngoscopy Neck dissection (progression through training)

Topic	Neoplastic salivary gland disease	Areas in which simulation should be used to develop relevant skills
Category	Head and Neck	
Sub-category:	None	
Objective	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.*	
Knowledge	4 Know the anatomy & physiology of the major & minor salivary glands & their relations 4 Know the anatomy of the neck 4 Know the anatomy of the oral cavity 4 Know the pathology of salivary gland tumours 4 Understand the classification of salivary gland tumour. 4 Know the presenting symptoms & signs of salivary gland tumours 4 Understand the modalities (cytological & imaging) available for investigating salivary gland tumours 4 Know the differential diagnosis of salivary gland tumours and inflammatory swellings 4 Understand the principles of management of salivary gland tumours 4 Understand the potential consequences of salivary gland surgery and the complications of surgery 4 Understand the principles of management (surgical & non surgical) of malignant salivary gland disease 4 Understand the role of reconstructive and palliative surgery in the management of malignant salivary gland disease	
Clinical Skills	4 Be able to elicit an appropriate clinical history and interpret physical signs correctly 4 Demonstrate the ability to detect 'red flag' symptoms & signs of malignant disease 4 Order the most appropriate imaging modality 4 Manage patients with malignant disease in a multidisciplinary team	
Technical Skills and Procedures	4 FNAC 4 Set up and use facial nerve monitor 4 Be able to perform a submandibular gland excision 4 Biopsy of a minor salivary gland tumour 4 Be able to perform a superficial parotidectomy 1 Total parotidectomy 2 Radical neck dissection 4 Selective neck dissection 1 Modified radical neck dissection 1 Facial nerve grafting 1 Facio-hypoglossal anastomosis	Desirable Submandibular gland excision Parotidectomy Desirabe (for those specialising in H&N) Neural anastamosis

Topic	Non-neoplastic salivary gland disease	Areas in which simulation should be used to develop relevant skills
Category	Head and Neck	
Sub-category:	None	
Objective	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.*	
Knowledge	4 Know the anatomy and physiology of the major and minor salivary glands 4 Understand the pathological processes, both local & systemic, that can affect the salivary glands 4 Understand the classification of benign salivary gland disease including infection, inflammatory diseases, drugs and benign tumours 4 Know the various imaging modalities for investigation of benign salivary gland disease 4 Understand the principles of patient management 4 Know the medical and surgical management of salivary gland disease, and the complications of surgery	
Clinical Skills	4 Be able to elicit an appropriate clinical history and interpret clinical signs correctly 4 Be able to order the appropriate special investigations and correctly interpret images including plain radiographs, computerised tomography and Magnetic resonance imaging 4 Be able to counsel patients on the particular risks of salivary gland surgery	
Technical Skills and Procedures	4 Be able to excise a submandibular calculus 4 Be able to perform submandibular gland excision 1 Excision of ranula 4 Minor salivary gland biopsy 1 Parotidectomy for inflammatory disease	

Topic	Thyroid and parathyroid disease	Areas in which simulation should be used to develop relevant skills
Category	Head and Neck	
Sub-category:	None	
Objective	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.*	
Knowledge	4 Understand the embryology, physiology, biochemistry and anatomy of the thyroid gland 4 Understand the embryology, physiology, biochemistry and anatomy of the parathyroid glands 4 Understand the pathophysiology of endocrine dysfunction of the thyroid and parathyroid glands 4 Understand the classification of thyroid neoplasia 4 Understand the principles of investigation of a patient with endocrine dysfunction of the thyroid gland 4 Understand the principles of investigation of a patient with endocrine dysfunction of the parathyroid glands 4 Understand the principles of investigation of a patient with a parathyroid or thyroid mass 4 Understand principles of medical and surgical management of endocrine dysfunction of the thyroid and parathyroid glands, including the peri operative management of thyrotoxicosis 4 Understand principles of medical and surgical management of neoplasia of the thyroid and parathyroid glands, including post operative complications 4 Understand the need to work as part of an MDT in management of malignant thyroid disease 4 be aware of national and local guidelines for the management of thyroid malignancy	
Clinical Skills	4 Be able to elicit an appropriate clinical history from a patient with thyroid or parathyroid gland disease 4 Be able to demonstrate relevant clinical signs in a patient with thyroid or parathyroid gland disease	
Technical Skills and Procedures	3 Thyroidectomy 4 Be able to obtain appropriate samples for fine needle cytology or core biopsy from a patient with a thyroid or parathyroid mass 1 Be able to perform surgical exploration of the neck for parathyroid disease 1 Be able to explore the superior mediastinum for thyroid and parathyroid neoplasia	Desirable Thyroidectomy

Topic	Oral pathology	Areas in which simulation should be used to develop relevant skills
Category	Head and Neck	
Sub-category:	None	
Objective	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.*	
Knowledge	4 Understand the anatomy of the oral cavity 4 Know the normal flora of the oral cavity and how oral disease can alter oral flora 4 Understand the physiology of the oral phases of swallowing 4 Know the physiology of salivary function 4 Understand the consequences of oral disease on swallowing 4 Understand the consequences of salivary gland dysfunction on oral health 4 Know the causes of drooling and the principles of management thereof 3 Understand the aetiology, pathophysiology, presenting symptoms and signs of dental caries 4 Know the pathophysiology, presenting symptoms & signs and management of mucosal oral disease including infection, inflammation, soft tissue and bony conditions 4 Understand the aetiology of oral cancer 4 Know the presenting symptoms and signs of oral cancer 4 Understand the principles of management of oral cancer 4 Understand the long and short term effects of chemotherapy and radiotherapy on oral health 4 Understand the appropriate modalities for imaging oral disease	
Clinical Skills	4 Be able to elicit an appropriate clinical history and interpret physical signs correctly 4 Demonstrate the ability to detect ‘red flag’ symptoms & signs of malignant disease 4 Order the most appropriate imaging modality 3 Be able to interpret plain images of the oral cavity and associated bony structures 3 Manage patients with malignant disease in a multidisciplinary team 4 be able to diagnose dental related sepsis presenting in the neck or paranasal sinuses	
Technical Skills and Procedures	4 Perform a biopsy of an oral lesion 4 Remove and treat benign oral lesions 1 Partial glossectomy 1 Submandibular duct transposition for drooling 1 Dental extractions 1 Closure of oroantral fistulae 1 Mandibulotomy and excision of floor of mouth lesion	Desirable (for those specialising in H&N) Excision oral lesions Mandibulotomy and reconstruction

Topic	Sleep related breathing disorders	Areas in which simulation should be used to develop relevant skills
Category	Head and Neck	
Sub-category:	None	
Objective	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.*	
Knowledge	4 Know the aetiology, presenting signs and symptoms of sleep related breathing disorders, including snoring, obstructive sleep apnoea / hypopnoea and central sleep apnoea in adults 4 Know of the pathophysiological sequelae of sleep related breathing disorders including snoring, obstructive sleep apnoea / hypopnoea and central sleep apnoea 4 Understand the principles of assessment and investigation of sleep related breathing disorders, including sleep nasendoscopy and sleep studies / polysomnography 4 Understand the principles of management of sleep related breathing disorders including CPAP, mandibular advancement prostheses, nasal and pharyngeal surgery, tracheostomy and drug therapy 4 Understand the principles of midface and mandibular advancement surgery	
Clinical Skills	4 Be able to elicit an appropriate clinical history and identify relevant clinical signs in a patient with a sleep related breathing disorder 4 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	
Technical Skills and Procedures	4 Be able to perform palatal surgery for snoring/OSAS 4 Be able to perform surgery to correct nasal airway obstruction 4 Be able to perform sleep nasendoscopy or outpatient flexible fibreoptic nasendoscopy 4 Tracheostomy	

Topic	Voice disorders	Areas in which simulation should be used to develop relevant skills
Category	Head and Neck	
Sub-category:	None	
Objective	To understand the aetiology, presenting signs, symptoms and management of common voice 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.*	
Knowledge	2 Understand the physics of sound 4 Understand the embryology of the larynx and congenital malformations of the larynx 4 Understand the maturational / developmental changes of the larynx 4 Understand the anatomy, neuroanatomy and movements of the larynx 4 Understand the physiology of phonation and articulation 3 Understand the classification of dysphonias and the various hypotheses relating to the aetiology of dysphonias 2 Understand the classification of disorders of articulation 4 Understand principles of videostroboscopic examination of the larynx, laryngography and analysis of pitch and periodicity of speech (including photodocumentation) 4 Understand the principles of the medical and surgical management of patients with dysphonia (including instrumentation) 3 Know the principles of Speech and Language Therapy 4 Know the classification & aetiology of inflammatory and neoplastic laryngeal disorders	
Clinical Skills	4 Elicit an appropriate clinical history from and demonstrate clinical signs in a dysphonic patient 3 Communication skills with Speech & Language therapists and ability to work in a multidisciplinary team	
Technical Skills and Procedures	4 Laryngeal examination with mirrors and flexible fibreoptic endoscope in an outpatient setting 4 Microlaryngosopy 2 Videostroboscopic laryngoscopy in an outpatient setting 3 Microscopic / endoscopic laryngeal surgery and intralaryngeal injection techniques 2 Laryngeal framework surgery 3 Vocal cord injection 1 Laryngeal electromyography	Strongly recommended Microlaryngoscopy Desirable Vocal cord injection (Desirable for those specialising in Laryngology) Laryngeal framework surgery

Topic	Tracheostomy Care Module (Adult)	Areas in which simulation should be used to develop relevant skills
Category	Head and Neck	
Sub-category:	Airway management	
Objective	To be able to manage patients with short and long term tracheostomies in an emergency, elective & community setting and provide an expert resource to other health professionals in the management of tracheostomies	
Knowledge	4 Anatomy of larynx, trachea and neck 4 Physiology of respiration 4 Indications for tracheostomy 4 In depth knowledge of different types of tracheostomy tubes and relative indications for use 4 Role of health professionals in the multidisciplinary management of patients with tracheostomy 4 Local and national guidelines for tracheostomy management 4 Indications for surgical & percutaneous tracheostomy 4 Principles of weaning	
Clinical Skills	4 Tracheostomy care; suction, inner tube care, humidification 4 Appropriate selection of correct tube to suit patient 4 Supervision of weaning and extubation 4 Troubleshooting in a variety of situations 4 Management of persistent trachea cutaneous fistula 4 Management of patients with failed extubation 4 Multi-disciplinary management of patients with long term tracheostomy tubes	
Technical Skills and Procedures	4 Flexible nasendoscopy 4 Management of blocked & displaced tube 4 Tracheostomy change 3 Repair of persistent tracheo cutaneous fistula	

OTOLOGY

Topic	Non-infective, acquired lesions of the pinna and external ear canal	Areas in which simulation should be used to develop relevant skills
Category	Otology	
Sub-category:	Non infective conditions of the external ear	
Objective	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*	
Knowledge	4 Anatomy, physiology and pathology of the external ear and relationship of disease to the temporal bone 4systemic conditions affecting external ear 4 dermatological conditions of the external ear 3 pharmacology of medications used in treatment 4 aetiology, pathology, presentation and management of benign tumours of the pinna and external ear canal 4 aetiology, pathology, presentation and management of malignant tumours of the pinna and external ear canal 3 aetiology of acquired atresia of the external auditory meatus 3 pathogenesis of effects of ionizing radiation of the ear and temporal bone 4 aetiology, pathology, presentation and management of osteoma / exostosis 4 management of foreign bodies 4 understand the implications and management of trauma to the pinna 4 Management including medical and surgical options as appropriate	
Clinical Skills	HISTORY AND EXAMINATION 4 obtain appropriate history 4 clinical examination 4 Otoscopy 4 microscopy DATA INTERPRETATION 4 interpretation of audiological investigations 3 awareness and interpretation of radiological investigations	
Technical Skills and Procedures	4 Aural toilet including microsuction and application of dressings 4 Biopsy of lesion of external ear 3 Oncological resection of tumours of the pinna 1 Reconstructive surgery of the pinna 2 Meatoplasty 1 Removal of osteoma/exostosis 4 Otomicroscopy and removal of FBs 4 Drainage of haematoma of pinna 4 Suturing of pinna	

Topic	Infective conditions of the pinna and external ear canal	Areas in which simulation should be used to develop relevant skills
Category	Otology	
Sub-category:	Infective conditions of the external ear and pinna including otitis externa, furunculosis, otomycosis, viral infections, chondritis & cellulitis	
Objective	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*	
Knowledge	4 Anatomy, physiology and pathology of the external ear and relationship of disease to the temporal bone 4 The pathogenesis of infective disorders of the external ear and pinna 4 Necrotising otitis externa 4 Microbiology of external ear and conditions affecting the pinna 4 Knowledge of antimicrobial and antiviral agents and relevant pharmacology of medications used in treatment 4 Differential diagnosis of infective/inflammatory conditions 4 Management including medical and surgical options as appropriate	
Clinical Skills	HISTORY AND EXAMINATION 4 obtain appropriate history 4 clinical examination 4 Otoscopy 4 microscopy DATA INTERPRETATION 3 Awareness and interpretation of radiological investigations 4 Awareness and interpretation of microbiological investigations	
Technical Skills and Procedures	4 Microscopy 4 suction clearance 4 biopsy of lesion of external ear canal 4 Drainage of abscess	

Topic	Trauma	Areas in which simulation should be used to develop relevant skills
Category	Otology	
Sub-category:	Trauma	
Objective	To understand the aetiology, presenting signs, symptoms and management of trauma of the external, middle and inner ear including the temporal bone. *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	4 Anatomy, physiology and pathology of the ear and auditory pathways 4 The effects of trauma on the pinna, ear canal, tympanic membrane, middle ear, otic capsule and temporal bone 3 The effects and assessment of poly-trauma and neurological injury 4 The effects of barotrauma 4 The surgical and non-surgical management of trauma of the external, middle and inner ear 4 Glasgow Coma Scale 4 Grading of facial nerve function 2 Neurophysiological assessment of facial nerve	
Clinical Skills	HISTORY AND EXAMINATION 4 Obtain appropriate history 4 Clinical examination including neurological assessment 4 Otoscopy 4 Microscopy 4 Audiological and vestibular assessment DATA INTERPRETATION 4 Objective and subjective audiological and vestibular tests 3 Radiological imaging of the temporal bone, head and neck 3 Laboratory investigations for suspected CSF leaks PATIENT MANAGEMENT 4 Be able to advise the patient of the treatment options, discuss risks and potential benefits, potential complications 4 To work where appropriate in a multidisciplinary team & liaise with other professional and organisations 4 The importance of teamwork in managing critically ill patients	
Technical Skills and Procedures	4 Microscopy 4 Suction clearance of ear 2 Meatoplasty 4 Drainage of haematoma of pinna 4 Suturing of pinna 3 Exploratory tympanotomy 4 Myringoplasty 1 Ossiculoplasty 1 Facial nerve decompression/anastomosis 1 Repair of perilymph leak	Strongly recommended Temporal bone dissection (annual, progression through training) Strongly recommended for those specialising in Otology Advanced temporal bone dissection

Topic	Acute otitis media and sequelae	Areas in which simulation should be used to develop relevant skills
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	4 Anatomy, physiology and pathology of the ear and temporal bone 4 The microbiology related to acute ear infections 4 Complications of acute otitis media including mastoiditis, lateral sinus thrombosis, meningitis and intracranial abscess 4 Indications for laboratory and radiological investigations 4 Differential diagnosis of acute otitis media and complications 4 Medical and surgical management options 4 Relevant pharmacology of medications used in medical treatment	
Clinical Skills	HISTORY AND EXAMINATION 4 obtain appropriate history 4 clinical examination including neurological assessment 4 Otoscopy 4 microscopy 4 Audiological assessment DATA INTERPRETATION 3 Interpretation of radiological investigations PATIENT MANAGEMENT 4 To work where appropriate in a multidisciplinary team & liaise with other professional and organisations 4 The importance of teamwork in managing critically ill patients	
Technical Skills and Procedures	4 microsuction 4 myringotomy and grommet insertion 4 Cortical mastoidectomy and access mastoidectomy	Strongly recommended Temporal bone dissection (annual, progression through training) Strongly recommended for those specialising in Otology Advanced temporal bone dissection

Topic	Chronic suppurative otitis media and sequelae	Areas in which simulation should be used to develop relevant skills
Category	Otology	
Sub-category:	Middle ear	
Objective	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*	
Knowledge	4 Anatomy, physiology and pathology of the ear and temporal bone 4 Definition and classification of chronic middle ear disease, including cholesteatoma, retraction pockets, perforations, otitis media with effusion and myringitis 4 Aetiology and pathophysiology of chronic middle ear disease 4 The microbiology related to chronic middle ear disease 4 Complications of chronic middle ear disease (including intracranial sepsis) 4 Principles and practice of audiology including pure tone audiometry, tympanometry 4 Principles of specialist audiological investigations including speech audiometry, otoacoustic emissions and evoked response audiometry 4 Indications for radiological investigations 4 Pharmacology of medications used in medical treatment 4 Medical and surgical management options	
Clinical Skills	HISTORY AND EXAMINATION 4 obtain appropriate history 4 clinical examination including neurological assessment 4 Otoscopy 4 microscopy 4 Audiological assessment DATA INTERPRETATION 4 Interpretation of audiological investigations 3 Interpretation of radiological investigations	
Technical Skills and Procedures	4 microsuction 4 myringotomy and grommet insertion 4 T tube insertion 4 Grommet removal 4 Aural polypectomy 4 Myringoplasty 4 Cortical mastoidectomy and access mastoidectomy 3 Modified radical mastoidectomy 1 Combined approach tympanoplasty 1 Ossiculoplasty	Strongly recommended Temporal bone dissection (annual, progression through training) Strongly recommended for those specialising in Otology Advanced temporal bone dissection

Topic	Adult hearing loss	Areas in which simulation should be used to develop relevant skills
Category	Otology	
Sub-category:	Deafness in adults	
Objective	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*	
Knowledge	4 Embryology of the ear 4 Anatomy, physiology and pathology of the ear and auditory pathways 4 Principles of acoustics and measurement of sound 4 Principles and practice of audiology including pure tone audiometry, speech audiometry and electrophysiological tests and other objective tests of hearing including oto-acoustic emissions 4 Indications for radiological investigation of hearing loss 3 The genetics of otological diseases 4 Differential diagnosis, aetiology and management of conductive hearing loss including external/middle ear disorders and otosclerosis 4 Differential diagnosis, aetiology and management of sensorineural hearing loss including noise induced hearing loss, presbyacusis, menieres disease autoimmune diseases and retro-cochlear pathology 4 Aetiology, investigation and management of acute sensorineural hearing loss 3 Central auditory processing disorders, auditory neuropathy, obscure auditory dysfunction 3 Auditory rehabilitation including the use of hearing aids and other assistive devices 4 Social and psychological issues of deafness 3 Principles of non-auditory communication 4 Principles of surgical reconstruction 4 Management of severe/ profound hearing loss 3 Principles of and indications for cochlear implants, middle ear implants and bone anchored hearing aids 4 Principles of preventative audiology and hearing conservation	

Clinical Skills	HISTORY AND EXAMINATION 4 obtain appropriate history 4 clinical examination 4 Otoscopy 4 microscopy 4 Audiological assessment DATA INTERPRETATION 4 Interpretation of audiological investigations 3 Interpretation of radiological investigations 4 Interpretation of laboratory investigations PATIENT MANAGEMENT 4 Demonstrate communication skills and empathy 4 Be able to advise the patient of the treatment options, discuss risks and potential benefits, potential complications 4 To work where appropriate in a multidisciplinary team & liaise with other professional and organisations 4 Principles of a holistic approach to the management of hearing loss 2 genetic counselling	
Technical Skills and Procedures	3 Perform pure tone audiometry, tympanometry 4 Microscopy 4 Microscution 4 Myringotomy + grommet insertion 4 Exploratory tympanotomy 4 Myringoplasty 1 Ossiculoplasty 1 Stapedotomy/stapedectomy 1 Cochlear implantation 1 Middle ear implantation 2 Insertion of Bone anchored hearing aid abutment 1 Closure of perilymph leak 1 The surgical approaches to the CP angle	Strongly recommended Temporal bone dissection (annual, progression through training) Strongly recommended for those specialising in Otology Advanced temporal bone dissection

Topic	Tinnitus	Areas in which simulation should be used to develop relevant skills
Category	Otology	
Sub-category:	Tinnitus	
Objective	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*	
Knowledge	4 Anatomy, physiology and pathology of the ear and auditory pathways 2 Psycho-acoustical tests, pitch and loudness match, minimum masking level, residual inhibition 3 The various hypotheses relating to the aetiology of tinnitus both objective and subjective 4 Knowledge of objective causes of tinnitus eg palatal myoclonus, tumours, arteriovenous malformations 4 The psychological effects of tinnitus 3 Principles of tinnitus retraining and rehabilitation and the principles of support and counselling 4 Principles of hearing aid(s) and masking	
Clinical Skills	HISTORY AND EXAMINATION 4 obtain appropriate history 4 clinical examination 4 Otoscopy DATA INTERPRETATION 3 Interpretation of radiology PATIENT MANAGEMENT 4 Demonstrate communication skills and empathy 4 Be able to advise the patient of the treatment options, discuss risks and potential benefits 4 To liaise with other organisations and professionals including audiologists, hearing therapists and clinical psychologists	
Technical Skills and Procedures	4 Perform pure tone audiometry, tympanometry	

Topic	Facial palsy	Areas in which simulation should be used to develop relevant skills
Category	Otology	
Sub-category:	Facial Paralysis	
Objective	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*	
Knowledge	4 The anatomy and physiology of facial nerve and related structures 4 The aetiology, classification and neuro-physiology of facial paralysis 4 Indications for investigations including radiology, electrophysiology and laboratory tests 4 Facial nerve grading 4 Management of acute and chronic facial nerve palsy 4 Management and prevention of ocular complications 4 Principles of peri-operative facial nerve monitoring 2 Principles of rehabilitation for facial paralysis	
Clinical Skills	HISTORY AND EXAMINATION 4 obtain appropriate history 4 clinical examination including assessment of facial nerve function 4 Otoscopy DATA INTERPRETATION 2 neuro-physiological tests of inner ear function and facial nerve 3 Interpretation of radiological tests 4 Interpretation of laboratory investigations PATIENT MANAGEMENT 4 Demonstrate communication skills and empathy 2 Appreciate the psychological effects of facial disfigurement 4 Be able to advise the patient of the treatment options, and liaise with other health care professionals	
Technical Skills and Procedures	4 Setup and use of intra-operative facial nerve monitor 4 Cortical mastoidectomy 3 Modified radical mastoidectomy 1 Full decompression of facial nerve 1 Facial nerve anastomosis	Strongly recommended Temporal bone dissection (annual, progression through training) Strongly recommended for those specialising in Otology Advanced temporal bone dissection

Topic	Disorders of balance	Areas in which simulation should be used to develop relevant skills
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	4 Anatomy and physiology related to maintenance of balance including the vestibular system, visual, locomotor, central nervous and cardiovascular systems 4 The pathology and various hypotheses relating to the aetiology and management of sudden vestibular failure, Ménière's disease, benign paroxysmal vertigo, vestibular schwannoma, pharmacological and metabolic side effects 4 The handicaps related to age related sensory and proprioceptive degeneration 4 Psychological aspects of dizziness 4 Appropriate investigations for balance disorders including audiological, radiological, laboratory and vestibular tests 4 The law as it relates to disorders of balance 4 The principles of vestibular rehabilitation 4 The principles of particle repositioning manoeuvres 4 Medical, non-surgical and surgical treatment options	
Clinical Skills	HISTORY AND EXAMINATION 4 obtain appropriate history 4 clinical examination including neurological assessment 4 Otoscopy DATA INTERPRETATION 4 Interpretation of audiological tests 4 Interpretation of vestibular tests 3 Interpretation of radiological and laboratory tests PATIENT MANAGEMENT 4 Demonstrate communication skills and empathy 4 Be able to advise the patient of the treatment options, discuss risks and potential benefits, potential complications 4 To work where appropriate in a multidisciplinary team & liaise with other professional and organisations	
Technical Skills and Procedures	4 Perform particle re-positioning manoeuvres 4 Myringotomy and grommet insertion 1 Inytratympanic instillation of drugs 4 Cortical mastoidectomy 1 Decompression of endolymphatic sac 1 Closure of perilymph fistula 1 Labyrinthectomy	Strongly recommended Temporal bone dissection (annual, progression through training)

Topic	Lateral skull base tumours	Areas in which simulation should be used to develop relevant skills
Category	Otology	
Sub-category:	Head and neck neoplasia	
Objective	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.*	
Knowledge	4 Anatomy of the skull base and neck 4 Anatomy of the inner, middle and external ear 4 Anatomy of the cranial nerves 4 Pathology and pathogenesis of skull base tumours 4 The relevant clinical neurological, vascular, radiological, biological, immunological and serological investigations 3 The genetics of skull base tumours incl vestibular schwannomas and genetic counselling 4 The clinical presentation of skull base tumours 4 The surgical and non-surgical management options 3 The surgical approaches to the CP angle and skull base	
Clinical Skills	HISTORY AND EXAMINATION 4 obtain appropriate history 4 clinical examination including neurological assessment 4 Otoscopy DATA INTERPRETATION 4 Interpretation of audiological tests 4 Interpretation of vestibular tests 3 Interpretation of radiological and laboratory tests PATIENT MANAGEMENT 4 Demonstrate communication skills and empathy 3 Be able to advise the patient of the treatment options, discuss risks and potential benefits, potential complications 4 principles of patient management including multidisciplinary team working	
Technical Skills and Procedures	1 Surgical approaches to the lateral skull base 4 Tympanotomy 1 Resection of glomus tympanicum 1 Management of complications of lateral skull base surgery including CSF leak, lateral sigmoid thrombosis and facial palsy	Strongly recommended Temporal bone dissection (annual, progression through training) Strongly recommended for those specialising in Otology Advanced temporal bone dissection

RHINOLOGY

Topic	Epistaxis	Areas in which simulation should be used to develop relevant skills
Category	Rhinology	
Sub-category:	None	
Objective	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*	
Knowledge	4 Know the anatomy of the nose 4 Understanding of local and systemic aetiologies of epistaxes 4 Detailed knowledge of the anatomy and physiology of nasal vasculature 4 Detailed understanding of the presenting symptoms and signs of epistaxes 4 Detailed knowledge of management including first aid measures, nasal cautery, packing and operative techniques in the management of epistaxes 4 Know the complications of epistaxes and the management of them. 4 Understanding of the role of radiology and embolisation in managing epistaxis	
Clinical Skills	4 Demonstrate expertise in taking an appropriate clinical history 4 Ability to elicit physical signs both local and systemic if appropriate 4 Awareness of relevant haematological and imaging investigations 4 Awareness of management principles in patient with epistaxis 4 Ability to resuscitate critically ill patient	
Technical Skills and Procedures	4 Diagnostic nasendoscopy 4 Packing of nose 4 Removal of nasal packing 4 Cautery of nasal septum 4 Ethmoid Artery ligation 4 Sphenopalatine artery ligation 1 Maxillary artery ligation	Strongly recommended Nasal endoscopy SPA Ligation

Topic	Nasal trauma and deformity	Areas in which simulation should be used to develop relevant skills
Category	Rhinology	
Sub-category:	None	
Objective	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.*	
Knowledge	4 Know the anatomy of the nose, paranasal sinuses and facial skeleton 4 Understanding of the mechanisms of trauma responsible for nasal and facial injuries 4 Understanding of objective assessment of airway e.g. rhinomanometry 4 Knowledge of the appropriate imaging techniques 4 Knowledge of the specific complications of nasal trauma 4 Knowledge of the management of nasal trauma 4 Knowledge of the management of nasal deformity 4 Glasgow Coma Scale	
Clinical Skills	4 Ability to take a relevant history and perform an appropriate clinical examination 4 Knowledge of the relevant special investigations and correct interpretation eg rhinomanometry 4 Ability to adequately resuscitate the critically ill patient	
Technical Skills and Procedures	4 Fracture nose reduction 4 Insertion septal button 4 Packing of nose 4 Management of traumatically induced epistaxis (see epistaxis section) 4 Septoplasty 4 Septorhinoplasty 1 Surgical repair septal perforation	Strongly recommended Nasal endoscopy SPA Ligation Septorhinoplasty

Topic	Nose and sinus infections	Areas in which simulation should be used to develop relevant skills
Category	Rhinology	
Sub-category:	None	
Objective	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.*	
Knowledge	4 Detailed knowledge of anatomy and physiology of the nose and paranasal sinuses 4 Know the microbiology of acute and chronic rhinosinusitis 4 understanding of special investigations to inform the diagnosis 4 Understanding of the management of acute and chronic rhinosinusitis 4 Knowledge of the indications for, techniques of, and complications of surgical management 4 Knowledge of the complications of sinusitis and their management	
Clinical Skills	4 Demonstrate an ability to take an appropriate history and perform a nasal examination with a speculum and endoscope 4 Awareness of the indications for and ability to interpret imaging including CT and MRI 4 Awareness of indications for other special investigations including microbiology, immunology etc	
Technical Skills and Procedures	4 Preparation of the nose for endoscopic surgery 4 Nasendoscopy 2 Antral washout – direct vision 2 Inferior meatal antrostomy – direct vision + endoscopic 4 Middle meatal antrostomy – endoscopic 4 Nasal polypectomy – endoscopic including microdebrider 4 Middle turbinate partial excision 4 Uncinectomy – endoscopic 4 Anterior ethmoidectomy - endoscopic 2 Caldwell-Luc – direct vision 1 External ethmoidectomy 2 Posterior ethmoidectomy – endoscopic 1 Sphenoidotomy – endoscopic 1 Opening the frontal recess – endoscopic 1 Balloon sinuplasty 2 Surgical management of intra-orbital bleeding	Strongly recommended Nasal endoscopy FESS (progression through training) Strongly recommended (For those specialising in Rhinology) Advanced Endoscopic dissection

Topic	Nose and sinus inflammation including allergy	Areas in which simulation should be used to develop relevant skills
Category	Rhinology	
Sub-category:	None	
Objective	To understand the aetiology and pathophysiology of nasal & 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.*	
Knowledge	4 Detailed knowledge of anatomy and physiology of the nose and paranasal sinuses 4 Understanding of the aetiologies underlying inflammation of the nose and sinuses 3 Basic science of allergy 4 Know the role of allergy in the pathophysiology of inflammation of the nose and sinuses 4 Understanding of the special investigations used in the assessment of nasal allergy 4 Understanding of the imaging modalities to assess the nose and sinuses 4 Knowledge of the role of management of allergy, and drug treatment in nasal and sinus inflammation 4 Knowledge of the indications for, techniques of and complications of surgical management 4 Knowledge of systemic conditions that can cause sinonasal inflammation 3 Understanding of scientific basis and methodology of desensitisation	
Clinical Skills	4 Ability to take an appropriate history and perform endoscopic examination of the nose and sinuses 4 Ability to interpret the result of allergy testing including skin prick testing 4 Know which haematological investigations & radiological imaging are appropriate	
Technical Skills and Procedures	4 Preparation of the nose for endoscopic surgery 4 Nasendoscopy 4 Antral washout – direct vision 2 Inferior meatal antrostomy – direct vision + endoscopic 2 Middle meatal antrostomy – endoscopic 4 Nasal polypectomy – endoscopic including microdebrider 4 Turbinate surgery 4 Uncinectomy – endoscopic 4 Anterior ethmoidectomy - endoscopic 2 Caldwell-Luc – direct vision 1 External ethmoidectomy 2 Posterior ethmoidectomy – endoscopic 1 Sphenoidotomy – endoscopic 1 Opening the frontal recess – endoscopic 1 Balloon sinuplasty 2 Surgical management of intra-orbital bleeding	Strongly recommended Nasal endoscopy FESS (progression through training) Strongly recommended (For those specialising in Rhinology) Advanced endoscopic dissection

Topic	Congenital abnormalities	Areas in which simulation should be used to develop relevant skills
Category	Rhinology	
Sub-category:	None	
Objective	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*	
Knowledge	4 Knowledge of the anatomy and physiology of the nose and paranasal sinuses 4 Knowledge of the embryology of the nose and sinuses. 4 Knowledge of those conditions associated with congenital nasal abnormalities 4 Understanding of how to manage congenital nasal abnormalities in both the elective and emergency settings 4 Understanding of imaging modalities appropriate to the investigation of congenital abnormality 2 Principles of genetics relating to congenital abnormalities	
Clinical Skills	4 Ability to take an appropriate history from the parent and child and perform relevant general and specific rhinological examination 4 Examination including endoscopic	
Technical Skills and Procedures	4 Nasendoscopy 4 Examination under anaesthesia 2 Surgical management of choanal atresia	

Topic	Facial pain	Areas in which simulation should be used to develop relevant skills
Category	Rhinology	
Sub-category:	None	
Objective	To understand the aetiologies, characteristics and management of conditions presenting with facial pain, including those causes not arising in the upper aerodigestive tract	
Knowledge	4 Anatomy and physiology of the head and neck, including the face, TMJ, dentition and cervical spine 4 Understand the differential diagnosis of facial pain including organic and functional causes 4 Understand the various treatment modalities, both medical and surgical 3 Understanding of the pharmacology of drugs used in the management of facial pain 4 Awareness of the multidisciplinary approach to management	
Clinical Skills	4 Ability to take a relevant history of facial pain 4 Ability to perform an appropriate ENT, neurological and locomotor examination 4 Understanding of the appropriate radiological investigations 4 Appropriate management to include onward referral for pharmacological, surgical and counselling therapies	
Technical Skills and Procedures	4 Outpatient endoscopy of upper aerodigestive tract 4 Examination under anaesthesia 4 Biopsy - external nose 4 Biopsy – internal nose	

Topic	Nasal polyps	Areas in which simulation should be used to develop relevant skills
Category	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	4 Anatomy of nose and paranasal sinuses 4 A detailed knowledge of current understanding of the aetiologies and conditions associated with nasal polyps 4 Knowledge of the clinical features of nasal polyps 4 Understand the medical management options of nasal polyps 4 Understand the clinical significance of unilateral nasal polyps 4 Knowledge of the indications for, techniques of and complications of surgical management 4 Understanding of the management of intra orbital bleeding postop	
Clinical Skills	4 Ability to take an appropriate history and perform an examination including nasal endoscopy 4 Awareness of and ability to interpret imaging	
Technical Skills and Procedures	4 Preparation of the nose for endoscopic surgery 4 Nasendoscopy 2 Antral washout – direct vision 2 Inferior meatal antrostomy – direct vision + endoscopic 4 Middle meatal antrostomy – endoscopic 4 Nasal polypectomy – endoscopic including microdebrider 4 Turbinate surgery 4 Uncinectomy – endoscopic 4 Anterior ethmoidectomy - endoscopic 2 Caldwell-Luc – direct vision 1 External ethmoidectomy 2 Posterior ethmoidectomy – endoscopic 1 Sphenoidotomy – endoscopic 1 Opening the frontal recess – endoscopic 1 Balloon sinuplasty 2 Surgical management of intra-orbital bleeding	Strongly recommended Nasal endoscopy FESS (progression through training) Strongly recommended (For those specialising in Rhinology) Advanced endoscopic dissection)

Topic	Granulomatous conditions	Areas in which simulation should be used to develop relevant skills
Category	Rhinology	
Sub-category:	None	
Objective	To understand the aetiology, classification, clinical features and management of granulomatous conditions of the nose. *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	4 Understanding of the classification of nasal granulomatous conditions 4 Knowledge of the Pathophysiology of these conditions 4 Knowledge of the microbiology of specific nasal granulomatous conditions 4 Knowledge of the systemic and nasal features of granulomatous conditions e.g. sarcoidosis and Polyangitis with granulomatosis 4 Understanding of methods of diagnosis 4 Knowledge of management of these conditions 4 Awareness of differential diagnosis	
Clinical Skills	4 Ability to take a relevant history and perform an appropriate clinical examination 4 Knowledge of the relevant special investigations and correct interpretation of them	
Technical Skills and Procedures	4 Diagnostic nasendoscopy 4 Examination under anaesthesia 4 Biopsy – external 4 Biopsy – internal	

Topic	Sinonasal neoplasms including anterior skull base tumours	Areas in which simulation should be used to develop relevant skills
Category	Sinonasal neoplasms	
Sub-category:	None	
Objective	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.*	
Knowledge	4 Knowledge of the anatomy of the nose and paranasal sinuses 3 Pituitary physiology 4 Knowledge of the distribution of cervical lymph nodes 4 Understanding of the pattern of spread of malignancy in the head and neck 4 Knowledge of the different histological types of neoplasm in the nose, paranasal sinuses and skull base 4 Understanding of the principles of medical and surgical management of neoplasms of the nose and sinuses 4 Knowledge of the complications of both the diseases and their management 3 Understanding of the multidisciplinary approach to the management of sinonasal/skull base tumours 3 Understanding of the multidisciplinary approach to the management of sinonasal/skull base tumours including pituitary tumours	
Clinical Skills	4 Ability to take a relevant history, perform an appropriate examination and interpret clinical findings correctly 4 Demonstrate a rational approach to special investigations 4 Participation in a multi-disciplinary team approach to management of sinonasal neoplasms	
Technical Skills and Procedures	4 Examination of nose under anaesthesia 4 Biopsy of nose - external 4 Biopsy of nose – internal 1 Anterior skull base approaches including endoscopic 2 Endoscopic medial maxillectomy 1 Lateral rhinotomy 2 Endoscopic excision nasal and sinus tumours 1 Maxillectomy 1 Midfacial degloving 1 Bicoronal flap approach 1 Endoscopic repair of anterior skull base csf leak	Strongly recommended Nasal endoscopy FESS (progression through training) Strongly recommended (For those specialising in Rhinology) Advanced endoscopic dissection

Topic	Septorhinoplasty	Areas in which simulation should be used to develop relevant skills
Category	Rhinology	
Sub-category:	Facial Plastics	
Objective	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.*	
Knowledge	4 Understanding of the anatomy of the nose, paranasal sinuses and facial skeleton 4 Understanding of the embryology of the nose 4 Understanding of the mechanisms of trauma responsible for nasal and facial injuries 4 Understanding of methods of assessment of the facial skeleton 4 Knowledge of surgical techniques including use of grafts 4 Knowledge of the specific complications of nasal surgery	
Clinical Skills	4 Ability to take a relevant history and perform an appropriate clinical examination 4 Ability to assess photographs and devise a surgical plan including onwards referral as appropriate	
Technical Skills and Procedures	4 Septoplasty 4 Septorhinoplasty including use of grafts 4 Appropriate dressing and packing of nose	Strongly recommended Septorhinoplasty

Topic	Congenital abnormalities of the face	Areas in which simulation should be used to develop relevant skills
Category	Rhinology	
Sub-category:	Facial Plastics	
Objective	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*	
Knowledge	4 Knowledge of the anatomy and physiology of the facial structures 4 Knowledge of the embryology of the face including the nose, palate and neck 4 Knowledge of those conditions associated with congenital facial abnormalities 4 Understanding of how to manage congenital facial abnormalities in both the elective & emergency settings 2 principles of genetics and counselling	
Clinical Skills	4 Ability to take an appropriate history form the parent and child and perform relevant examinations 4 Nasendoscopy if appropriate	
Technical Skills and Procedures	4 Examination under anaesthesia 4 Excision facial skin lesion including reconstructive techniques 1 Septorhinoplasty in cleft patients	

Topic	Cosmetic Surgery	Areas in which simulation should be used to develop relevant skills
Category	Rhinology	
Sub-category:	Facial Plastics	
Objective	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.*	
Knowledge	4 Understanding of the anatomical areas and aesthetic units that make up the face 4 Knowledge of relaxed skin tension lines 4 Understanding of the blood supply and innervation of the face 4 Knowledge of the planes of dissection available 4 Knowledge of the methods used to analyse facial features 4 Knowledge of the various procedures used in cosmetic facial surgery 4 Knowledge of the limitations and complications of cosmetic facial surgery	
Clinical Skills	4 Ability to take a relevant history and perform an appropriate clinical examination 4 Ability to assess facial deformity and devise a management plan	
Technical Skills and Procedures	4 Nasendoscopy 4 Resection of nasal lesion 2 Be able to reconstruct defects with local flaps 1 Be able to reconstruct defects using Distant flaps 4 Excision skin lesion 4 harvesting and use of split and full thickness skin grafts 1 Facelift 1 Tissue expansion techniques 1 Neuromuscular blockade	Strongly recommended Excision skin lesions Harvesting of grafts Local skin flaps Desirable (For Facial Plastics specialists) Blepharoplasty Dermal fillers Tissue expansion techniques

Topic	Reconstruction	Areas in which simulation should be used to develop relevant skills
Category	Rhinology	
Sub-category:	Facial Plastics	
Objective	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.*	
Knowledge	4 Understanding of the applied anatomy of the head and neck 4 Understanding of the blood supply and innervation of the head and neck and of local, regional and free grafts 4 Knowledge of the different types of flap available and the indications for their use 4 Knowledge of the implants and prosthetic devices available	
Clinical Skills	4 Ability to take a relevant history and perform an appropriate clinical examination 4 Ability to assess cosmetic and functional deficits and devise a management plan including onward referral as appropriate	
Technical Skills and Procedures	4 Resection of nasal lesion 2 Reconstruction of nasal cosmetic units 2 Lip-wedge resection 4 Excision skin lesion 4 Suture skin 2 Reconstruction with axial and random pattern local flaps 4 Split and full thickness skin grafts 1 Tissue expansion techniques 1 Dermal fillers	Strongly recommended Excision skin lesions Harvesting of grafts Local skin flaps Desirable (For Facial Plastics specialists) Blepharoplasty Dermal fillers Tissue expansion techniques

Topic	Disorders of Olfaction	Areas in which simulation should be used to develop relevant skills
Category	Rhinology	
Sub-category:	Olfaction	
Objective	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.*	
Knowledge	4 Know the anatomy of the olfactory nerve including intracranial connections 4 Know the physiology of olfaction 4 Know the classification of olfactory dysfunction 4 Know the causes of olfactory dysfunction 4 Understand the scientific basis for the assessment of olfactory dysfunction 4 Know of the commonly used tests of olfaction 4 Know the anatomy and physiology of taste 4 Know the causes of taste dysfunction	
Clinical Skills	4 Be competent at taking a comprehensive history and examination from a patient presenting with olfactory and/ or taste dysfunction 4 Be competent at performing a formal assessment of olfaction using appropriate validated assessment techniques 4 Be competent at ordering and interpreting appropriate imaging to investigate olfactory dysfunction	
Technical Skills and Procedures	4 Nasendoscopy 4 Examination of nose and postnasal space 4 Nasal biopsy	

Skin Cancer

Topic	Skin Cancer	Areas in which simulation should be used to develop relevant skills
Category	Skin cancer	
Sub-category:		
Objective	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.*	
Knowledge	4 Know the anatomy and cellular composition of the skin 4 Know the zones of the face and relaxed skin contour lines 4 Know the physiology of skin 4 Understand the principles of carcinogenesis 4 Know of the different types of skin cancer and their classification 4 Know the presenting features and appearance of different types of skin cancer 4 Know the causes and predisposing factors of skin cancer 4 Know of the staging of different types of skin cancer 4 Know of the treatment of different types of skin cancer 4 Understand the rationale for the strategies to prevent skin cancer	
Clinical Skills	4 Be able to take a comprehensive history and examination from a patient presenting with symptoms of skin cancer 4 Manage all patients within a multidisciplinary setting when indicated 4 Be able to recommend correct treatment options to patients 4 Order appropriate imaging	
Technical Skills and Procedures	4 Skin biopsy 4 Excision of skin cancer and primary closure 2 Excision of skin cancer and reconstruction with local axial or random pattern flaps or grafts 4 Harvesting and use of split and full thickness skin grafts 1 Be able to reconstruct defects using Distant flaps	Strongly recommended Excision skin lesions Harvesting of grafts Local skin flaps Desirable Distant, pedicled and free flaps

Topic	Surgical Management of Epiphora	Areas in which simulation should be used to develop relevant skills
Category	Surgical Management of Epiphora	
Sub-category:		
Objective	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.*	
Knowledge	4 Anatomy of the lacrimal system 4 Intranasal anatomy 4 Physiology of lacrimation 4 Causes of epiphora 4 'Red Flag' symptoms	
Clinical Skills	4 Take a comprehensive history from a patient presenting with epiphora 3 Relevant ophthalmic examination 1 Syringing of lacrimal system and understanding of results 2 Dye disappearance test 3 Understand indications for relevant investigations 4 Team working with ophthalmologist	
Technical Skills and Procedures	4 Nasal endoscopy 4 EUA Nose 2 Endonasal DCR	Desirable Endonasal DCR

The Syllabus for Professional Behaviour and Leadership

The Syllabus for Professional Behaviour and Leadership

The Professional Behaviour and Leadership elements expected of candidates sitting this examination are mapped to the leadership curriculum as laid out by the Academy of Medical Royal Colleges. The assessment of these areas is a thread running throughout this examination and is common to all disciplines of surgery.

	Professional Behaviour and Leadership	Mapping to Leadership Curriculum
Category	**Good Clinical Care**, to include: • History taking (see GMP Domains: 1, 3, 4) • Physical examination (see GMP Domains: 1, 2,4) • Time management and decision making (see GMP Domains: 1,2,3) • Clinical reasoning (see GMP Domains: 1,2, 3, 4) • Therapeutics and safe prescribing (see GMP Domains: 1, 2, 3) • Patient as a focus of clinical care (see GMP Domains: 1, 3, 4) • Patient safety (see GMP Domains: 1, 2, 3) • Infection control (see GMP Domains: 1, 2, 3)	**Area 4.1**

Objective	• To achieve an excellent level of care for the individual patient
	• To elicit a relevant focused history
	• To perform focused, relevant and accurate clinical examination
	• To formulate a diagnostic and therapeutic plan for a patient based upon the clinic findings
	• To prioritise the diagnostic and therapeutic plan & communicate a diagnostic and therapeutic plan appropriately
	• To prescribe, review and monitor appropriate therapeutic interventions relevant to clinical practice including non – medication based therapeutic and preventative indications
	• To prioritise the patient's agenda encompassing their beliefs, concerns expectations and needs
	• To prioritise and maximise patient safety
	• To understand that patient safety depends on
	  ○ The effective and efficient organisation of care
	  ○ Health care staff working well together
	  ○ Safe systems, individual competency and safe practice
	• To understand the risks of treatments and to discuss these honestly and openly with patients
	• To use systematic ways of assessing and minimising risk
	• To ensure that all staff are aware of risks and work together to minimise risk
	• To manage and control infection in patients, including:
	  ○ Controlling the risk of cross-infection
	  ○ Appropriately managing infection in individual patients
	  ○ Working appropriately within the wider community to manage the risk posed by communicable diseases
		Area 4.1

Knowledge	Patient assessment • Knows likely causes and risk factors for conditions relevant to mode of presentation • Understands the basis for clinical signs and the relevance of positive and negative physical signs • Recognises constraints and limitations of physical examination • Recognises the role of a chaperone is appropriate or required • Understand health needs of particular populations e.g. ethnic minorities • Recognises the impact of health beliefs, culture and ethnicity in presentations of physical and psychological conditions Clinical reasoning • Interpret history and clinical signs to generate hypothesis within context of clinical likelihood • Understands the psychological component of disease and illness presentation • Test, refine and verify hypotheses • Develop problem list and action plan • Recognise how to use expert advice, clinical guidelines and algorithms • Recognise and appropriately respond to sources of information accessed by patients • Recognises the need to determine the best value and most effective treatment both for the individual patient and for a patient cohort Record keeping • Understands local and national guidelines for the standards of clinical record keeping in all circumstances • Understanding of the importance of high quality and adequate clinical record keeping and relevance to patient safety and to litigation • Understand the primacy for confidentiality Patient safety • Outline the features of a safe working environment • Outline the hazards of medical equipment in common use • Understand principles of risk assessment and management • Understanding the components of safe working practice in the personal, clinical and organisational settings • Outline local procedures and protocols for optimal practice e.g. GI bleed protocol, safe prescribing • Understands the investigation of significant events, serious untoward incidents and near misses Infection control • Understand the principles of infection control • Understands the principles of preventing infection in high risk groups	**Area 4.1**

Skills	Patient assessment • Takes a history from a patient with appropriate use of standardised questionnaires and with appropriate input from other parties including family members, carers and other health professionals • Performs an examination relevant to the presentation and risk factors that is valid, targeted and time efficient and which actively elicits important clinical findings • Give adequate time for patients and carers to express their beliefs ideas, concerns and expectations • Respond to questions honestly and seek advice if unable to answer • Develop a self-management plan with the patient • Encourage patients to voice their preferences and personal choices about their care Clinical reasoning • Interpret clinical features, their reliability and relevance to clinical scenarios including recognition of the breadth of presentation of common disorders • Incorporates an understanding of the psychological and social elements of clinical scenarios into decision making through a robust process of clinical reasoning • Recognise critical illness and respond with due urgency • Generate plausible hypothesis(es) following patient assessment • Construct a concise and applicable problem list using available information • Construct an appropriate management plan in conjunction with the patient, carers and other members of the clinical team and communicate this effectively to the patient, parents and carers where relevant Patient safety • Recognise and practise within limits of own professional competence • Recognise when a patient is not responding to treatment, reassess the situation, and encourage others to do so • Ensure the correct and safe use of medical equipment • Improve patients' and colleagues' understanding of the side effects and contraindications of therapeutic intervention • Recognise and respond to the manifestations of a patient's deterioration or lack of improvement (symptoms, signs, observations, and laboratory results) and support other members of the team to act similarly Infection control • Recognise the potential for infection within patients being cared for • Counsel patients on matters of infection risk, transmission and control • Actively engage in local infection control procedures • Prescribe antibiotics according to local guidelines and work with microbiological services where appropriate • Recognise potential for cross-infection in clinical settings • Practice aseptic technique whenever relevant	**Area 4.1**

Behaviour	• Shows respect and behaves in accordance with Good Medical Practice • Ensures that patient assessment, whilst clinically appropriate considers social, cultural and religious boundaries • Support patient self-management • Recognise the duty of the medical professional to act as patient advocate • Ability to work flexibly and deal with tasks in an effective and efficient fashion • Remain calm in stressful or high pressure situations and adopt a timely, rational approach • Show willingness to discuss intelligibly with a patient the notion and difficulties of prediction of future events, and benefit/risk balance of therapeutic intervention • Show willingness to adapt and adjust approaches according to the beliefs and preferences of the patient and/or carers • Be willing to facilitate patient choice • Demonstrate ability to identify one's own biases and inconsistencies in clinical reasoning • Continue to maintain a high level of safety awareness and consciousness • Encourage feedback from all members of the team on safety issues • Reports serious untoward incidents and near misses and co-operates with the investigation of the same. • Show willingness to take action when concerns are raised about performance of members of the healthcare team, and act appropriately when these concerns are voiced to you by others • Continue to be aware of one's own limitations, and operate within them • Encourage all staff, patients and relatives to observe infection control principles • Recognise the risk of personal ill-health as a risk to patients and colleagues in addition to its effect on performance	

Examples and descriptors for candidates	Patient assessment
	• Undertakes patient assessment (including history and examination) under difficult circumstances. Examples include:
	  ○ Limited time available (Emergency situations, Outpatients, ward referral)
	  ○ Severely ill patients
	  ○ Angry or distressed patients or relatives
	• Uses and interprets findings adjuncts to basic examination appropriately e.g. electrocardiography, spirometry, ankle brachial pressure index, fundoscopy, sigmoidoscopy
	• Recognises and deals with complex situations of communication, accommodates disparate needs and develops strategies to cope
	• Is sensitive to patients cultural concerns and norms
	• Is able to explain diagnoses and medical procedures in ways that enable patients understand and make decisions about their own health care.
	Clinical reasoning
	• In a complex case, develops a provisional diagnosis and a differential diagnosis on the basis of the clinical evidence, institutes an appropriate investigative and therapeutic plan, seeks appropriate support from others and takes account of the patients wishes
	Patient safety
	• Leads team discussion on risk assessment, risk management, clinical incidents
	• Works to make organisational changes that will reduce risk and improve safety
	• Promotes patients safety to more junior colleagues
	• Recognises and reports untoward or significant events
	• Undertakes a root cause analysis
	• Shows support for junior colleagues who are involved in untoward events
	Infection control
	• Performs complex clinical procedures whilst maintaining full aseptic precautions
	• Manages complex cases effectively in collaboration with infection control specialists
		Area 4.1

	Professional Behaviour and Leadership	Mapping to Leadership Curriculum
Category	**Being a good communicator** To include: • Communication with patients (GMP Domains: 1, 3, 4) • Breaking bad news (GMP Domains: 1, 3, 4) • Communication with colleagues (GMP Domains: 1, 3)	N/A
Objective	Communication with patients • To establish a doctor/patient relationship characterised by understanding, trust, respect, empathy and confidentiality • To communicate effectively by listening to patients, asking for and respecting their views about their health and responding to their concerns and preferences • To cooperate effectively with healthcare professionals involved in patient care • To provide appropriate and timely information to patients and their families Breaking bad news • To deliver bad news according to the needs of individual patients Communication with Colleagues • To recognise and accept the responsibilities and role of the doctor in relation to other healthcare professionals. • To communicate succinctly and effectively with other professionals as appropriate • To present a clinical case in a clear, succinct and systematic manner	

Knowledge	Communication with patients
	• Understands questioning and listening techniques
	• Understanding that poor communication is a cause of complaints/litigation
	Breaking bad news
	• In delivering bad news understand that:
	  ○ The delivery of bad news affects the relationship with the patient
	  ○ Patient have different responses to bad news
	  ○ Bad news is confidential but the patient may wish to be accompanied
	  ○ Once the news is given, patients are unlikely to take in anything else
	  ○ Breaking bad news can be extremely stressful for both parties
	  ○ It is important to prepare for breaking bad news
	Communication and working with colleagues
	• Understand the importance of working with colleagues, in particular:
	  ○ The roles played by all members of a multi-disciplinary team
	  ○ The features of good team dynamics
	  ○ The principles of effective inter-professional collaboration
	  ○ The principles of confidentiality	

Skills	Communication with patients • Establish a rapport with the patient and any relevant others (eg carers) • Listen actively and question sensitively to guide the patient and to clarify information • Identify and manage communication barriers, tailoring language to the individual patient and others and using interpreters when indicated • Deliver information compassionately, being alert to and managing their and your emotional response (anxiety, antipathy etc) • Use, and refer patients to appropriate written and other evidence based information sources • Check the patient's understanding, ensuring that all their concerns/questions have been covered • Make accurate contemporaneous records of the discussion • Manage follow-up effectively and safely utilising a variety if methods (eg phone call, email, letter) • Ensure appropriate referral and communications with other healthcare professional resulting from the consultation are made accurately and in a timely manner Breaking bad news • Demonstrate to others good practice in breaking bad news • Recognises the impact of the bad news on the patient, carer, supporters, staff members and self • Act with empathy, honesty and sensitivity avoiding undue optimism or pessimism Communication with colleagues • Communicate with colleagues accurately, clearly and promptly • Utilise the expertise of the whole multi-disciplinary team • Participate in, and co-ordinate, an effective hospital at night or hospital out of hours team • Communicate effectively with administrative bodies and support organisations • Prevent and resolve conflict and enhance collaboration	

Behaviour	Communication with patients • Approach the situation with courtesy, empathy, compassion and professionalism • Demonstrate and inclusive and patient centred approach with respect for the diversity of values in patients, carers and colleagues Breaking bad news • Behave with respect, honest and empathy when breaking bad news • Respect the different ways people react to bad news Communication with colleagues • Be aware of the importance of, and take part in, multi-disciplinary teamwork, including adoption of a leadership role • Foster an environment that supports open and transparent communication between team members • Ensure confidentiality is maintained during communication with the team • Be prepared to accept additional duties in situations of unavoidable and unpredictable absence of colleagues	
Examples and descriptors for candidates	• Shows mastery of patient communication in all situations, anticipating and managing any difficulties which may occur • Able to break bad news in both unexpected and planned settings • Fully recognises the role of, and communicates appropriately with, all relevant team members • Predicts and manages conflict between members of the healthcare team • Beginning to take leadership role as appropriate, fully respecting the skills, responsibilities and viewpoints of all team members	

	Professional Behaviour and Leadership	Mapping to Leadership Curriculum
Category	**Teaching and Training** (GMP Domains: 1, 3)	N/A
Objective	• To teach to a variety of different audiences in a variety of different ways • To assess the quality of the teaching • To train a variety of different trainees in a variety of different ways • To plan and deliver a training programme with appropriate assessments	
Knowledge	• Understand relevant educational theory and principles relevant to medical education • Understand learning methods and effective learning objectives and outcomes • Differentiate between appraisal, assessment and performance review • Understand the appropriate course of action to assist a trainee in difficulty	
Skills	• Critically evaluate relevant educational literature • Vary teaching format and stimulus, appropriate to situation and subject • Provide effective feedback and promote reflection • Deliver effective lecture, presentation, small group and bed side teaching sessions • Participate in patient education • Lead departmental teaching programmes including journal clubs • Recognise the trainee in difficulty and take appropriate action • Be able to identify and plan learning activities in the workplace	
Behaviour	• In discharging educational duties respect the dignity and safety of patients at all times • Recognise the importance of the role of the physician as an educator • Balances the needs of service delivery with education • Demonstrate willingness to teach trainees and other health workers • Demonstrates consideration for learners • Acts to endure equality of opportunity for students, trainees, staff and professional colleagues • Encourage discussions with colleagues in clinical settings to share understanding • Maintains honesty, empathy and objectivity during appraisal and assessment	
Examples and descriptors for candidates	• Performs a workplace based assessment including giving appropriate feedback • Appraises a medical student, nurse or colleague • Plans, develops and delivers educational programmes with clear objectives and outcomes • Plans, develops and delivers an assessment programme to support educational activities	

	Professional Behaviour and Leadership	Mapping to Leadership Curriculum
Category	**Keeping up to date and understanding how to analyse information.** Including: • Ethical research (GMP Domains: 1) • Evidence and guidelines (GMP Domains: 1) • Audit (GMP Domains: 1, 2) • Personal development	**Area 1.3**
Objective	• To understand the results of research as they relate to medical practise • To participate in medical research • To use current best evidence in making decisions about the care of patients • To construct evidence based guidelines and protocols • To complete an audit of clinical practice • At actively seek opportunities for personal development • To participate in continuous professional development activities	**Area 1.3** **Area 1.3**
Knowledge	• Understands the principles of research governance • Understands research methodology including qualitative, quantitative, bio-statistical and epidemiological research methods • Understands of the application of statistics as applied to medical practice • Understands the principles of critical appraisal • Understands levels of evidence and quality of evidence • Understands guideline development together with their roles and limitations • Understands the different methods of obtaining data for audit • Understands the role of audit in improving patient care and risk management • Understands the audit cycle • Understands the working and uses of national and local databases used for audit such as specialty data collection systems, cancer registries etc • To demonstrate knowledge of the importance of best practice, transparency and consistency	**Area 1.3**
Skills	• Develops critical appraisal skills and applies these when reading literature • Devises a simple plan to test a hypothesis • Demonstrates the ability to write a scientific paper • Obtains appropriate ethical research approval • Uses literature databases • Contribute to the construction, review and updating of local (and national) guidelines of good practice using the principles of evidence based medicine • Designs, implements and completes audit cycles • To use a reflective approach to practice with an ability to learn from previous experience • To use assessment, appraisal, complaints and other feedback to discuss and develop an understanding of own development needs	**Area 1.3** **Area 1.3**

Behaviour	• Follows guidelines on ethical conduct in research and consent for research • Keep up to date with national reviews and guidelines of practice • Aims for best clinical practice at all times, responding to evidence based medicine while recognising the occasional need to practise outside clinical guidelines • Recognise the need for audit in clinical practice to promote standard setting and quality assurance • To be prepared to accept responsibility • Show commitment to continuing professional development	**Area 1.3** **Area 1.3**
Examples and descriptors for candidates	• Demonstrates critical appraisal skills in relation to the published literature • Demonstrates ability to apply for appropriate ethical research approval • Demonstrates knowledge of research organisation and funding sources • Demonstrates ability to write a scientific paper • Lead a complete clinical audit cycle including development of conclusions, the changes needed for improvement, implementation of findings and re-audit to assess the effectiveness of the changes • Seeks opportunity to visit other departments and learn from other professionals	**Area 1.3** **Area 1.3**

	Professional Behaviour and Leadership	Mapping to Leadership Curriculum
Sub-category:	**Manager,** including: • Self Awareness & self management (GMP Domain:1) • Team-working (GMP Domains: 1, 3) • Leadership (GMP Domains: 1, 2, 3) • Principles of quality & safety improvement (GMP Domains: 1, 3, 4) • Management & health service structure (GMP Domain 1)	**Area 1.1 and 1.2** **Area 2** **Area 4.2, 4.3, 4.4** **Area 3**
Objective	Self awareness and self management • To recognise & articulate one's own values & principles, appreciating how these may differ from those of others • To obtain, value & act on feedback from a variety of sources • To manage the impact of emotions on behaviour & actions • To be reliable in fulfilling responsibilities & commitments to a consistently high standard • To ensure that plans & actions are flexible, & take into account the needs and requirements of others Team working • To identify opportunities where working with others can bring added benefits • To work well in a variety of different teams and team settings by listening to others, sharing information, seeking the views of others, empathising with others, communicating well, gaining trust, respecting roles and expertise of others, encouraging others, managing differences of opinion, adopting a team approach Leadership • To develop the leadership skills necessary to lead teams effectively. These include: • Identification of contexts for change • Application of knowledge and evidence to produce an evidence based challenge to systems and processes • Making decision by integrating values with evidence • Evaluating impact of change & taking corrective action where necessary Principles of quality and safety improvement • To recognise the desirability of monitoring performance, learning from mistakes and adopting no blame culture in order to ensure high standards of care and optimise patient safety • To critically evaluate services • To identify where services can be improved • To support & facilitate innovative service improvement Management and health service culture • To actively contribute to plans which achieve service goals • To manage resources effectively and safely • To manage people effectively and safely • To manage performance of themselves and others • To understand the management of local healthcare systems in order to be able to participate fully in managing healthcare provision	**Area 1.1 and 1.2** **Area 2** **Area 5** **Area 4.2, 4.3 and 4.4** **Area 3**

Knowledge	Self awareness and self management • Demonstrate knowledge of ways in which individual behaviours impact on others; • Demonstrate knowledge of personality types, group dynamics, learning styles, leadership styles • Demonstrate knowledge of methods of obtaining feedback from others • Demonstrate knowledge of tools and techniques for managing stress • Demonstrate knowledge of the role and responsibility of occupational health and other support networks • Demonstrate knowledge of the limitations of self professional competence Team working • Outline the components of effective collaboration and team working • Demonstrate knowledge of specific techniques and methods that facilitate effective and empathetic communication • Demonstrate knowledge of techniques to facilitate and resolve conflict • Describe the roles and responsibilities of members of the multidisciplinary team • Outline factors adversely affecting a doctor's and team performance and methods to rectify these • Demonstrate knowledge of different leadership styles Leadership • Demonstrate knowledge of patient outcome reporting systems within surgery, and the organisation and how these relate to national programmes. • Understand how decisions are made by individuals, teams and the organisation • Understand effective communication strategies within organisations • Demonstrate knowledge of impact mapping of service change, barriers to change, qualitative methods to gather the experience of patients and carers Quality and safety improvement • Understand the elements of clinical governance and its relevance to clinical care • Understands significant event reporting systems relevant to surgery • Understands the importance of evidence-based practice in relation to clinical effectiveness • Understand risks associated with the surgery including mechanisms to reduce risk • Outline the use of patient early warning systems to detect clinical deterioration • Keep abreast of national patient safety initiatives • Understand quality improvement methodologies including feedback from patients, public and staff • Understand the role of audit, research, guidelines and standard setting in improving quality of care • Understand methodology of creating solutions for service improvement • Understand the implications of change	**Areas 1.1 and 1.2** **Area 2** **Area 4.2, 4.3, 4.4**

Skills	Self awareness and self management
	• Demonstrate the ability to maintain and routinely practice critical self awareness, including able to discuss strengths and weaknesses with supervisor, recognising external influences and changing behaviour accordingly
	• Demonstrate the ability to show awareness of and sensitivity to the way in which cultural and religious beliefs affect approaches and decisions, and to respond respectfully
	• Demonstrate the ability to recognise the manifestations of stress on self and others and know where and when to look for support
	• Demonstrate the ability to balance personal and professional roles and responsibilities, prioritise tasks, having realistic expectations of what can be completed by self and others
	Team working
	• Preparation of patient lists with clarification of problems and ongoing care plan
	• Detailed hand over between shifts and areas of care
	• Communicate effectively in the resolution of conflict, providing feedback
	• Develop effective working relationships with colleagues within the multidisciplinary team
	• Demonstrate leadership and management in the following areas:
	  ○ Education and training of junior colleagues and other members of the team
	  ○ Deteriorating performance of colleagues (e.g. stress, fatigue)
	  ○ Effective handover of care between shifts and teams
	• Lead and participate in interdisciplinary team meetings
	• Provide appropriate supervision to less experienced colleagues
	• Timely preparation of tasks which need to be completed to a deadline
	Leadership
	• Identify trends, future options and strategy relevant to surgery
	• Compare and benchmark healthcare services
	• Use a broad range of scientific and policy publications relating to delivering healthcare services
	• Prepare for meetings by reading agendas, understanding minutes, action points and background research on agenda items
	• Work collegiately and collaboratively with a wide range of people outside the immediate clinical setting
	• Evaluate outcomes and re-assess the solutions through research, audit and quality assurance activities
	• Understand the wider impact of implementing change in healthcare provision and the potential for opportunity costs
		Area 1.2 and 1.2
		
		Area 2
		
		Area 5

	Quality and safety improvement
	• Adopt strategies to reduce risk e.g. Safe surgery
	• Contribute to quality improvement processes e.g.
	  ○ Audit of personal and departmental performance
	  ○ Errors / discrepancy meetings
	  ○ Critical incident and near miss reporting
	  ○ Unit morbidity and mortality meetings
	  ○ Local and national databases
	• Maintenance of a personal portfolio of information and evidence
	• Creatively question existing practise in order to improve service and propose solutions
	Management and health service structures
	• Manage time and resources effectively
	• Utilise and implement protocols and guidelines
	• Participate in managerial meetings
	• Take an active role in promoting the best use of healthcare resources
	• Work with stakeholders to create and sustain a patient-centred service
	• Employ new technologies appropriately, including information technology
	• Conduct an assessment of the community needs for specific health improvement measures
		Area 4.2, 4.3, 4.4
		
		Area 3

Behaviour	Self awareness and self management • To adopt a patient-focused approach to decisions that acknowledges the right, values and strengths of patients and the public • To recognise and show respect for diversity and • differences in others • To be conscientious, able to manage time and delegate • To recognise personal health as an important issue Team working • Encourage an open environment to foster and explore concerns and issues about the functioning and safety of team working • Recognise limits of own professional competence and only practise within these. • Recognise and respect the skills and expertise of others • Recognise and respect the request for a second opinion • Recognise the importance of induction for new members of a team • Recognise the importance of prompt and accurate information sharing with a patients own doctors following hospital discharge Leadership • Demonstrate compliance with national guidelines that influence healthcare provision • Articulate strategic ideas and use effective influencing skills • Understand issues and potential solutions before acting • Appreciate the importance of involving the public and communities in developing health services • Participate in decision making processes beyond the immediate clinical care setting • Demonstrate commitment to implementing proven improvements in clinical practice and services Quality and safety improvement • Obtain the evidence base before declaring effectiveness of changes • Participate in safety improvement strategies such as critical incident reporting • Develop reflection in order to achieve insight into own professional practice • Demonstrates personal commitment to improve own performance in the light of feedback and assessment • Engage with an open no blame culture • Respond positively to outcomes of audit and quality improvement • Co-operate with changes necessary to improve service quality and safety Management and health service structures • Recognise the importance of equitable allocation of healthcare resources • Recognise the role of doctors as active participants in healthcare systems	**Area 1.1 and 1.2** **Area 2** **Area 5** **Area 4.2, 4.3, 4.4**

	• Respond appropriately to own health service objectives and targets and take part in the development of services • Recognise the role of patients and carers as active participants in healthcare systems and service planning • Show willingness to improve managerial skills (e.g. management courses) and engage in management of the service	**Area 3**
Examples and descriptors for candidates	Self awareness and self management • Participates in case conferences as part of multidisciplinary and multi agency team • Responds to service pressures in a responsible and considered way • Liaises with colleagues in the planning and implementation of work rotas Team working • Discusses problems within a team and provides an analysis and plan for change • Works well in a variety of different teams • Shows the leadership skills necessary to lead the multidisciplinary team • Beginning to leads multidisciplinary team meetings o Promotes contribution from all team members o Fosters an atmosphere of collaboration o Ensures that team functioning is maintained at all times. o Recognises need for optimal team dynamics o Promotes conflict resolution • Recognises situations in which others are better equipped to lead or where delegation is appropriate Leadership • Shadows own health service managers • Attends multi-agency conference • Uses and interprets departments performance data and information to debate services • Participates in clinical committee structures within an organisation Quality and safety improvement • Able to define key elements of clinical governance • Demonstrates personal and service performance • Designs audit protocols and completes audit cycle • Identifies areas for improvement and initiates improvement projects • Supports and participates in the implementation of change • Leads in review of patient safety issue • Understands change management Management and Health Care Structure • Can describe in outline the roles of primary care, including general practice, public health, community,	**Area 1.1 and 1.2** **Area 2** **Area 5** **Area 4.2, 4.3, 4.4** **Area 3**

	mental health, secondary and tertiary care services within own healthcare system • Participates fully in clinical coding arrangements and other relevant local activities • Participate in team and clinical directorate meetings including discussions around service development • Can discuss the most recent guidance from the relevant local health regulatory agencies in relation to the surgical specialty • Can describe the local structure for health services and how they relate to regional or devolved administration structures • Discusses funding allocation processes from central government in outline and how that might impact on the local health organisation	

	Professional Behaviour and Leadership	Mapping to Leadership Curriculum
Sub-category:	**Promoting good health**	
Objective	• To demonstrate an understanding of the determinants of health and public policy in relation to individual patients • To promote supporting people with long term conditions to self-care • To develop the ability to work with individuals and communities to reduce levels of ill health and to remove inequalities in healthcare provision • To promote self-care	N/A
Knowledge	• Recognises the agencies that can provide care and support out with the hospital • Understand the factors which influence the incidence and prevalence of common conditions including psychological, biological, social, cultural and economic factors • Understand the role of screening programmes • Demonstrate knowledge of the determinants of health worldwide and strategies to influence policy relating to health issues • Outline the major causes of global morbidity and mortality and effective, affordable interventions to reduce these	
Skills	• Adapts assessment and management accordingly to the patients social circumstances • Ensures appropriate equipment and devices are discussed and where appropriate puts the patient in touch with the relevant agency • Identifies opportunities to promote change in lifestyle and to prevent ill health • Counsels patients appropriately on the benefits and risks of screening and health promotion activities	
Behaviour	• Recognises the impact of long term conditions on the patient, family and friends • Show willingness to maintain a close working relationship with other members of the multi-disciplinary team, primary and community care • Recognise and respect the role of family, friends and carers in the management of the patient with a long term condition • Encourage where appropriate screening to facilitate early intervention	
Examples and descriptors for candidates	• Demonstrates awareness of management of long term conditions • Develops management plans in partnership with the patient that are pertinent to the patients long term condition • Provide information to an individual about a screening programme offering specific guidance in relation to their personal health and circumstances concerning the factors that would affect the risks and benefits of screening to them as an individual.	

	Professional Behaviour and Leadership	Mapping to Leadership Curriculum
Sub-category:	**Probity and Ethics** To include: • Acting with integrity • Medical Error • Medical ethics and confidentiality • Medical consent • Legal framework for medical practise	Area 1.4
Objective	• To uphold personal, professional ethics and values, taking into account the values of the organisation and the culture and beliefs of individuals • To communicate openly, honestly and inclusively • To act as a positive role model in all aspects of communication • To take appropriate action where ethics and values are compromised • To recognise and respond the causes of medical error • To know, understand and apply appropriately the principles, guidance and laws regarding medical ethics and confidentiality as they apply to surgery • To understand the necessity of obtaining valid consent from the patient and how to obtain • To recognise, analyse and know how to deal with unprofessional behaviours in clinical practice, taking into account local and national regulations • Understand ethical obligations to patients and colleagues • To appreciate an obligation to be aware of personal good health	Area 1.4
Knowledge	• Understand local complaints procedure • Recognise factors likely to lead to complaints • Understands the differences between system and individual errors • Outline the principles of an effective apology • Knows and understand the professional, legal and ethical codes of own l Medical Council and any other codes to which the physician is bound • Understands of the principles of medical ethics • Understands the principles of confidentiality • Understands the principles of Information Governance • Understands the legal framework for patient consent in relation to medical practise • Recognises the factors influencing ethical decision making including religion, personal and moral beliefs, cultural practices • Understands the local standards of practice employed when deciding to withhold or withdraw life-prolonging treatment • Understands the local legal framework and guidelines for taking and using informed consent for invasive procedures including issues of patient incapacity	Area 1.4

Skills	• To recognise, analyse and know how to deal with unprofessional behaviours in clinical practice taking into account local and national regulations • To create open and nondiscriminatory professional working relationships with colleagues awareness of the need to prevent bullying and harassment • Contribute to processes whereby complaints are reviewed and learned from • Explains comprehensibly to the patient the events leading up to a medical error or serious untoward incident, and sources of support for patients and their relatives • Deliver an appropriate apology and explanation relating to error • Use and share information with the highest regard for confidentiality both within the team and in relation to patients • Counsel patients, family, carers and advocates tactfully and effectively when making decisions about resuscitation status, and withholding or withdrawing treatment • Present all information to patients (and carers) in a format they understand, checking understanding and allowing time for reflection on the decision to give consent • Provide a balanced view of all care options • Applies the relevant legislation that relates to the health care system in order to guide one's clinical practice including reporting to the Coroner's/Procurator Officer (or local equivalent), the Police or the proper officer of the local authority in relevant circumstances • Ability to prepare appropriate medical legal statements for submission to any relevant legal proceedings • Be prepared to present such material in Court	Area 1.4 Area 1.4
Behaviour	• To demonstrate acceptance of professional regulation • To promote professional attitudes and values • To demonstrate probity and the willingness to be truthful and to admit errors • Adopt behaviour likely to prevent causes for complaints • Deals appropriately with concerned or dissatisfied patients or relatives • Recognise the impact of complaints and medical error on staff, patients, and the local Health Service • Contribute to a fair and transparent culture around complaints and errors • Recognise the rights of patients to make a complaint • Identify sources of help and support for patients and yourself when a complaint is made about yourself or a colleague • Show willingness to seek advice of peers, legal bodies, and the local medical council in the event of ethical dilemmas over disclosure and confidentiality • Share patient information as appropriate, and taking into account the wishes of the patient • Show willingness to seek the opinion of others when making decisions about resuscitation status, and withholding or withdrawing treatment	Area 1.4 Area 1.4 Area 1.4

	• Seeks and uses consent from patients for procedures that they are competent to perform while
	  ○ Respecting the patient's autonomy
	  ○ Respecting personal, moral or religious beliefs
	  ○ Not exceeding the scope of authority given by the patient
	  ○ Not withholding relevant information
	• Seeks a second opinion, senior opinion, and legal advice in difficult situations of consent or capacity
	• Show willingness to seek advice from the employer, appropriate legal bodies (including defence societies), and the local medical council on medico-legal matters	

Examples and descriptors for candidates	• Recognises and responds to both system failure and individual error • Provides timely accurate written responses to complaints when required • Counsels patients on the need for information distribution within members of the immediate healthcare team • Seek patients' consent for disclosure of identifiable information • Discuss with patients with whom they would like information about their health to be shared • Understand the importance the possible need for ethical approval when patient information is to be used for any purpose • Understand the difference between confidentiality and anonymity • Know the process for gaining ethical approval for research • Able to assume a full role in making and implementing decisions about resuscitation status and withholding or withdrawing treatment • Able to support decision making on behalf of those who are not competent to make decisions about their own care • Obtains consent for interventions that he/she is competent to undertake, even when there are communication difficulties • Identifies cases which should be reported to external bodies • Identify situations where medical legal issues may be relevant • Work with external bodies around cases that should be reported to them. • Collaborating with external bodies by preparing and presenting reports as required	