Otolaryngology Specialty Overview

Overview

ORL is the third largest surgical specialty in the UK.

ORL deals with the diagnosis and treatment of the whole range of medical and surgical problems affecting the ear, nose and throat.

There has been a trend towards specialisation within ORL. These areas of special interest do not have a separate specialty advisory committee (SAC) within the surgical collegiate structure

The areas of special interest in ORL at the time of writing are as follows:

- Head and neck oncology
- Benign head and neck surgery
- Paediatric otorhinolaryngology
- Otology
- Neuro-otology
- Skull base surgery
- Medical rhinology
- Surgical rhinology
- Facial plastics
- Phoniatrics
- Cleft lip and palate

In addition trainees will be expected to pursue activities which support professional development, for example:

- Academic ORL
- Management
- Education

The Purposes of Training in ORL

The purpose of training in the specialty of ORL surgery is to produce clinicians competent to work as consultant ORL surgeons in the UK.

This includes:

- Competence to manage patients presenting on an unselected emergency ORL 'take', diagnosing, assessing and treating or referring on as appropriate.
- Competence in the management of patients presenting with a range of symptoms and elective conditions as specified in the core syllabus for ORL.
- Knowledge of the subject in depth and breadth, which supports accurate diagnosis, assessment and onward referral where appropriate.
- Competence to manage an additional range of elective and emergency conditions by virtue of appropriate training and assessment opportunities obtained during training.
- Through appropriate training and experience, to contribute to the development of a body of consultant surgeons capable of delivering the wide range of medical, managerial and educational skills required by the health services in the UK.
- To impart the professional competences as outlined in the syllabus and derived from the CanMEDS framework of the Canadian Medical Association and Good Medical Practice of the General Medical Council of the UK.

The Training Pathway in the Specialty of ORL Surgery

The syllabus is linked with a number of related surgical specialties during the first two years of training (themed training). Thereafter training is conducted solely within the specialty unless interface modules are taken during the final years.

The minimum objective of training is to produce specialist surgeons who are emergency safe and can manage the common conditions set out in the syllabus, from start to finish. At successful completion of training, CCT holders will also possess a depth and breadth of knowledge that permits accurate diagnosis and assessment of a wide range of conditions and onwards referral as appropriate.

Each trainee should be able to develop an area of special interest to a higher standard. He/she will contribute to the development of the service in its broadest terms in line with the principles laid out in CanMEDS framework of the Canadian Medical Association and Good Medical Practice of the General Medical Council of the UK.

The purposes of training in the specialty of ORL surgery are defined elsewhere.

The syllabus supports a curriculum that is divided into three **Stages**, which together form the training continuum through to the level of a CCT in the Specialty of ORL.

The curriculum is competence based and progress is regulated by the acquisition of specific gaols set for each stage. Assessments occur at a national, regional or local level.

Variation in the time to achieve the specified learning outcomes is permitted, but an indicative timeframe is set within each stage and these are conveniently considered as annual periods (i.e. ST1, ST2, etc. to fit with the annual review of competence progression panels.

The indicative time frames for each stage are as follows:

- The initial stage of training in the specialty of ORL: 2 years
- The final stage of training in the specialty of ORL: 4 5 years
- The special interest training in the specialty of ORL surgery: 1- 2 years

Giving an overall predicted length of training of 7 - 8 years for the majority of trainees entering the specialty.

Within the syllabus, related areas of learning and training are integrated in the form a series of modules designated as <u>Key Topics</u>.

The Scope And Standards Of ORL Practice At CCT

This list defines, in general terms the essential skills and levels of clinical expertise expected of an ORL surgeon emerging from training having completed the surgical specialty CCT. It is unlikely that the expertise will be confined to the descriptions that follow as most ORL surgeons will have developed additional interests and competences by the time that they emerge from training. There is flexibility within the curricula to accommodate this.

Where the specialty encompasses areas of special interest that require additional training, these are expressed in lists that build on the essential components of the CCT syllabus.

Those pursuing a career in ORL surgery should undertake further professional development following the acquisition of the CCT. The range and levels of expertise will change in response to the demands of the service, personal aspirations and the needs of patients.

Taking into account the present and future requirements of the service, the ORL surgeon emerging from training at CCT level will expect to deal with patients presenting with a range of problems. As it is used here, the term 'manage' equates to diagnosis, assessment and treatment or referral as appropriate. The levels of expertise expected are further expressed within the detail of the syllabus.

At CCT, the ORL surgeon will be able to:

- 1. Manage patients presenting with the common ORL emergencies
 - 1. Able to diagnose and treat patients presenting with foreign bodies in the ear, nose and throat including the oral cavity and airway
 - 2. Able to diagnose and treat acute infections of the head and neck, oral cavity, ear and sinuses. This would include managing the complications and onward referral where appropriate.
 - 3. Able to manage epistaxis, emergency airway problems, acute dysphagia, sudden hearing loss, facial palsy, facial and neck trauma.
- 2. Manage paediatric conditions.
 - 1. Congenital conditions including adenoid obstruction
 - 2. Obstructive sleep apnoea
 - 3. Sinusitis and its complications
 - 4. Otitis media and its complications
 - 5. Hearing and development problems
 - 6. Upper airway conditions affecting the larynx and pharynx.
- 3. Manage conditions of the external and middle ear.
 - 1. Infections of the external and middle ear
 - 2. Acute and chronic inflammatory conditions including cholesteatoma,
 - 3. Conditions affecting hearing
 - 4. Facial nerve palsy
 - 5. Tumours of the skin and middle ear mucosa
 - 6. Other congenital and vascular abnormalities.
- 4. Manage conditions of the inner ear.
 - 1. Deafness due to ageing
 - 2. Infections
 - 3. Noise trauma
 - 4. Ototoxicity and development problems
 - 5. Meniere's syndrome
 - 6. Acoustic neuroma
 - 7. Benign positional vertigo

- 8. Vestibular neuronitis.
- 5. Manage conditions of the nose and paranasal sinuses.
 - 1. Acute infections
 - 2. Chronic facial pain
 - 3. Allergic rhinitis
 - 4. Non-allergic rhinitis
 - 5. Nasal polyps
 - 6. Granulomatous rhinitis
 - 7. Nasal tumours both benign and malignant
 - 8. Disorders of the sense of smell and occupational rhinitis
 - 9. Structural and traumatic nasal deformities.
- 6. Manage conditions of the oral cavity
 - 1. Infections of the oral cavity including tonsillitis, peritonsilar abscess, oral ulceration
 - 2. Carcinoma
 - 3. Temperomandibular joint dysfunction
 - 4. Dental conditions
 - 5. Lesions of the minor salivary glands.
- 7. Manage conditions of the larynx and pharynx.
 - 1. Pharyngeal pouches
 - 2. Stridor, acute and chronic
 - 3. Laryngitis
 - 4. Disorders of the voice
 - 5. Carcinoma and other tumours of the larynx and hypopharynx
 - 6. Lesions of the lower oesophagus and tracheostomy.
- 8. Manage conditions of the neck, thyroid and salivary glands.
 - 1. The differential diagnosis of head and neck lymphadenopathy
 - 2. Benign and malignant skin lesions
 - 3. Sialadenitis
 - 4. Benign and malignant salivary lesions
 - 5. Thyroid conditions
- 9. Professional skills and behaviours
 - 1. And will demonstrate the <u>professional skills and behaviours</u> associated with consultant practice in the UK (including those outlined in <u>CanMEDS</u> and <u>Good</u> <u>Medical Practice</u>).

Areas of Special Interest

Head and Neck oncology

The majority of the activity in this area involves the management of patients with malignancy of the skin and structures of the head and neck, larynx and pharynx, oral cavity and paranasal sinuses.

The specialist should work in a team comprising maxillofacial surgeons and oncologists as well as supporting and diagnostic staff. Such specialists may well have undertaken an interdisciplinary fellowship (interface module).

Benign Head and Neck Surgery

Management of benign tumours of the salivary glands, thyroid and other head and neck structures form the main part of the workload.

Surgeons who have developed this area of special interest should work as part of the relevant multidisciplinary team e.g. endocrine services.

Paediatric Otorhinolarynology

While paediatric ORL accounts for approximately a third of routine ORL practice, it is recognised that children with congenital lesions, airway problems and developmental conditions including speech and hearing deficits, require more specialist input.

These specialists will often work in a multidisciplinary team in order to provide such services.

The specialist may focus on one area such as paediatric cochlear implantation or airway problems.

Otology

Complex middle ear surgery and the management of hearing problems form the major part of practice in this area.

Neuro-otology

This specialty focuses on the management of disorders of the cochlea and vestibular apparatus and the rehabilitation of patients thus affected. In this area, the function of the ORL specialist is usually one of investigation and non-operative management, but some specialists will practice skull base surgery in circumscribed areas such as acoustic neuroma.

Skull Base Surgery

Specialists in this area work with neurosurgeons and other colleagues as a member of a multidisciplinary team, which tackles conditions such as tumours of the lateral and anterior skull base.

Typical work would include repairing cerebrospinal fluid leaks, acoustic neuroma excision and endoscopic pituitary work.

Medical Rhinology

This area involves the management of nasal and sinus conditions, including undertaking the full range of treatments for allergy such as desensitization.

Surgical Rhinology

Although comprising conventional and endoscopic surgery, the surgical specialist in this area will have additional expertise to that required for routine ORL practice. For example the specialist working in this area may undertake surgery in the frontal recess, or more complex rhinoplasty.

Such specialists may work in teams with the neurosurgeons or endocrinologists when undertaking pituitary surgery or CSF leaks.

Facial Plastic Surgery

The majority of practice in this area involves the selection and management of patients for cosmetic rhinoplasty. Soft tissue face and neck work may form part of the practice such as the surgery for ageing.

Phoniatrics

This is a developing area focussing on the management of patients with voice disorders, often relating to work their occupation such as professional voice users and performers.

Practice in this area involves working closely with speech therapists and other specialist workers in the field, as there are often other issues such as psychological factors that require consideration and management.

Treatments may range from rehabilitation through to active interventions such as Botox injections into the muscles of phonation or endoscopic surgery.

Cleft Lip and Palate

At the time of writing, in order to provide the UK service there are three interface training fellowships offered each year. These are open to ORL, maxillofacial and plastic surgical trainee by application following advertisement.

The ORL surgeon may form part of the team managing the ear and nasal conditions.

Academic Surgery

Academic surgery provides an exciting and challenging career for those who wish to combine clinical surgery with a major commitment to research and undergraduate teaching.

Trainees interested in this career pathway will, in addition to completing clinical training in ORL, acquire a high level of competency in research. After completing their clinical training those committed to an academic career will pursue a position in a university department as senior lecturer with a longer-term view to promotion to a chair in surgery.

Trainees must complete the full requirements of the specialty curriculum in order to gain the CCT.

Management

The importance that all consultants are trained in management and leadership skills is well recognised. Trainees who wish to undertake further development in this area will be encouraged to undertake further studies in parallel with their clinical and professional training.

Education

It is imperative that the surgical profession maintains its reputation for high quality teaching, training and assessment.

All consultants receive training in this area and there are now available courses that will lead to the acquisition of further qualifications such as Cert. Ed, M.Sc. or Masters in these disciplines for trainees wishing to develop these skills further in parallel with their clinical studies.

The Configuration and Delivery of ORL Services

- The service comprises emergency and elective elements both of which require significant supporting infrastructure in order to deliver them to modern standards.
- Some specialists may work outside the current hospital structure.
- A full range of outpatient diagnostic services such as audiology and diagnostic endoscopy are required. Many of the surgical services may be delivered through short stay facilities.

Future Trends in ORL

- It is likely that the emphasis towards greater subspecialisation will continue, especially in the sphere of elective practice.
- The government has signalled its intention to devolve the delivery of surgical services for elective conditions into smaller, independent units, including primary care, where at all possible.

Key Topics

Key Topics in Otolaryngology

Otology

- Congenital and acquired deformity of the ear and temporal bone
- Deafness in adults and children
- Disorders of the external ear
- Acute and Chronic middle ear disease including Otitis media with effusion
- Disorders of equilibrium
- Tinnitus
- Disorders of the facial nerve
- Cerebello-pontine angle tumours

Rhinology and Facial Plastics

- Rhinitis/Sinusitis ~ including allergy, inflammation and infection
- Congenital and acquired deformities of the facial and nasal skeleton
- Tumours of the nose and paranasal sinuses including skin tumours of the face, head and neck
- Epistaxis
- Facial pain

Head and Neck

- Congenital and acquired deformity of the larynx
- Voice disorders
- Disorders of the thyroid and salivary glands
- Head and neck cancer and other causes of neck masses
- Disorders of the pharynx and oesophagus including diseases of the tonsils
- Upper airway obstruction
- Infections of the soft tissues of the Head and Neck
- Sleep apnoea in adults

Paediatric Otolaryngology

- Deafness in childhood including congenital deformities of the temporal bone
- Upper airway disorders and sleep apnoea in children
- Neck masses in children
- Acute and chronic ear disease in children
- Disorders and deformity of the external ear

Initial Stage

The purpose of the initial phase is to allow the trainee to develop the key skills and knowledge that will allow further progress in the specialty.

By the end of ST2 the trainee will have acquired the following

- Generic Skills to allow team working, and management of both adult and paediatric patients with disorders of the ears nose and throat
- Clear understanding of the basic sciences (anatomy, physiology, pathology, embryology and genetics) as they relate to disorders of he ears nose and throat and the practice of ORL Surgery
- Competence in both diagnosis and management of common ear nose and throat surgical conditions including an understanding of acoustics and basic audiology.
- Competence in the operative management of a range of common abnormalities of the ears nose and throat.

During the initial stage the trainee will be expected to understand the aetiology, presenting signs, symptoms and management of common ORL conditions as listed below. The detail of the level of competence required in knowledge, clinical skills, technical skills and procedures and professional skills are defined in the syllabus.

Otology

- Deafness in adults
- Facial Paralysis
- Tinnitus
- Trauma
- Middle ear
- Non infective conditions of the external ear
- Infective conditions of the external ear including otitis externa, furunculosis, otomycosis, myringitis granular and benign / herpetic
- Dizziness

Paediatric

- Neck Masses
- Airway Disorders
- Congenital deformities affecting the head and neck
- Deafness excluding otitis media and its complications
- Facial Palsy
- Otitis media and its complications
- Disorders of the external ear in children
- Nose and Sinus infections
- Inflammatory nasal disease (including allergic rhinitis)
- Nasal Polyps in Children
- Foreign bodies in the ear nose and throat
- Epistaxis
- Trauma to the head and neck
- Tonsils and adenoids
- Speech and language development
- Oncology

Head and Neck

- Actiology and management of congenital abnormalities of the head and neck affecting adults
- Oral pathology
- Airway obstruction in adults
- Voice disorders
- Disorders of swallowing
- Sleep related breathing disorders
- Adenoid and tonsillar pathology in adults
- Neoplastic salivary gland disease
- Benign salivary gland disease
- Thyroid and parathyroid disease
- Head and neck malignancies in the upper aerodigestive tract excluding the oral cavity
- Aetiology and management of the craniocervical trauma in adults
- Aetiology and management of cervical sepsis
- Cervical lymphadenopathy in adults
- Investigation and management of the neck lump

Rhinology

- Congenital abnormalities
- Nose and sinus infections
- Nose and sinus inflammation including allergy
- Nasal polyps
- Facial pain
- Epistaxis
- Nasal trauma and deformity
- Rhinological oncology
- Granulomatous conditions
- Septorhinoplasty
- Congenital abnormalities
- Cosmetic surgery
- Reconstruction

ST1 Placement

The purpose of a four or six month placement in **ORL surgery** is to provide:

- trainees with insight into the specialty, and the role of the ORL surgeon
- skills which may be a basis for further training in the specialty, or which may be transferable and creditable to other specialties or disciplines

Knowledge

- An introduction to the anatomy, physiology and pathology of the ears, nose, throat and neck
- An introduction to the signs, symptoms and management of common ORL disorders

Clinical Skills

• An ability to carry out a comprehensive clinical examination of the ears, nose, throat and neck

- An introduction to treatment planning in the management of head and neck malignancies, and other complex ORL and head and neck disorders.
- Ability to manage common ORL emergencies which include:
 - Simple epistaxis
 - Otitis externa
 - \circ $\;$ Foreign bodies in the ear, nose and oropharynx
 - Acute oropharyngeal infections
 - Simple fractures of the facial skeleton

Technical Skills

- Endoscopic or microscopic examination in the out patient clinic
- Endoscopic or microscopic examination in the operating theatre with biopsy as appropriate of the ears, nose and throat
- An acquisition of basic surgical skills in disorders of the ears, nose, throat head and neck and upper aerodigestive tract
- Specific skills in relation to the management of common ORL conditions which include:
 - Nasal cautery
 - \circ $\;$ Foreign body removal from the ear canal, nose and oropharynx
 - Microsuction of the ears
 - Drainage of a quinsy
 - Reduction of simple nasal fractures

Professional skills and behaviours

• As specified in the professional skills and behaviour syllabus

Click on Workplace Based Assessments to view the assessment forms including DOPS and PBAs

Topics

Topic	Basic sciences
Category	Core Surgical Skills and Knowledge for All Specialties
Sub-category:	None
	Underpinning basic science knowledge appropriate for the practice of surgery.
Objective	Applied anatomy: Knowledge of anatomy appropriate for surgery
	Physiology: Knowledge of physiology relevant to surgical practice
	Pathology: Knowledge of pathological principles underlying system specific pathology
	Microbiology: Knowledge of microbiology relevant to surgical practice
	<i>Radiology: Knowledge of diagnostic and interventional radiology</i> Applied anatomy:
Knowledge	4 Development, organs and structures, surface and imaging anatomy of thorax, abdomen, pelvis, perineum, limbs, neck as appropriate for surgical operations
	Physiology:

- 4 Homeostasis
- 3 Thermoregulation
- 3 Metabolic pathways
- 4 Blood loss
- 4 Sepsis
- 4 Fluid balance and fluid replacement therapy
- 3 Metabolic abnormalities

Pathology:

- 4 Inflammation
- 4 Wound healing
- 4 Cellular injury
- 4 Vascular disorders
- 4 Disorders of growth, differentiation and morphogenesis
- 4 Tumours
- 3 Surgical immunology
- 3 Surgical haematology

Microbiology:

- 4 Surgically important microorganisms
- 4 Sources of infection
- 4 Asepsis and antisepsis
- 4 Sterilisation
- 4 Antibiotics
- 4 High risk patient management

Radiology:

3 Principles of diagnostic and interventional radiology

Clinical Skills No content

Technical Skills and Procedures No content

Topic	Basic surgical skills
Category	Core Surgical Skills and Knowledge for All Specialties
Sub-category:	None
	Acquisition of basic surgical skills in instrument and tissue handling.
	Incision of skin and subcutaneous tissue: Ability to incise superficial tissues accurately with suitable instruments.
Objective	<i>Closure of skin and subcutaneous tissue: Ability to close superficial tissues accurately.</i>
	Knot tying: Ability to tie secure knots.
	Haemostasis: Ability to achieve haemostasis of superficial vessels.
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Tissue retraction: Use of suitable methods of retraction.

Use of drains: Knowledge of when to use a drain and which to choose.

Tissue handling: Ability to handle tissues gently with appropriate instruments.

Skill as assistant: Ability to assist helpfully, even when the operation is not familiar.

Incision of skin and subcutaneous tissue:

4 Langer's lines4 Healing mechanism4 Choice of instrument4 Safe practice4 Basic Surgical Skills course

Closure of skin and subcutaneous tissue:

4 Options for closure4 Suture and needle choice4 Safe practice

Knot tying:

4 Choice of material

Knowledge

Haemostasis:

4 Techniques

Tissue retraction:

4 Choice of instruments

Use of drains:

4 Indications4 Types4 Management/removal

Tissue handling:

4 Choice of instruments Incision of skin and subcutaneous tissue:

4 Ability to use scalpel, diathermy and scissors

Clinical Skills Closure of skin and subcutaneous tissue:

4 Accurate and tension free apposition of wound edges

Knot tying:

- 4 Single handed
- 4 Double handed
- 4 Instrument
- 4 Superficial
- 4 Deep

Haemostasis:

- 4 Control of bleeding vessel (superficial)
- 4 Diathermy
- 4 Suture ligation
- 4 Tie ligation
- 4 Clip application

Tissue retraction:

4 Tissue forceps4 Placement of wound retractors

Use of drains:

- 4 Insertion
- 4 Fixation
- 4 Removal

Tissue handling:

4 Appropriate application of instruments and respect for tissues

Skill as assistant:

4 Anticipation of needs of surgeon when assisting

Technical Skills and Procedures No content

Topic	The Assessment and Management of the Surgical Patient
Category	Core Surgical Skills and Knowledge for All Specialties
Sub-category:	None
Objective	Ability to assess the patient and manage the patient, and propose surgical or non-surgical management.
Knowledge	No content
Clinical Skills	 Surgical history and examination (elective and emergency) Construct a differential diagnosis Plan investigations Clinical decision making Case work up and evaluation; risk management Active participation in MDTs Taking consent for intermediate level intervention; emergency and elective

- 3 Written clinical communication skills
- 3 Interactive clinical communication skills: patients
- 3 Interactive clinical communication skills: colleagues

Technical Skills and Procedures No content

Topic Category Sub-category:	Peri-operative care Core Surgical Skills and Knowledge for All Specialties None
	Ability to manage patient care in the peri-operative period.
	Pre-operative assessment and management: Ability to assess the patient adequately prior to operation and manage any pre-operative problems appropriately.
Objective	Intraoperative care: Ability to conduct safe surgery in the operating theatre environment.
	Post-operative care: Ability to care for the patient in the post-operative period.
	Blood Products: Appropriate use of blood products.
	Antibiotics: Appropriate use of antibiotics.
	Pre-operative assessment and management:
	 4 Cardiorespiratory physiology 3 Diabetes mellitus 3 Renal failure 4 Pathophysiology of blood loss 4 Pathophysiology of sepsis 4 Risk factors for surgery and scoring systems 3 Principles of day surgery
	Intraoperative care:
Knowledge	 4 Safety in theatre 4 Sharps safety 4 Diathermy, laser use 4 Infection risks 3 Radiation use and risks 4 Tourniquets 3 Principles of local, regional and general anaesthesia
	Post-operative care:
	 4 Cardiorespiratory physiology 3 Diabetes mellitus 3 Renal failure 4 Pathophysiology of blood loss 4 Pathophysiology of sepsis

	4 Complications specific to particular operation 2 Critical care
	Blood Products:
	4 Components of blood4 Alternatives to use of blood products
	Antibiotics:
	 4 Common pathogens in surgical patients 4 Antibiotic sensitivities 4 Antibiotic side-effects 4 Principles of prophylaxis and treatment Pre-operative assessment and management:
	4 History and examination4 Interpretation of pre-operative investigations3 Management of comorbidity4 Resuscitation
	Intraoperative care:
	4 Safe conduct of intraoperative care
	Post-operative care:
Clinical Skills	 4 Assessment of patient's condition 4 Post-operative analgesia 4 Fluid and electrolyte management 4 Monitoring of post-operative patient 4 Detection of impending organ failure 4 Initial management of organ failure 4 Use of MDT meetings
	Blood Products:
	4 Appropriate use of blood products4 Management of the complications of blood product transfusion
	Antibiotics:
	4 Appropriate prescription of antibiotics
Technical Skills and Procedures	No content

Topic	Assessment of multiply injured patients including children
Category	Core Surgical Skills and Knowledge for All Specialties
Sub-category:	None
Objective	Safely assess the multiply injured patient.
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Knowledge	3 Anatomy3 Pathogenesis of shock1 Differences In Children
Clinical Skills	 4 History and examination 3 Investigation 4 Resuscitation and early management according to ATLS and APLS guidelines 3 Referral to appropriate surgical subspecialties
Technical Skills and Procedures	3 Central venous line insertion3 Chest drain insertion2 Diagnostic peritoneal lavage
Professional Skills	Please see the <u>Professional Skills and Behaviour » Initial</u> section for these skills

Topic	Bleeding diathesis
Category	Core Surgical Skills and Knowledge for All Specialties
Sub-category:	None
	Understand, Recognise and Manage bleeding diathesis in the surgical patient.
Objective	Diagnosis: Diagnose possible bleeding diathesis in the surgical patient.
	Treatment: Manage bleeding diathesis in the surgical patient.
	Diagnosis:
	3 Mechanism of haemostasis3 Pathology of impaired haemostasis e.g. haemophilia, liver disease, massive
Knowledge	haemorrhage
-	Treatment:
	3 Understands use of blood products
	Diagnosis:
Clinical Skills	4 Recognition of conditions likely to lead to the diathesis 3 Recognition of abnormal bleeding during surgery
	Treatment:
	3 Avoidance by correct surgical techniques3 Corrective measures, e.g. warming, packing
Technical Skills and Procedures	No content
Professional Skills	Please see the <u>Professional Skills and Behaviour » Initial</u> section for these skills

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	thrombosis and Embolism.
	<i>Coagulation: Understanding of the physiology and pathophysiology of coagulation.</i>
	Diagnosis: Able to arrange basic investigation of patients with suspected venous thrombosis and embolism.
	Treatment: Ability to initiate treatment of venous thrombosis and embolism.
	Prophylaxis: Use of common methods of prophylaxis against venous thrombosis and embolism. Coagulation:
	2 Clotting mechanism (Virchow Triad)2 Effect of surgery and trauma on coagulation2 Tests for thrombophilia and other disorders of coagulation
	Diagnosis:
	2 Methods of investigation for suspected thromboembolic disease
Knowledge	Treatment:
	4 Anticoagulation, heparin and warfarin2 Role of V/Q scanning, CT angiography and thrombolysis2 Place of pulmonary embolectomy
	Prophylaxis:
	3 Knowledge of methods of prevention, mechanical and pharmacological Coagulation:
	4 Recognition of patients at risk
	Diagnosis:
Clinical Skills	3 Awareness of symptoms and signs associated with pulmonary embolism and DVT2 Role of duplex scanning, venography and d-dimer measurement
	Treatment:
	3 Initiate and monitor treatment
	Prophylaxis:
Technical Skills and Procedures	4 Awareness at all times of the importance of prophylaxis No content

Topic	Nutrition
Category	Core Surgical Skills and Knowledge for All Specialties
Sub-category:	None
Objective	<i>Recognise the need for artificial nutritional support and arrange enteral nutrition.</i>
Knowledge	3 Effects of malnutrition, both excess and depletion3 Methods of screening and assessment
Clinical Skills	 3 Arrange access to suitable artificial nutritional support, preferably via a nutrition team: Dietary supplements 2 Arrange access to suitable artificial nutritional support, preferably via a nutrition team: Enteral nutrition 1 Arrange access to suitable artificial nutritional support, preferably via a nutrition team: Parenteral nutrition
Technical Skills and Procedures	No content

Topic Category Sub-category:	Academic activity Core Surgical Skills and Knowledge for All Specialties None An introduction to research methodology and to teaching others.
Objective	Research: Ability to perform a simple research study and present the results.
	<i>Teaching: Ability to teach small groups such as medical students.</i> Research:
Vnowladaa	2 Research methodology
Knowledge Clinical Skills	Teaching:
	2 Teaching methods Research:
	2 Ability to analyse published evidence
	Teaching:
Technical Skills and Procedures	3 Ability to teach small groups No content
	Please see the <u>Professional Skills and Behaviour » Initial</u> section for these skills

Topic	Management of the dying patient
Category	Core Surgical Skills and Knowledge for All Specialties

Sub-category:	None
	Ability to manage the dying patient appropriately.
Objective	Palliative Care: Good management of the dying patient in consultation with the palliative care team.
	<i>Principles of organ donation: Knowledge of the principles of organ donation.</i> Palliative Care:
	3 Care of the terminally ill4 Analgesia3 Antiemetics
Knowledge	3 Laxatives
into througe	Principles of organ donation:
	3 Circumstances in which consideration of organ donation is appropriate 3 Principles of brain death
	3 Understanding the role of the coroner and the certification of death
Clinical Skills	Palliative Care:
	3 Symptom control in the terminally ill patient
Technical Skills and Procedures	No content

Topic	Endocrine and Metabolic Disorders	
Category	Core Surgical Skills and Knowledge for All Specialties	
Sub-category:	None	
Objective	 To identify, investigate and manage surgical patients with common metabolic disorders To identify, investigate and manage surgical patients with Thyrotoxicosis To identify, investigate and manage surgical patients with Hypothyroidism To identify, investigate and manage surgical patients with Hypercalcaemia Knowledge of the significance of corticosteroid therapy in patient care To identify, investigate and manage surgical patients with diabetes mellitus To identify, investigate and manage surgical patients with Hyponatraemia 	
Knowledge	Thyrotoxicosis 4 Pathophysiology of thyroid hormone excess and associated risks from surgery Hypothyroidism 4 Pathophysiology of thyroid hormone deficiency and associated risks from surgery Hypercalcaemia 3 Causes and effects of hypercalcaemia Cortico-steroid therapy 4 Complications	

	4 Steroid insufficiency
	Diabetes Mellitus 4 Complications
	Hyponatraemia 4 Pathophysiology of fluid and electrolyte balance 4 Causes of hyponatraemia Thyrotoxicosis 4 History and examination 3 Investigation of thyrotoxicosis
	Hypothyroidism 4 History and examination 4 Investigation
Clinical Skills	Hypercalcaemia 3 Investigation of hypercalcaemia 3 Treatment of hypercalcaemia
	Cortico-steroid therapy 4 Peri-operative management of patients on steroid therapy
	Diabetes Mellitus 4 Peri-operative management of diabetic patients
Technical Skills	Hyponatraemia 4 Treatment

and Procedures No content

Topic	Child Protection
Category	Core Surgical Skills and Knowledge for All Specialties
Sub-category:	None
Objective	No content
Knowledge	 4 Working knowledge of Trust and ACPC Child Protection Procedures 4 Basic understanding of child protection law 4 Understanding of Children's rights 4 Working knowledge of types and categories of child maltreatment, presentations, signs and other features (primarily physical, emotional, sexual, neglect, professional) 4 Understanding of one personal role, responsibilities and appropriate referral patterns in child protection 4 Understanding of the challenges of working in partnership with children and families
Clinical Skills	Ability to: 4 recognise the possibility of abuse or maltreatment 4 recognise limitations of own knowledge and experience and seek appropriate expert advice

4 urgently consult immediate senior in surgery to enable referral to paediatricians
4 keep appropriate written documentation relating to child protection matters
4 Communicate effectively with those involved with child protection, including children and their families

Technical Skills and Procedures No content

Торіс	Foreign bodies in the ear canal, nasal foreign bodies, ingested foreign bodies both swallowed and inhaled
Category	Paediatric
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 and nose; primary management of inhaled foreign bodies to facilitate safe transfer for tracheobronchoscopy as needed
Knowledge	3 Recognition of the clinical features of foreign bodies in the ear nose and throat; knowledge of the natural history and the complications associated with treatment.
	HISTORY AND EXAMINATION 3 Ability to take a thorough history from the child/carer 3 Otoscopy 3 Rhinoscopy
Clinical Skills	 2 Assessment of the airway in the child DATA INTERPRETATION 1 Assessment of plain radiography at a basic level e.g. recognition of gross abnormalities on chest radiograph 1 Assessment of soft tissue x-ray of the neck PATIENT MANAGEMENT
	2 Emergency airway care
	2 Otomicroscopy and removal of FB
and Procedures	2 Removal of nasal foreign body
Professional Skills	s Please see the <u>Professional Skills and Behaviour » Initial</u> section for these skills

Торіс	Nasal injuries, haematoma of the pinna, trauma to the external, middle and inner ear, neck trauma	
Category	Paediatric	
Sub-category:	Trauma to the head and neck	
Objective	None	
Knowledge	 3 Presentation and management of nasal fractures 2 Nasal septal haematoma 2 Ear trauma 2 Good knowledge of common aetiologies and awareness of the possible presentations of non-accidental injury in the ENT department. 	
Clinical Skills	HISTORY AND EXAMINATION	

	 3 Ability to take a thorough history from child/parent 3 Assessment of the external nose 3 Assessment of the nasal airway 3 Clinical examination of the ear including otoscopy 2 Assessment of the neck including the airway 3 Otoscopy DATA INTERPRETATION
	2 Pure tone audiometry, tympanometry
	PATIENT MANAGEMENT Emergency airway care see section
Technical Skills and Procedures	2 Nasal fracture manipulation2 Drainage of septal haematoma2 Drainage of haematoma of pinna

Торіс	Spontaneous epistaxis; epistaxis in children with coagulopathy; epistaxis as a presentation of systematic disease
Category	Paediatric
Sub-category:	Epistaxis
Objective	Optimum recognition and management of children with epistaxis;
Knowledge	 3 Thorough knowledge of the pathophysiology, epidemiology, natural history and current approach to treatment of epistaxis to include awareness of the evidence base for current treatment regimens. 3 Understand the role of systemic diseases and their treatments in relation to expistaxis 3 Understand the guidelines for investigations
	HISTORY AND EXAMINATION
	3 Ability to take a thorough history from the child/carer
	3 Anterior Rhinoscopy
	3 Flexible Nasendoscopy 2 Rigid Nasendoscopy
	3 Examination of the neck
Clinical Skills	3 Otoscopy
	DATA INTERPRETATION 3 Interpretation of full blood count; awareness of significance of coagulation tests
	PATIENT MANAGEMENT 3 Medical and surgical management of epistaxis
Technical Skills and Procedures	3 Nasal cautery
Professional Skills	s Please see the <u>Professional Skills and Behaviour » Initial</u> section for these skills

Topic	Rhinosinusitis; complications of sinus infections
Category	Paediatric
Sub-category:	Nose and Sinus infections

Objective	<i>Optimum recognition and management of children with rhinosinusitis;</i> <i>particularly complicated sinus disease e.g. orbital cellulitis, intracranial sepsis.</i>	
Knowledge	3 Thorough knowledge of the pathophysiology, epidemiology, natural history and current approach to treatment of infective rhinitis to include awareness of the evidence base for current treatment regimens.3 Recognition and emergency management of complications	
Clinical Skills	HISTORY AND EXAMINATION 3 Ability to take a thorough history from the child/carer 3 Anterior Rhinoscopy 3 Flexible Nasendoscopy 2 Rigid Nasendoscopy 3 Examination of the neck 3 Otoscopy	
	DATA INTERPRETATION 1 Awareness of imaging techniques; assessment of abnormalities on CT scanning of the paranasal sinuses PATIENT MANAGEMENT 3 Medical and surgical management of rhinitis, rhinosinusitis	
Technical Skills and Procedures	None	
Professional Skills	Please see the <u>Professional Skills and Behaviour » Initial</u> section for these skills	

Торіс	Congenital laryngeal pathology including laryngomalacia, subglottic stenosis, acute laryngeal infections
Category	Paediatric
Sub-category:	Airway Disorders
Objective	Safe recognition of main patterns of presentations of children with airway obstruction at birth, in infancy and in later childhood. Includes primary management to enable definitive treatment of main conditions.
Knowledge	2 Clinical feature of airway obstruction, clinical measures to determine severity of obstruction, awareness of spectrum of causes, treatment options and natural history of main conditions at different ages e.g. laryngeal webs in the newborn, laryngomalacia, acute epiglottitis and laryngotracheobronchitis.
	HISTORY AND EXAMINATION
	1 Assessment of the airway in the newborn
Clinical Skills	DATA INTERPRETATION 1 Assessment of pulse oximetry findings, assessment of plain radiography at a basic level e.g. recognition of gross abnormalities on chest radiograph
	PATIENT MANAGEMENT 3 Medical management e.g. steroids, adrenaline, bronchodilators. 1 Emergency airway care
Technical Skills and Procedures	None
Professional Skills	Please see the Professional Skills and Behaviour » Initial section for these skills

Торіс	Acute tonsillitis, complications of tonsillitis, adenoids, obstructive sleep apnoea
Category	Paediatric
Sub-category:	Tonsils and adenoids
Objective	Definitive secondary-care management of adenotonsillar disease in otherwise healthy children, Management in syndromic and special needs children is often in a designated children's hospital
Knowledge	2 Epidemiology, classification, aetiology and natural history of adenotonsillar disease. Thorough understanding of the evidence base that underpins current treatment approaches. Awareness of controversies. Except for the management of very young (under four years) children and those with complex medical needs e.g. syndromic children.
	HISTORY AND EXAMINATION 3 Ability to take a through history from child/parent. 3 Otoscopy 2 Examination of the pharynx including endoscopy
Clinical Skills	DATA INTERPRETATION 2 Assessment of the adenoids and airway using plain radiography 2 Awareness of the principles that underpin sleep studies in children
	PATIENT MANAGEMENT Comprehensive management including surgery as appropriate
Technical Skills and Procedures	2 Tonsillectomy2 Adenoidectomy1 Arrest of adenotonsillar bleeding
Professional Skills	s Please see the <u>Professional Skills and Behaviour » Initial</u> section for these skills

Торіс	Syndromes with important ORL manifestations, cleft palate and the major malformations of the ears nose and throat
Category	Paediatric
Sub-category:	Congenital deformities affecting the head and neck
Objective	Safe primary management of children with congenital deformities of the head and neck, awareness of the principles that underpin long-term care.
Knowledge	2 Basic knowledge of the range of deformities that present at birth with an emphasis on awareness of those that affect the airway e.g. choanal atresia, cystic hygroma
	HISTORY AND EXAMINATION
	1 Assessment of the airway in the newborn
Clinical Skills	DATA INTERPRETATION 1 Assessment of pulse oximetry findings, assessment of plain radiography at a basic level e.g. recognition of gross abnormalities on chest radiograph
	PATIENT MANAGEMENT 1 Emergency airway care 2 Management of OME in cleft palate children
Technical Skills and Procedures	None

Торіс	Congenital masses e.g vascular malformations, thyroid and thyroglossal duct swellings, acute and chronic infections and granulomatous disorders that cause neck swellings, cervical adenopathy, awareness of the rare malignancies that present with neck masses
Category	Paediatric
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.
Knowledge	 1 Classification of vascular malformations, awareness of treatment options 1 Applied embryology of thyroid gland descent and awareness of commoner causes of swellings related to the thyroid gland and thyroglossal duct 1 Applied anatomy of the neck spaces and awareness of the presentation, clinical features and primary management of abscesses and collections in these spaces 2 Knowledge of the range of causes and natural history of cervical adenopathy, good grasp of the evidence base which guides the selection of children for neck node biopsy
Clinical Skills	 HISTORY AND EXAMINATION 3 Assessment of the neck, ability to take a through history from child/parent. DATA INTERPRETATION 1 Assessment of plain radiography at a basic level e.g. recognition of gross abnormalities on chest radiograph. Awareness of the range of imaging options available e.g. sonography, CT, MR scanning. PATIENT MANAGEMENT 2 Emergency airway care 1 The role of surgery
Technical Skills and Procedures	2 Flexible endoscopy2 Incision drainage neck abscess2 Biopsy neck node
Professional Skills	Please see the <u>Professional Skills and Behaviour » Initial</u> section for these skills

Topic	Speech delay, disorders of articulation
Category	Paediatric
Sub-category:	Speech and language development
Objective	Awareness of the epidemiology and presentation of delayed speech and its relevance to ENT disorders. Awareness of the main disorders of articulation e.g hyponasal and hypernasal speech.
Knowledge	3 The normal developmental milestones with an emphasis on speech and language acquisition. Major causes of delayed speech4 Pathology that underlies hyponasal and hypernasal speech. Role of the adenoids
Clinical Skills	HISTORY AND EXAMINATION 3 Ability to take a through history from child/parent

	 Ability to distinguish hyponasal and hypernasal speech i.e. clinical assessment of speech Otoscopy Flexible endoscopy
	DATA INTERPRETATION
	3 Pure tone audiometry
	1 Hearing tests in pre-school child
	PATIENT MANAGEMENT
	1 Multidisciplinary teams in the management of children with speech and other developmental problems
	1 Flexible endoscopy, examination of the nasopharynx 2 Division of tongue tie
Professional Skills	Please see the <u>Professional Skills and Behaviour » Initial</u> section for these skills

Торіс	Main cancers that affect the head and neck in children, including lymphoma
Category	Paediatric
Sub-category:	Oncology
Objective	Awareness of the epidemiology presentation and principles of management of malignant disease in the head and neck.
Knowledge	3 Classification of the main malignancies, knowledge of typical presentations, understanding of the natural history of childhood cancers with an emphasis on differences between adult and childhood disease. Awareness of issues relating to the management of the child and family with cancer including palliative care e.g. management of epistaxis.
Clinical Skills	HISTORY AND EXAMINATION 3 Ability to take a through history from child/parent 3 Examination of the neck 3 Examination of the cranial nerves 3 Otoscopy 1 Flexible endoscopy
Chinical Skills	DATA INTERPRETATION
	3 Awareness of the range of diagnostic tests available particularly imaging
	PATIENT MANAGEMENT
	1 Initial diagnosis and liaison with colleagues
Technical Skills and Procedures	1 5
Professional Skills	s Please see the <u>Professional Skills and Behaviour » Initial</u> section for these skills

TopicCongenital lesions including cysts, sinus's and fistulas; abnormalities of the
pinna; inflammatory disease of the ear canal

Category	Paediatric
Sub-category:	Disorders of the external ear in children
Objective	Recognition and classification of the principle congenital anomalies; management of otitis externa; management of uncomplicated lesions of the pinna e.g. accessory auricles, sebaceous cysts
Knowledge	4 Recognition of the clinical features of foreign bodies in the ear nose and throat; knowledge of the natural history and the complications associated with treatment.
	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; Otoscopy
Clinical Skills	DATA INTERPRETATION 4 Age-appropriate assessment of hearing; Tympanometery; Awareness of the imaging techniques and principle findings in microtia.
	PATIENT MANAGEMENT 3 Rehabilitation of hearing loss in microtia; selection of children for referral for ear reconstrucion/prostheses; Counselling of families but not definitive management of microtia and other major anomalies of the external ear.
Technical Skills and Procedures	4 Otomicroscopy4 Excision of simple lesions in and around the external ear3 Surgery for prominent ears requires specific training
Professional Skills	Please see the <u>Professional Skills and Behaviour » Initial</u> section for these skills

Торіс	Congenital deafness, classification of causes, investigation and rehabilitation
Category	Paediatric
Sub-category:	Deafness excluding otitis media and its complications
Objective	Awareness of the epidemiology and presentation of deafness, good knowledge of range of causes, awareness of diagnostic and investigative strategies and knowledge of the principles that underpin rehabilitation including amplification and cochlear implantation
Knowledge	 2 Applied embryology of the ear including congenital deformities of the ear and their relationship to deafness 2 Differential diagnosis 2 Genetic, syndromic and non-syndromic deafness 1 The principles of audiometric screening 1 The principles of audiological testing and the range of tests available 1 Rehabilitation of the deaf child with an emphasis on hearing aids 1 Cochlear implantation
Clinical Skills	 HISTORY AND EXAMINATION 3 Ability to take a through history from child/parent. 3 Otoscopy DATA INTERPRETATION 1 Awareness of the range of investigative options available especially the principles of genetic testing e.g connexin measurements, imaging e.g. sonography, CT, MR scanning

PATIENT MANAGEMENT

As above

Technical Skills and Procedures 3 Microscopic examination of the ear

Торіс	Acute otitis media, recurrent acute otitis media, otitis media with effusion (OME), chronic otitis media, mastoiditis, intracranial sepsis
Category	Paediatric
Sub-category:	Otitis media and its complications
Objective	Definitive secondary-care management of inflammatory middle –ear disease and its complications
Knowledge	4 Epidemiology, classification, aetiology and natural history of each variant of otitis media. 4 Thorough understanding of the evidence base which underpins current treatment approaches.4 Except for the surgical management of cholesteatoma and the use of bone-anchored hearing aids trainees are expected to progress to level 4.
Clinical Skills	 HISTORY AND EXAMINATION 3 Ability to take a through history from child/parent 3 Otoscopy 3 Examination of the cranial nerves 2 Neurological examination DATA INTERPRETATION 2 Pure Tone Audiometry 2 Tympanometery 2 Diagnostic imaging e.g. ST scan, MRI 2 Laboratory investigations e.g. blood tests, lumbar puncture and bacteriology results
	PATIENT MANAGEMENT 4 Comprehensive management including surgery as appropriate 4 Referral and team working for children with complications of acute otitis media
	3 Otomicroscopy 3 Tympanostomy tubes
Professional Skills	s Please see the <u>Professional Skills and Behaviour » Initial</u> section for these skills

Торіс	Congenital and acquired causes that are of particular importance in children and the principles of management and rehabilitation with an emphasis on how these differ in children
Category	Paediatric
Sub-category:	Facial Palsy
Objective	Safe primary management of children with facial palsy, recognition of clinical pathologies that present with facial palsy.
Knowledge	3 Basic knowledge of the range of aetiologies, the natural history of the main causes, and the evidence base that underpins current investigation and management (This section complements the adult curriculum)
Clinical Skills	HISTORY AND EXAMINATION

	 3 Ability to take a history from child/parent 3 Otoscopy 3 Examination of the head and neck 3 Assessment of the cranial nerves in children
	DATA INTERPRETATION 1 Awareness of the range of diagnostic tests and the principles that govern their use e.g. electroneuronography, imaging of the facial nerve
	PATIENT MANAGEMENT 3 Principles of pharmacological management (e.g steroids, anti-viral agents) 3 Emergency care 3 Eye protection
Technical Skills and Procedures Professional Skills	2 Myringotomy (3 to 4) s Please see the <u>Professional Skills and Behaviour » Initial</u> section for these skills

Topic	Rhinitis, allergic rhinitis
Category	Paediatric
Sub-category:	Inflammatory nasal disease (including allergic rhinitis)
Objective	Optimum recognition and management of children with rhinitis.
Knowledge	3 Thorough knowledge of the pathophysiology, epidemiology, natural history and current approach to treatment of allergic rhinitis to include awareness of the evidence base for current treatment regimens.
	HISTORY AND EXAMINATION
	3 Ability to take a thorough history from the child/carer
	3 Anterior Rhinoscopy 2 Flexible Nasendoscopy
	2 Rigid Nasendoscopy
	3 Examination of the neck
	3 Otoscopy
Clinical Skills	 DATA INTERPRETATION 3 Skin tests for allergies; Blood tests for allergies; 1 Awareness of imaging techniques; assessment of abnormalities on CT scanning of the paranasal sinuses 1 Knowledge of immunological tests, ciliary function tests/nasal biopsy.
	PATIENT MANAGEMENT
	3 Medical and surgical management of rhinitis
Technical Skills and Procedures	2 Submucous diathermy
Professional Skills	Please see the <u>Professional Skills and Behaviour » Initial</u> section for these skills

Торіс	Inflammatory nasal polyposis; nasal masses e.g. encephalocoele, rare nasal tumours
Category	Paediatric

Sub-category:	Nasal Polyps in Children
Objective	None
	3 Recognition of the aetiology and clinical features of foreign nasal polyps including cystic fibrosis and the contents of the anterior cranial fossa presenting as nasal polyps
Knowledge	3 Knowledge of the natural history and the complications associated with
	treatment 3 The relationship to other respiratory disease including those in the lower respiratory tract
	HISTORY AND EXAMINATION
	3 Ability to take a thorough history from the child/carer
	3 Anterior Rhinoscopy
	2 Flexible Nasendoscopy
	2 Rigid Nasendoscopy
	3 Examination of the neck 3 Otoscopy
Clinical Skills	DATA INTERPRETATION
	1 Awareness of imaging techniques; assessment of abnormalities on CT scanning of the paranasal sinuses
	1 Knowledge of immunological tests, ciliary function tests/nasal biopsy
	PATIENT MANAGEMENT
	3 Medical and surgical management of nasal polyposis1 Investigation of nasal masses
Technical Skills and Procedures	1 Nasal Polypectomy either endoscopically or with direct vision
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Торіс	Adnenoid and tonsillar pathology in adults
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 including relevant anatomical relationships 4 Know the presenting signs and symptoms 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 2 Diagnosis and medical management of post-operative haemorrhage following adenotonsillar surgery

	4 Incision and drainage of peritonsillar abscess.
	3 Tonsillectomy and adenoidectomy in adults and children (see paediatric
Technical Skills	ENT)
and Procedures	3 Manage the compromised airway due to hypertrophy
	1 Surgical management of post-operative bleeding following adenotonsillar
	surgery
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Topic	Airway obstruction in adults
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 3 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 the management of patients presenting with airway obstruction. 3 Know the different methods of securing an airway safely (surgical & non surgical) in an emergency setting 2 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. 2 Be aware of the role of investigation in the management of airway obstruction 2 Demonstrate the ability to work effectively with anaesthetists and those involved in critical care who manage the 'shared airway'. 3 Demonstrate expertise in the safe assessment of patients with critical airways.
Technical Skills and Procedures	 2 Be competent at performing the following diagnostic procedures; fibreoptic nasopharyngoscopy, direct laryngoscopy, microlaryngoscopy, bronchoscopy, pharyngo oesophagoscopy 2 Be competent at performing endotracheal intuation 2 Be proficient at performing a surgical tracheostomy in the elective & emergency setting both under general and local anaesthesia 1 Be competent at foreign body removal from the airway in adults

Topic	Aetiology and management of the craniocervical trauma in adults
Category	Head and Neck
Sub-category:	None
Objective	To understand the aetiology, presenting signs, symptoms and management of a

Knowledge	 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. 4 Understand the anatomy of the head and neck 2 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 2 Understand the Le Fort classification of facial fractures and their effects. 2 Understand the classification of fractures of the mandible and their effects 2 Understand the classification of fractures of the temporal bone and their effects. 2 Understand the consequences and potential complications of injury to structures in the neck, in the 3 horizontal entry zones of the neck. 2 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. 2 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 approach to management.
Clinical Skills	 2 Be able to elicit an appropriate clinical history from a patient with craniocervical trauma (or from a third party witness). 2 Be able to demonstrate the relevant clinical signs from a patient with craniocervical trauma. 1 Be able to appropriately order and interpret the results of investigations in a patient with craniocervical trauma. 1 Be able to coordinate the assembly of an appropriate multidisciplinary team to manage a patient with craniocervical trauma.
Technical Skills and Procedures	2 Be able to secure the airway through intubation or tracheostomy
Professional Skills	Please see the Professional Skills and Behaviour » Initial section for these skills

Topic	Disorders of swallowing
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, 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 Understand the anatomy of the pharynx, and physiology of swallowing. 3 Understand causes of odynophagia. 3 Understand the various hypotheses relating to the aetiology of dysphagia. 4 Understand the investigation and imaging of a patient with dysphagia. 3 Understand the principles of medical and surgical management of dysphagia
Clinical Skills	4 Elicit clinical history and clinical signs.3 Be able to examine the pharynx and oesophagus with mirrors and endoscopes in outpatients

	2 be able to work with Speech & Language therapists in the management of dysphagia
Technical Skills and Procedures	 4 Flexible fibreoptic nasopharyngolaryngoscopy 1 Interpretation of videofluoroscopic swallowing studies 1 Fibreoptic endoscopic evaluation of swallowing studies 2 Endoscopic examination of pharynx, larynx and oesophagus under general anaesthesia 2 Removal of foreign bodies from the pharynx, larynx and oesophagus under general anaesthesia 1 Be able to perform competently endoscopic and open pharyngeal pouch surgery

Topic	Aetiology and management of cervical sepsis
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 Understand the anatomy of the fascial compartments of the neck. 2 Understand the pathogenesis(including congenital abnormalities) and clinical presentation of deep neck space infections. 2 Know the microbiology of deep neck space infections. 2 Understand the principles of medical and surgical management of deep neck space infections, including image guided drainage procedures. 2 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. 3 Be able to order and interpret the results of appropriate investigations, including imaging and microbiological cultures, in a patient with deep cervical sepsis. 1 Be able to undertake treatment of a patient with deep cervical sepsis or complications thereof.
Technical Skills and Procedures	2 Be proficient in rigid endoscopic examination of the upper aerodigestive tract 2 Be proficient in management of the compromised upper airway, including tracheostomy.
Professional Skills	Please see the <u>Professional Skills and Behaviour » Initial</u> section for these skills

Topic	Aetiology and management of congenital abnormalities of the head and neck affecting adults
Category	Head and Neck
Sub-category:	None
Objective	To understand the aetiology, presenting signs, symptoms and management of a patient with congenital abnormalility 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. 3 Understand the embryology of the head and neck. 3 Understand the anatomy of the neck. 2 Understand the morphology and classification of pharyngeal diverticulae. 2 Understand the pathophysiological effects of pharyngeal diverticulae and the principles underlying their management
Knowledge	 2 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. 2 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. 2 Know of syndromes associated with congenital abnormalities of the head and neck 1 Understand the morphology and elassification of dentaplycolar.
	 1 Understand the morphology and classification of dentoalveolar malformations and the principles underlying their management. 2 Understand the morphology and classification of congenital abnormalities of the larynx, trachea and oesophagus and the principles underlying their management. 2 Understand the morphology, classification of and pathophysiological effects of cleft lip and palate, and the principles of management thereof. 2 Understand the investigation of congenital abnormalities of the head and neck including imaging and examination under anesthesia. 1 Understand the principles of genetic counselling of patients or the parents of children with congenital abnormalities of the head and neck.
Clinical Skills	 2 Be able to elicit an appropriate history from a patient with a congenital abnormality of the head and neck. 2 Be able to demonstrate the relevant clinical signs from a patient with a congenital abnormality of the head and neck. 2 Be able to undertake appropriately ordered investigation of a congenital abnormality of the head and neck. 2 Be able to interpret imaging of congenital abnormalities of the head and neck. 2 Understand the role of a multidisciplinary team in the management of congenital abnormalities of the head and neck.
Technical Skills and Procedures	 Be able to perform appropriately directed examination under anaesthesia, including endoscopic assessment of a congenital abnormality of the head and neck. Be able to excise a pharyngeal diverticulum using open and endoscopic techniques. Be able to perform surgery to remove abnormalities of the thyroglossal duct. Be able to perform a tracheostomy. Be able to excise a branchial cyst.
Professional Skills	Please see the <u>Professional Skills and Behaviour » Initial</u> section for these skills

Topic	Cervical lymphadenopathy in adults
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	 3 Demonstrate knowledge of the aetiology & pathology of cervical lymphadenopathy including manifestations of systemic disease. 3 The need for endoscopic assessment of a neck mass this comes in under demonstrating knowledge of aetiology & pathology therefore 3 Be able to order the appropriate investigations of neck masses 3 Understand the anatomy of the neck, and distribution of cervical lymph nodes. Classify the lymphatic levels of the neck according to the MSK classification. 2 Demonstrate knowledge of the differing histology and microbiological causes of cervical lyphadenopathy. 2 Presentation, aetiology, investigations and pattern of metastatic spread of upper aerodigestive tract, salivary gland, cutaneous and thyroid malignancies. 2 Demonstrate knowledge of the presentation, aetiology, investigations and principles of management of lymphoreticular disease as it applies to the head and neck. 3 Principles of management of patients with cervical lymphadenopathy. 2 Demonstrate knowledge of the indications for medical & surgical management and the complications of management.
Clinical Skills	3 Be able to take a relevant detailed history and interpret clinical signs correctly.
Technical Skills and Procedures	4 Fine needle aspiration cytology3 Out patient and in patient endoscopy of the UADT.2 Excision of cervical lymph nodes and deal with the complications.
Professional Skills	Please see the Professional Skills and Behaviour » Initial section for these skills

Торіс	Head and neck malignancies in the upper aerodigestive tract excluding the oral cavity
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. 2 Understand the various hypotheses relating to the aetiology of squamous cell cancer including the cellular basis of oncogenesis. 3 Understand the pattern of spread of malignant disease. 2 Understand how HNC is managed in the multidisciplinary setting. 1 Know the indications for imaging in HNC and the use of relevant imaging modalities.

	 2 Understand the functional consequences of head and neck cancer, and its treatment. 1 Understand the principles involved in and evidence for the various medical and surgical methods of treatment available for head and neck cancer. 1 Understand the role of surgical and medical treatment in palliative management of patients 1 Understand the indications for reconstructive and rehabilitative surgery (including surgical voice restoration) in HNC 1 Know the various reconstructive options available in HNC
Clinical Skills	 4 Elicit a relevant clinical history and clinical signs including being able to perform an appropriate examination. 2 Be able to work within the MDT, and recognise the contributions made by all team members. 4 Demonstrate good communication skills with other professionals. 1 Be able to break bad news sensitively and appropriately to patients and their families
	 2 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 1 Comprehensive and selective neck dissection 1 Partial laryngectomy 1 Transoral laser surgery 2 Be able to replace a tracheooesophageal valve in clinic.

Topic	Investigation and management of the neck and lump
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. 4 Know the differential diagnosis of a neck lump. 4 Demonstrate knowledge of the aetiology & pathology of cervical lymphadenopathy including manifestations of systemic disease. 3 Understand the presentation, aetiology, investigations and pattern of metastatic spread of upper aerodigestive tract, salivary gland, cutaneous and thyroid malignancies. 3 Understand the appropriate investigation of neck masses 3 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 3 Demonstrate knowledge of the potential complications of management.
Clinical Skills	3 Be able to take a relevant detailed history, perform appropriate examination and interpret clinical signs correctly

Technical Skills and Procedures	 3 Demonstrate a rational approach to investigation of a neck lump 3 Perform (FNAC) 3 Out patient and in patient endoscopy of the Upper aerodigestive tract 2 Perform excision biopsy of cervical lymph nodes and deal with the complications.
and Procedures	complications.
	1 Branchial cyst excision and management of complications

Торіс	Neoplastic salivary gland disease
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. 3 Know the pathology of salivary gland tumours. 3 Understand the classification of salivary gland tumours. 3 Understand inflammatory swellings 3 Know the presenting symptoms & signs of salivary gland tumours. 3 Understand the modalities (cytological & imaging) available for investigating salivary gland tumours 2 Know the differential diagnosis of salivary gland tumours and inflammatory swellings. 2 Understand the principles of management of salivary gland tumours. 2 Understand the potential consequences of salivary gland surgery and the complications of surgery 2 Understand the principles of management (surgical & non surgical) of malignant salivary gland disease 1 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 3 Demonstrate the ability to detect 'red flag' symptoms & signs of malignant disease. 2 Order the most appropriate imaging modality 1 Manage patients with malignant disease in a multidisciplinary team 3 FNAC
Technical Skills and Procedures	 1 Be able to perform a submandibular gland excision 1 Biopsy of a minor salivary gland tumour 1 Be able to perform a superficial parotidectomy

Торіс	Benign salivary gland disease
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. 3 Understand the pathological processes, both local & systemic, that can affect the salivary glands. 3 Understand the classification of benign salivary gland disease including infection, inflammatory diseases, drugs and benign tumours 3 Know the various imaging modalities for investigation of benign salivary gland disease. 3 Understand the principles of patient management. 3 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. 2 Be able to order the appropriate special investigations and correctly interpret images including plain radiographs, computerized tomography and Magnetic resonance imaging. 2 Be able to counsel patients on the particular risks of salivary gland surgery. 	
Technical Skills and Procedures	2 Be able to excise a submandibular calculus 1 Be able to perform submandibular gland excision	
Professional Skills Please see the <u>Professional Skills and Behaviour » Initial</u> section for these skills		

Торіс	Thyroid and parathyroid disease
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.
	4 Understand the embryology, physiology, biochemistry and anatomy of the thyroid gland.
Knowledge	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.
	3 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 Be able to elicit an appropriate clinical history from a patient with thyroid or parathyroid gland disease.
Clinical Skills	4 Be able to demonstrate relevant clinical signs in a patient with thyroid or parathyroid gland disease
	2 Be able to obtain appropriate samples for fine needle cytology or microtrephine biopsy from a patient with a thyroid or parathyroid mass.
Technical Skills and Procedures	1 Be able to perform thyroid surgery.
Professional Skills	Please see the <u>Professional Skills and Behaviour » Initial</u> section for these skills

Topic **Oral pathology** Head and Neck Category None Sub-category: To understand the aetiology, presenting signs, symptoms and management of patients presenting with disorders of the oral cavity. This module gives some **Objective** indication of the breadth and depth of required knowledge and surgical skills. The list should not be considered to be fully inclusive or exhaustive. 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 3 Understand the physiology of the oral phases of swallowing 3 Know the physiology of salivary function 2 Understand the consequences of oral disease on swallowing 2 Understand the consequences of salivary gland dysfunction on oral health 2 Know the causes of drooling and the principles of management thereof. 1 Understand the aetiology, pathophysiology, presenting symptoms and signs Knowledge of dental caries 2 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 3 Know the presenting symptoms and signs of oral cancer 2 Understand the principles of management of oral cancer 3 Understand the long and short term effects of chemotherapy and radiotherapy on oral health 1 Understand the appropriate modalities for imaging oral disease 4 Be able to elicit an appropriate clinical history and interpret physical signs correctly **Clinical Skills** 2 Demonstrate the ability to detect 'red flag' symptoms & signs of malignant disease. Page 44 of 123

	2 Order the most appropriate imaging modality
	2 Be able to interpret plain images of the oral cavity and associated bony
	structures
	1 Manage patients with malignant disease in a multidisciplinary team
	2 Be able to diagnose dental related sepsis presenting in the neck or paranasal
	sinuses
Technical Skills and Procedures	3 Perform a biopsy of an oral lesion
	1 Remove and treat benign oral lesions
	1 Simple dental extractions

Topic	Sleep related breathing disorders
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.
	2 Know the aetiology, presenting signs and symptoms of sleep related breathing disorders, including snoring, obstructive sleep apnoea / hypopnoea and central sleep apnoea in adults.
	2 Know of the pathophysiological sequelae of sleep related breathing disorders including snoring, obstructive sleep apnoea / hypopnoea and central sleep
Knowledge	apnoea 2 Understand the principles of assessment and investigation of sleep related breathing disorders, including sleep nasendoscopy and sleep studies / polysomnography.
	 2 Understand the principles of management of sleep related breathing disorders including CPAP, mandibular advancement prostheses, nasal and pharyngeal surgery, tracheostomy and drug therapy. 2 Understand the principles of midface and mandibular advancement surgery.
Clinical Skills	 3 Be able to elicit an appropriate clinical history and identify relevant clinical signs in a patient with a sleep related breathing disorder. 2 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	 Be able to perform surgery to correct nasal airway obstruction. Be able to perform sleep nasendoscopy and out patient flexible fibreoptic nasendoscopy

Topic	Voice disorders
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	 3 Understand the physics of sound 3 Understand the embryology of the larynx and congenital malformations of the larynx 2 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 2 Understand the classification of dysphonias and the various hypotheses relating to the aetiology of dysphonias. 2 Understand the classification of disorders of articulation 2 Understand the classification of disorders of articulation 2 Understand principles of videostroboscopic examination of the larynx, laryngography and analysis of pitch and periodicity of speech. (including photodocumentation) 2 Understand the principles of the medical and surgical management of patients with dysphonia (including instrumentation). 2 Know the principles of Speech and Language Therapy 4 Know about 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.
and Procedures	 4 Laryngeal examination with mirrors and flexible fibreoptic endoscope in an outpatient setting 2 Microlaryngoscopy 1 Videostroboscopic laryngoscopy in an outpatient setting 1 Microscopic / endoscopic laryngeal surgery 1 Laryngeal framework surgery
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Торіс	Acquired lesions including osteoma, exostosis and atresia, dermatological conditions, benign and malignant lesions, affect of ionizing irradiation on the temporal none. Trauma and foreign bodies.
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.
Knowledge	 3 systemic conditions affecting external ear 3 dermatological conditions of the external ear 3 pharmocolgy of medications used in treatment 3 aetiology, pathology, presentation and management of benign and malignant disease 1 aetiology of acquired atresia of the external auditory meatus 1 pathogenesis of effects of ionizing radiation of the ear and temporal bone 2 aetiology, pathology, presentation and management of osteoma / exostosis 3 management of foreign bodies 3 understand the implications and management of trauma to the ear
Clinical Skills	HISTORY AND EXAMINATION 4 obtain appropriate history 3 clinical examination 3 Ototoscopy 2 microscopy

	DATA INTERPRETATION 2 interpretation of audiological 2 awareness and interpretation of radiological investigations
	PATIENT MANAGEMENT Medical management
	Comprehensive management including surgery as appropriate 3 Referral and team working
	3 aural toilet including microsuction and application of dressings2 biopsy of lesion of external ear wedge excision1 oncological and reconstructive surgery
Technical Skills	1 meatoplasty
and Procedures	1 removal of osteoma / exostosis
	2 otomicroscopy and removal of FB's
	2 Drainage of haematoma of pinna
	2 suturing of pinna

Торіс	Comprehensive management of otitis externa, furunculosis, otomycosis, myringitis granular and benign, herpetic lesions and malignant otitis externa
Category	Otology
Sub-category:	Infective conditions of the external ear including otitis externa, furunculosis, otomycosis, myringitis granular and benign/herpetic
Objective	<i>To understand the aetiology, pathology, presentation and management of infective conditions of the external ear.</i>
Knowledge	 3 Anatomy, physiology and pathology of the external ear and relationship of disease to the temporal bone. 3 Microbiology of external ear 3 Knowledge of antimicrobial and antiviral agents and pharmacology of medications used in treatment 3 The pathogenesis of disorders of the external ear. 3 Differential diagnosis and management of inflammatory conditions 3 Necrotising otitis externa.
Clinical Skills	 HISTORY AND EXAMINATION History taking, clinical examination including neuro – otological 2 Interpret audio vestibular tests. 2 Understand principles of patient management. DATA INTERPRETATION Awareness and interpretation of radiological investigations inc bone scanning microbiological reports 2 interpretation of laboratory investigations
Technical Skills	Indications for surgical intervention 3 Microscopy

and Procedures 2 suction clearance 2 biopsy of lesion of external ear

Торіс	Trauma
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.
Knowledge	 3 Anatomy, physiology and pathology of the ear and auditory pathways. 3 The effects of trauma on the pinna, ear canal, tympanic membrane, middle ear, otic capsule and temporal bone. 2 The effects and assessment of poly-trauma and neurological injury. 3 The effects of barotrauma 2 The surgical and non-surgical management of trauma of the external, middle and inner ear.
	HISTORY AND EXAMINATION
	3 History taking, clinical examination,
	2 Audiological and vestibular assessment
	2 Neurophysiological assessment of facial nerve
	2 Significance of radiological findings.2 Interpret audio-vestibular tests.2 Principles of patient management
Clinical Skills	DATA INTERPRETATION 2 objective and subjective audiological and vestibular tests 2 Radiological imaging of the temporal bone, head and neck 2 Laboratory investigations
	 PATIENT MANAGEMENT Demonstrate communication skills and empathy 2 Be able to advise the patient of the treatment options, discuss risks and potential benefits, potential complications 3 To work where appropriate in a multidisciplinary team liaise with other professional and organisations 3 The importance of teamwork in managing critically ill patients
Technical Skills and Procedures	 3 Microscopy 2 Suction clearance of ear 1 meatoplasty 2 Drainage of haematoma of pinna 2 suturing of pinna 1 reconstructive surgery of the pinna 1 exploratory tympanotomy 1 myringoplasty 1 ossiculoplasty 1 facial nerve decompression / anastomosis 1 repair of perilymph leak

Торіс	Acute otitis media including mastoiditis, skull base infection, chronic otitis media and sequelae	
Category	Otology	
Sub-category:	Middle ear	
Objective	Demonstrate communication skills and empathy. To understand the aetiology, presenting signs, symptoms and management of infection of the middle ear. 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	 3 Anatomy, physiology and pathology of the ear and temporal bone 3 The microbiology related to acute and chronic ear infections. 3 Complications of acute otitis media. 2 Principles and practice of audiology including pure tone audiometry, tympanometry 2 Principle and practice of objective tests of hearing 2 interpretation of radiological investigations 2 Pharmacology of medications used in medical treatment 	
Clinical Skills	HISTORY AND EXAMINATION 3 Otological and neuro-otological examination 2 Audiological assessment 3 History taking, clinical examination, 3 Understand principles of patient management 2 Microscope assessment of the ear DATA INTERPRETATION 2 Drinking and mostice of chieve texts of hearing	
	 2 Principle and practice of objective tests of hearing 2 interpretation of radiological investigations PATIENT MANAGEMENT medical and surgical treatments of acute infection to the middle ear and temporal bone 	
	 2 suction clearance 2 microsuction and myringotomy 2 myringotomy and grommet 2 T tube insertion 2 Grommet removal 1 Myringoplasty 1 Cortical mastoidectomy 1 Modified radical mastoidectomy 	

Торіс	Management of adult deafness presenting as sudden or progressive conductive, mixed and sensorineural hearing loss	
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. The list should not be considered to be fully inclusive or exhaustive.
	 3 Embryology of the ear 3 Anatomy, physiology and pathology of the ear and auditory pathways. Principles of acoustics and measurement of sound. 2 Principles and practice of audiology including pure tone audiometry, speech audiometry and electrophysiological tests and other objective tests of hearing including oto-acoustic emissions
	2 Radiological imaging of the inner ear and central vestibular pathways
	2 The genetics of otological diseases
Knowledge	3 The aetiology, pathogenesis and management of disorders of the ear and hearing; including both benign and malignant disease noise induced hearing loss; preservation of hearing
	1 Central auditory processing disorders, auditory neuropathy, obscure auditory
	dysfunction 2 Auditory rehabilitation including the use of hearing aids and other assistive devices.
	2 Social and psychological issues of deafness
	2 Principles of non-auditory communication
	2 Principles of surgical reconstruction.
	2 Management of severe/ profound hearing loss.
	HISTORY AND EXAMINATION 3 History taking, clinical examination inc neuro-otological
	2 Objective and subjective audiological assessment
	3 Principles of a holistic approach to the management of hearing loss2 Vestibular assessment, including electro physiological testing, and clinical
	examination 2 Radiological assessment
	2 Genetic counselling
Clinical Skills	DATA INTERPRETATION
Chilical Skills	Audiological and vestibular tests
	2 Radiological imaging of the temporal bone , head and neck 3 Laboratory investigations
	5 Laboratory investigations
	PATIENT MANAGEMENT
	Demonstrate communication skills and empathy
	2 Be able to advise the patient of the treatment options, discuss risks and
	potential benefits, potential complications 3 To work where appropriate in a multidisciplinary team Liaise with other
	professional and organisations
	2 Microscopy
	2 Suction clearance of ear
	2 Aural polypectomy
T	2 Myringotomy +/- grommet
Technical Skills and Procedures	1 Exploratory tympanotomy 1 Myringoplasty
and Froteuries	1 Tympanoplasty
	1 Open and closed mastoidectomy
	1 Ossiculoplasty
	1 Stapedotomy / stapedectomy

1	Cochlear	imn	lantation
T	Countral	mp.	amation

- 1 Middle ear implantation
- 1 Insertion of Bone anchored hearing aid abutment
- 1 closure of perilymph leak
- 1 The surgical approaches to the CP angle

Topic	Objective and subjective tinnitus
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. The list should not be considered to be fully inclusive or exhaustive.
Knowledge	 3 Anatomy, physiology and pathology of the ear and auditory pathways. 3 The pathogenesis of disorders of the ear and hearing 2 Principles and practice of audiology including pure tone audiometry, speech audiometry and electrophysiological tests and other objective tests of hearing including oto-acoustic emissions 1 Psycho-acoustical tests, pitch and loudness match, minimum masking level, residual inhibition 1 The various hypotheses relating to the aetiology of tinnitus both objective and subjective 2 The psychological effects of tinnitus 1 Principles of tinnitus retraining and rehabilitation and the principles of support and counselling 2 Function of hearing aid(s) and masking HISTORY AND EXAMINATION
Clinical Skills	 3 History taking, clinical examination including neuro-otological 2 Otoscopy 2 Microscopy 2 Significance of radiological findings DATA INTERPRETATION 1 Interpretation of neuro-otological radiology 1 Interpretation of neuro-physiological tests PATIENT MANAGEMENT 2 Principles of patient management
	3 Demonstrate communication skills and empathy.1 Be able to advise the patient of the treatment options, discuss risks and potential benefits.
Technical Skills	1 Perform pure tone audiometry, tympanometry
and Procedures	1 Pitch matching and masking
Professional Skills	Please see the <u>Professional Skills and Behaviour » Initial</u> section for these skills

Торіс	Upper and lower motor neuron disease of the facial nerve
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. The list should not be considered to be fully inclusive or exhaustive.		
Knowledge	 3 The anatomy and physiology of facial nerve and related structures 3 The aetiology classification and neuro-physiology of facial paralysis 2 The relevant clinical neurological, vascular, radiological, biochemical, serological and electrophysiological investigations 2 Per-operative facial nerve monitoring 2 Principles of rehabilitation for facial paralysis 2 Understand the psychological effects of facial disfigurement HISTORY AND EXAMINATION 		
	 3 The anatomy and physiology of facial nerve and related structures 3 The aetiology classification and neuro-physiology of facial paralysis 2 The relevant clinical neurological, vascular, radiological, biochemical, serological and electrophysiological investigations 2 Principles of rehabilitation for facial paralysis 2 Understand the psychological effects of facial disfigurement 		
Clinical Skills	DATA INTERPRETATION 2 Neuro-physiological tests of inner ear function and facial nerve 2 Neuro-otological radiological tests 2 Laboratory investigations		
	PATIENT MANAGEMENT Demonstrate communication skills and empathy 2 Be able to advise the patient/parents or carers of the treatment options, discuss risks and potential benefits, potential complications and obtain informed consent. Liaise with other health care professionals.		
Technical Skills and Procedures	 1 Tarsorraphy 1 Cortical mastoidectomy 1 Modified radical mastoidectomy 1 Decompression of facial nerve 1 Facial nerve anastomosis 		
Professional Skills	Please see the Professional Skills and Behaviour » Initial section for these skills		

Topic	Dizziness
Category	Otology
Sub-category:	Dizziness
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	 3 Anatomy, neuro-anatomy and physiology of related to maintenance of balance [this was to encompass all this vestibular system, visual, locomotor and cardiovascular systems] 3 Pathology and pathogenesis of diseases of the ear 2 The pathology and various hypotheses relating to the aetiology and management of sudden vestibular failure, Ménière's disease, benign

paroxysma side effect	al vertigo, vestibular schwannoma, pharmacological and metabolic s
psycholog 2 The releving 2 The relation 2 The relation 2 The prin 2 The prin 2 The prin	dicaps related to age related sensory and proprioceptive degeneration ical aspects of dizziness vant clinical neurological, vascular, radiological, biological, gical and serological investigations tionship of vestibular disorders to legislation relating to employment g ciples of vestibular rehabilitation ciples of particle repositioning manoeuvres nt options both non-surgical and surgical
	AND EXAMINATION
	and clinical examination ar assessment, including electro physiological testing
DATA IN	TERPRETATION
-	audio-vestibular tests
	neuro-physiological tests neuro-otological radiological investigations
	MANAGEMENT trate communication skills and empathy
2 Be able t	to advise the patient of the treatment options, discuss risks and enefits, potential complications and obtain informed consent
2 Microsco	particle re-positioning manoeuveres opy tomy and grommet
Technical Skills 1 Cortical	
and Procedures 1 Decomp	ression of endolymphatic sac
	of perilymph fistula
	procedures for Ménière's disease, vestibular schwannoma l of lesions of the IAM and cerebro-pontine angle
	the <u>Professional Skills and Behaviour » Initial</u> section for these skills

Topic	Disorders of equilibrium including Meniere's disorder
Category	Otology
Sub-category:	Disorders of equilibrium including merniere's disorder
Objective	To understand the aetiology, presenting signs, symptoms and management of common ORL conditions. 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, neuro-anatomy and physiology of the vestibular system, locomotor, CVS and cardiovascular systems and vision. 4 Pathology and pathogenesis of diseases of the ear. 3 The pathology and various hypotheses relating to the aetiology of Meniere's Disease. 2 Neuroradiological imaging of the inner ear and central vestibular pathways 3 The relevant clinical neurological, vascular, radiological, biochemical,

immunological and serological investigations.

2 The relationship of vestibular disorders to legislation relating to employment and driving.

2 The principles of vestibular rehabilitation.

Clinical Skills	 4 History taking and examination 2 Vestibular assessment, including electro physiological testing, and clinical examination 2 Interpret audio vestibular tests 2 Interpret neurophysiological tests 2 Principles of patient management
Technical Skills and Procedures	No content

Professional Skills Please see the Professional Skills and Behaviour » Initial section for these skills

Topic	Disequilibrium of ageing.
Category	Otology
Sub-category:	Disorders of equilibrium including merniere's disorder
Objective	To understand the aetiology, presenting signs, symptoms and management of common ORL conditions. 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 Clinical anatomy, neuro-anatomy and physiology of the vestibular system, locomotor, CVS and cardivascular systems and vision 4 Pathology and pathogenesis of diseases of the ear 3 The relevant clinical neurological, vascular, radiological, biological, immunological and serological investigations 2 The relationship of vestibular disorders to legislation relating to employment and driving 2 The principles of vestibular rehabilitation 2 The handicaps related to age related sensory and proprioceptive degeneration
Clinical Skills	 4 History taking and examination 2 Vestibular assessment, including electro physiological testing, and clinical examination 2 Interpret audio vestibular tests 2 Interpret neurophysiological tests 2 principles of patient management
Technical Skills and Procedures	No content

Category	Otology
Sub-category:	Disorders of equilibrium including merniere's disorder
Objective	To understand the aetiology, presenting signs, symptoms and management of common ORL conditions. 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, neuro-anatomy and physiology of the vestibular system, loccomotor, CVS and cardiovascular systems and vision 4 Pathology and pathogenesis of diseases of the ear 3 The relevant clinical neurological, vascular, radiological, biological, immunological and serological investigations 2 The relationship of vestibular disorders to legislation relating to employment and driving 2 The principles of vestibular rehabilitation
Clinical Skills	 4 History taking and examination 2 Vestibular assessment, including electro physiological testing, and clinical examination 2 Elicit clinical history and clinical signs 2 Interpret audio vestibular tests 2 Interpret neurophysiological tests 2 Principles of patient management
Technical Skills and Procedures	No content

and Procedures

Topic	Vestibular Schwannoma
Category	Otology
Sub-category:	Disorders of equilibrium including merniere's disorder
Objective	To understand the aetiology, presenting signs, symptoms and management of common ORL conditions. 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, neuro-anatomy and physiology of the vestibular system, locomotor, CVS and cardivascular systems and vision 4 Pathology and pathogenesis of diseases of the ear 2 The relevant clinical neurological, vascular, radiological, biological, immunological and serological investigations 2 The relationship of vestibular disorders to legislation relating to employment and driving 2 The principles of vestibular rehabilitation 2 Neuroradiological imaging of the inner ear and central vestibular pathways 2 The genetics of vestibular schwannomas and genetic counselling 2 The surgical and non-surgical management options 1 The surgical approaches to the CP angle
Clinical Skills	 4 History taking and examination 2 Vestibular assessment, including electro physiological testing, and clinical examination 2 Interpret audio vestibular tests 2 Interpret neurophysiological tests 2 Principles of patient management Page 55 of 123

Technical Skills and Procedures No content

Professional Skills Please see the Professional Skills and Behaviour » Initial section for these skills

Topic	Benign Paroxysmal Positional Vertigo
Category	Otology
Sub-category:	Disorders of equilibrium including merniere's disorder
Objective	To understand the aetiology, presenting signs, symptoms and management of common ORL conditions. 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, neuro-anatomy and physiology of the vestibular system, locomotor, CVS and cardiovascular systems and vision 4 Pathology and pathogenesis of diseases of the ear 2 The relevant clinical neurological, vascular, radiological, biological, immunological and serological investigations 2 The relationship of vestibular disorders to legislation relating to employment and driving 2 The principles of vestibular rehabilitation; particle repositioning manoeuvres 2 Treatment options both non-surgical and surgical 2 The pathology and various hypotheses relating to the aetiology of BPPV
Clinical Skills	 4 History taking and examination 2 Vestibular assessment, including electro physiological testing, and clinical examination 2 Interpret audio vestibular tests 2 Interpret neurophysiological tests 2 principles of patient management
Technical Skills and Procedures	1 Perform partide re-positioning manoeuvres

Topic	Acute vestibular failure
Category	Otology
Sub-category:	Disorders of equilibrium including merniere's disorder
Objective	To understand the aetiology, presenting signs, symptoms and management of common ORL conditions. 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, neuro-anatomy and physiology of the vestibular system, loccomotor, CVS and cardivascular systems and vision 4 Pathology and pathogenesis of diseases of the ear 4 The pathology and various hypotheses relating to the aetiology of sudden vestibular failure 2 The relevant clinical neurological, vascular, radiological, biological, immunological and serological investigations 2 The relationship of vestibular disorders to legislation relating to employment and driving

	2 The principles of vestibular rehabilitation
Clinical Skills	4 History taking and examination
	2 Vestibular assessment, including electro physiological testing, and clinical
	examination
	2 Interpret audio vestibular tests
	2 Interpret neurophysiological tests
	2 Principles of patient management
Technical Skills	No content

and Procedures No content

Professional Skills Please see the Professional Skills and Behaviour » Initial section for these skills

Topic	Epistaxis
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 infections.
Knowledge	 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 3 Detailed knowledge of management including first aid measures, nasal cautery, packing and operative techniques in the management of epistaxes 3 Know the complications of epistaxes and the management of them.
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. 3 Awareness of management principles in patient with epistaxis 3 Ability to resuscitate critically ill patient
Technical Skills and Procedures	 2 diagnostic nasendoscopy 2 Packing of nose 2 Removal of nasal packing 3 Cautery of nasal septum 1 Ethmoid Artery ligation 1 Sphenopalatine artery ligation

Topic	Nasal trauma and deformity
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	 3 Understanding of the anatomy of the nose, paranasal sinuses and facial skeleton. 3 Understanding of the mechanisms of trauma responsible for nasal and facial injuries. 3 Knowledge of the appropriate imaging techniques
	Page 57 of 123

	2 Knowledge of the specific complications of nasal trauma3 Knowledge of the management of nasal trauma
	2 Knowledge of the management of nasal deformity
Clinical Skills	4 Ability to take a relevant history and perform an appropriate clinical examination3 Knowledge of the relevant special investigations and correct interpretation2 Ability to adequately resuscitate the critically ill patient
Technical Skills and Procedures	2 Fracture nose reduction3 Packing of nose1 Septoplasty

Topic	Nose and sinus infections
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	 3 Detailed knowledge of anatomy and physiology of the nose and paranasal sinuses 3 Know the microbiology of acute and chronic rhinosinusitis 2 Knowledge of rarer pathogens responsible for rhinosinusitis 2 understanding of special investigations to inform the diagnosis 2 Understanding of the differences in management between acute and chronic rhinosinusitis. 3 Knowledge of the indications for and techniques of surgical management 3 Knowledge of the complications of sinusitis and their management.
Clinical Skills	 3 Demonstrate an ability to take an appropriate history and perform a nasal examination with a speculum and endoscope. 3 Awareness of the indications for imaging including CT and MRI 3 Awareness of indications for other special investigations including microbiology, immunology etc
Technical Skills and Procedures	 2 Nasendoscopy 2 Antral washout – direct vision 1 Inferior meatal antrostomy – direct vision + endoscopic 1 Middle meatal antrostomy – endoscopic 1 Nasal polypectomy – endoscopic 1 Uncinectomy – endoscopic 1 Uncinectomy + bulla – endoscopic 1 Anterior ethmoidectomy - endoscopic 1 Caldwell-Luc – direct vision 1 Intranasal ethmoidectomy – direct vision
Professional Skills	Please see the Professional Skills and Behaviour » Initial section for these skills

Торіс	Mose and sinus inflamation including allergy
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	 3 Detailed knowledge of anatomy and physiology of the nose and paranasal sinuses 3 Understanding of the aetiologies underlying inflammation of the nose and sinuses. 3 Know the role of allergy in the pathophysiology of inflammation of the nose and sinuses. 2 Understanding of the special investigations used in the assessment of nasal allergy. 2 Understanding of the imaging modalities to assess the nose and sinuses 2 Knowledge of the role of management of allergy, and drug treatment in nasal and sinus inflammation. 2 Understand the place of surgery in management of nasal and sinus inflammation
Clinical Skills	 3 Ability to take an appropriate history and perform a relevant examination of the nose and sinuses. 2 Ability to perform nasendoscopy 2 Ability to interpret the result of allergy testing including skin prick testing 2 Know which haematological investigations & radiological imaging are appropriate
Technical Skills and Procedures	 2 Nasendoscopy 2 Turbinate cautery 2 Turbinate surgery 2 Antral washout – direct vision 1 Inferior meatal antrostomy – direct vision + endoscopic 1 Middle meatal antrostomy – endoscopic 1 Nasal polypectomy – endoscopic 1 Uncinectomy – endoscopic 1 Uncinectomy + bulla – endoscopic 1 Anterior ethmoidectomy - endoscopic 1 Caldwell-Luc – direct vision 1 Intranasal ethmoidectomy – direct vision

Topic	Congenital abnormalities
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	2 Knowledge of the anatomy and physiology of the nose and paranasal sinuses.2 Knowledge of the embryology of the nose and sinuses.

	2 Knowledge of those conditions associated with congenital nasal abnormalities.1 Understanding of how to manage congenital nasal abnormalities in both the elective & emergency settings.
Clinical Skills	2 Ability to take an appropriate history form the parent and child and perform relevant examination.1 Nasendocopy if appropriate
Technical Skills and Procedures	1 Nasendoscopy

Торіс	Facial pain
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	 3 Anatomy and physiology of the face, including the TMJ, dentition and cervical spine 2 Understand the differential diagnosis of facial pain including organic and functional causes 2 Understand the various treatment modalities, both medical and surgical 2 Awareness of the multidisciplinary approach to management
Clinical Skills	 3 Ability to take a relevant history of facial pain 3 Ability to perform an appropriate ENT, neurological and locomotor examination 2 Understanding of the appropriate radiological investigations 1 Appropriate management to include pharmacological, surgical and counselling therapies
	 2 Outpatient endoscopy of upper aerodigestive tract 2 Examination under anaesthesia 2 Biopsy - external nose 2 Biopsy - internal nose
Professional Skills	Please see the Professional Skills and Behaviour » Initial section for these skill

Topic	Nasal polyps
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	3 A detailed understanding of the aetiologies and conditions associated with nasal polyps.3 Knowledge of the clinical features of nasal polyps3 Understand the medical and surgical management options of nasal polyps

	3 Understand the clinical significance of unilateral nasal polyps
Clinical Skills	3 Ability to take an appropriate history and perform an examination including
Chinical Skins	nasal endoscopy. 2 Awareness of imaging techniques
	1 Nasal polypectomy
	2 Nasendoscopy
	2 Antral washout – direct vision
	1 Inferior meatal antrostomy – direct vision + endoscopic
Technical Skills	1 Middle meatal antrostomy – endoscopic
and Procedures	1 Uncinectomy – endoscopic
	1 Uncinectomy + bulla – endoscopic
	1 Anterior ethmoidectomy - endoscopic
	1 Caldwell-Luc – direct vision
	1 Intranasal ethmoidectomy – direct vision

Topic	Granulomatous conditions
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	 3 Understanding of the classification of nasal granulomatous conditions 3 Knowledge of the Pathophysiology of these conditions 3 Knowledge of the microbiology of specific nasal granulomatous conditions 3 Knowledge of the features of non specific granulomatous conditions eg sarcoidosis and Wegener's granulomatosis. 2 Understanding of methods of diagnosis. 2 Knowledge of management of these conditions. 3 Awareness of differential diagnosis
Clinical Skills	3 Ability to take a relevant history and perform an appropriate clinical examination2 Knowledge of the relevant special investigations and correct interpretation of them.
and Procedures	2 diagnostic nasendoscopy 2 examination under anaesthesia 2 biopsy – external 2 biopsy - internal
Professional Skills	Please see the Professional Skills and Behaviour » Initial section for these skills

Торіс	Rhinological oncology
Category	Rhinology
Sub-category:	None
Objective	To understand the aetiology, clinical presentation and management of 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	 3 Knowledge of the anatomy of the nose and paranasal sinuses. 3 Knowledge of the distribution of cervical lymph nodes 3 Understanding of the pattern of spread of malignancy in the head and neck 2 Knowledge of the different histological types of malignancy in the nose and paranasal sinuses. 2 Understanding of the principles of medical and surgical management of malignancy of the nose and sinuses. 2 Knowledge of the complications of both the disease and its management.
Clinical Skills	3 Ability to take a relevant history, perform an appropriate examination and interpret clinical findings correctly2 Demonstrate a rational approach to special investigations
Technical Skills and Procedures	2 Examination of nose under anaesthesia2 Biopsy of nose - external2 Biopsy of nose - internal
Professional Skills	Please see the <u>Professional Skills and Behaviour » Initial</u> section for these skills

Topic	Septorhinoplasty
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. 3 Understanding the embryology of the nose 2 Understanding of the mechanisms of trauma responsible for nasal and facial injuries. 2 Understanding methods of assessment of the facial skeleton 2 Knowledge of the specific complications of nasal surgery
Clinical Skills	4 Ability to take a relevant history and perform an appropriate clinical examination2 Ability to assess the patient and devise a surgical plan
	1 Septoplasty 1 Septorhinoplasty 2 Packing of nose

1 Sphenopalatine artery ligation	
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Topic	Congenital abnormalities
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.
	4 Knowledge of the anatomy and physiology of the facial structures.3 Knowledge of the embryology of the face including the nose, palate and neck.
Knowledge	2 Knowledge of those conditions associated with congenital facial abnormalities.2 Understanding of how to manage congenital facial abnormalities in both the elective & emergency settings.
Clinical Skills	3 Ability to take an appropriate history form the parent and child and perform relevant examination.2 Nasendoscopy
Technical Skills and Procedures	 4 Examination of external nose 4 Examination of internal nose with headlight 2 Nasendoscopy 2 Examination under anaesthesia 2 Resection of nasal lesion NEC 1 Excision skin lesion

Topic	Cosmetic Surgery
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.
	2 Understanding of the anatomical areas and aesthetic units that make up the
Knowledge	 face. 4 Understanding of the blood supply and innervations of the face. 2 Knowledge of the planes of dissection available. 2 Knowledge of the methods used to analyse facial features. 2 Knowledge of the various procedures used in cosmetic facial surgery. 2 Knowledge of the limitations and complications of cosmetic facial surgery
Clinical Skills	3 Ability to take a relevant history and perform an appropriate clinical examination2 Ability to assess facial deformity and devise a management plan
Technical Skills and Procedures	 4 Examination of external nose 4 Examination of internal nose with headlight 2 Resection of nasal lesion 1 Flaps used in reconstruction 1 SMR 1 Septoplasty 2 Excision skin lesion

Topic	Reconstruction
Category	Rhinology
Sub-category:	Facial Plastics
Objective	To understand the methods available for facial reconstruction involving, 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 anatomical areas of the face 4 Understanding of the blood supply and innervations of the face and of local, regional and free grafts. 2 Knowledge of the different types of flap available and the indications for their use 2 Knowledge of the implants and prosthetic devices available.
Clinical Skills	3 Ability to take a relevant history and perform an appropriate clinical examination2 Ability to assess facial defects and devise a management plan
Technical Skills and Procedures	1 0
Professional Skills	Please see the <u>Professional Skills and Behaviour » Initial</u> section for these skills

Final Stage

At the completion of final stage trainees will be competent in all aspects of the operative and nonoperative management of patients presenting with the following key conditions (Level 4).

- Adult Upper Airway Obstruction
- Neck Masses
- Disorders of Swallowing
- Sleep Apnoea
- Voice Disorders
- Airway Disorders
- Sore Throat and Tonsillitis
- Cutaneous Lesions of the Head and Neck
- Tinnitus
- Hearing Loss
- Ear Discharge
- Otalgia
- Disorders of equilibrium
- Facial nerve disorders

By the end of the final stage of training, trainees will be competent in all aspects of the following procedures (Level 4):

- Excision of neck, thyroglossal and branchial cleft cysts and fistulae
- Drainage of superficial and deep neck space infections
- Examination of the neck and upper aerodigestive tract in the clinic and in theatre
- Out patient and in patient endoscopy
- Fine needle aspiration for cytology
- Excision of cervical lymph nodes
- Submandibular gland excision
- Endoscopic assessment of head and neck cancer
- Endoscopic assessment of the airway, intubation, tracheostomy, and foreign body removal
- The removal of foreign bodies from the pharynx and oesophagus
- The drainage of peritonsillar abscess.
- Tonsillectomy and adenoidectomy.
- Endoscopic examination of the neck and upper aerodigestive tract in the outpatient department
- Surgical ventilation of the ears; adenoidectomy
- The drainage of auricular haematomas
- Myringoplasty.
- Microscope assessment of the ear/ microsuction and insertion of dressings
- Cortical mastoidectomy

Click on Workplace Based Assessments to view the assessment forms including DOPS and PBAs

Topics

TopicForeign bodies in the ear canal, nasal foreign bodies, ingested foreign
bodies both swallowed and inhaled

Category Paediatric

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 and nose; primary management of inhaled foreign bodies to facilitate safe transfer for tracheobronchoscopy as needed.	
Knowledge	4 Recognition of the clinical features of foreign bodies in the ear nose and throat; knowledge of the natural history and the complications associated with treatment.	
	HISTORY AND EXAMINATION 4 Ability to take a thorough history from the child/carer 4 Otoscopy 4 Rhinoscopy	
Clinical Skills	 4 Assessment of the airway in the child DATA INTERPRETATION 3 Assessment of plain radiography at a basic level e.g. recognition of gross abnormalities on chest radiograph 3 Assessment of soft tissue x-ray of the neck 	
	PATIENT MANAGEMENT 3 Emergency airway care	
Technical Skills and Procedures	4 Otomicroscopy and removal of FB4 Removal of nasal foreign body4 Pharyngo-oesophagoscopy	
Professional Skills	Please see the <u>Professional Skills and Behaviour » Final</u> section for these skills	

Торіс	Nasal injuries, haematoma of the pinna, trauma to the external, middle and inner ear, neck trauma
Category	Paediatric
Sub-category:	Trauma to the head and neck
Objective	None
Knowledge	 4 Presentation and management of nasal fractures 4 Nasal septal haematoma 4 Ear trauma 4 Good knowledge of common aetiologies and awareness of the possible presentations of non-accidental injury in the ENT department.
Clinical Skills	 HISTORY AND EXAMINATION 4 Ability to take a thorough history from child/parent 4 Assessment of the external nose 4 Assessment of the nasal airway 4 Clinical examination of the ear including otoscopy 4 Assessment of the neck including the airway 4 Otoscopy DATA INTERPRETATION 4 Pure tone audiometry, tympanometry
	PATIENT MANAGEMENT Emergency airway care see section 4 Nasal fracture manipulation 4 Drainage of septal haematoma Page 66 of 123

4 Drainage of haematoma of pinna

Торіс	Spontaneous epistaxis; epistaxis in children with coagulopathy; epistaxis as a presentation of systematic disease
Category	Paediatric
Sub-category:	Epistaxis
Objective	Optimum recognition and management of children with epistaxis;
Knowledge	 4 Thorough knowledge of the pathophysiology, epidemiology, natural history and current approach to treatment of epistaxis to include awareness of the evidence base for current treatment regimens. 4 Understand the role of systemic diseases and their treatments in relation to expistaxis 4 Understand the guidelines for investigations
Clinical Skills	HISTORY AND EXAMINATION 4 Ability to take a thorough history from the child/carer 4 Anterior Rhinoscopy 4 Flexible Nasendoscopy 4 Rigid Nasendoscopy 4 Examination of the neck 4 Otoscopy
	DATA INTERPRETATION 4 Interpretation of full blood count; awareness of significance of coagulation tests PATIENT MANAGEMENT
	4 Medical and surgical management of epistaxis
Technical Skills and Procedures	4 Nasal cautery
Professional Skills	Please see the <u>Professional Skills and Behaviour » Final</u> section for these skills

Topic Category	Rhinosinusitis; complications of sinus infections Paediatric
Sub-category:	Nose and Sinus infections
Objective	Optimum recognition and management of children with rhinosinusitis; particularly complicated sinus disease e.g. orbital cellulitis, intracranial sepsis.
Knowledge	4 Thorough knowledge of the pathophysiology, epidemiology, natural history and current approach to treatment of infective rhinitis to include awareness of the evidence base for current treatment regimens.4 Recognition and emergency management of complications
Clinical Skills	HISTORY AND EXAMINATION 4 Ability to take a thorough history from the child/carer 4 Anterior Rhinoscopy 4 Flexible Nasendoscopy 4 Rigid Nasendoscopy 4 Examination of the neck 4 Otoscopy

DATA INTERPRETATION

3 Awareness of imaging techniques; assessment of abnormalities on CT scanning of the paranasal sinuses

PATIENT MANAGEMENT

4 Medical and surgical management of rhinitis, rhinosinusitis

Technical Skills	2 External frontoethmoidectomy
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and Procedures 1 Drainage of sphenoid sinus

Торіс	Congenital laryngeal pathology including laryngomalacia, subglottic stenosis, acute laryngeal infections
Category	Paediatric
Sub-category:	Airway Disorders
Objective	Safe recognition of main patterns of presentations of children with airway obstruction at birth, in infancy and in later childhood. Includes primary management to enable definitive treatment of main conditions.
Knowledge	4 Clinical feature of airway obstruction, clinical measures to determine severity of obstruction, awareness of spectrum of causes, treatment options and natural history of main conditions at different ages e.g. laryngeal webs in the newborn, laryngomalacia, acute epiglottitis and laryngotracheobronchitis. HISTORY AND EXAMINATION
Clinical Skills	 3 Assessment of the airway in the newborn DATA INTERPRETATION 3 Assessment of pulse oximetry findings, assessment of plain radiography at a basic level e.g. recognition of gross abnormalities on chest radiograph and CT PATIENT MANAGEMENT 4 Medical management e.g. steroids, adrenaline, bronchodilators. 2 Emergency airway care
	2 Paediatric panendoscopy both in the outpatients and in theatre 2 Paediatric tracheotomy emergency and elective
	s Please see the <u>Professional Skills and Behaviour » Final</u> section for these skills

Topic	Acute tonsillitis, complications of tonsillitis, adenoids, obstructive sleep apnoea
Category	Paediatric
Sub-category:	Tonsils and adenoids
Objective	Definitive secondary-care management of adenotonsillar disease in otherwise healthy children, Management in syndromic and special needs children is often in a designated children's hospital.
Knowledge	4 Epidemiology, classification, aetiology and natural history of adenotonsillar disease. Thorough understanding of the evidence base that underpins current treatment approaches. Awareness of controversies. Except for the management of very young (under four years) children and those with complex medical

	needs e.g. syndrmic children. HISTORY AND EXAMINATION 4 Ability to take a through history from child/parent. 4 Otoscopy 4 Examination of the pharynx including endoscopy
Clinical Skills	DATA INTERPRETATION
	4 Assessment of the adenoids and airway using plain radiography3 Awareness of the principles that underpin sleep studies in children
	PATIENT MANAGEMENT
	Comprehensive management including surgery as appropriate
Technical Skills	4 Tonsillectomy
and Procedures	4 Adenoidectomy
	4 Arrest of adenotonsillar bleeding as an emergency
Professional Skills	Please see the <u>Professional Skills and Behaviour » Final</u> section for these skills

Topic	Syndromes with important ORL manifestations, cleft palate and the major malformations of the ears nose and throat
Category	Paediatric
Sub-category:	Congenital deformities affecting the head and neck
Objective	Safe primary management of children with congenital deformities of the head and neck, awareness of the principles that underpin long-term care.
Knowledge	Basic knowledge of the range of deformities that present at birth with an emphasis on awareness of those that affect the airway e.g. choanal atresia, cystic hygroma. Level 2
Clinical Skills	 HISTORY AND EXAMINATION 3 Assessment of the airway in the newborn DATA INTERPRETATION Assessment of pulse oximetry findings, assessment of plain radiography at a basic level e.g. recognition of gross abnormalities on chest radiograph and CT PATIENT MANAGEMENT 2 Emergency airway care 4 Management of OME in cleft palate children
Technical Skills and Procedures	1 surgical procedures but not required
Professional Skills	Please see the <u>Professional Skills and Behaviour » Final</u> section for these skills

Торіс	Congenital masses e.g vascular malformations, thyroid and thyroglossal duct swellings, acute and chronic infections and granulomatous disorders that cause neck swellings, cervical adenopathy, awareness of the rare malignancies that present with neck masses
Category	Paediatric
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.
	3 Classification of vascular malformations, awareness of treatment options
	3 applied embryology of thyroid gland descent and awareness of commoner causes of swellings related to the thyroid gland and thyroglossal duct
	3 applied anatomy of the neck spaces and awareness of the presentation,
Knowledge	clinical features and primary management of abscesses and collections in these
interage	spaces
	4 Knowledge of the range of causes and natural history of cervical adenopathy,
	good grasp of the evidence base which guides the selection of children for neck
	node biopsy
	HISTORY AND EXAMINATION
	4 Assessment of the neck, ability to take a through history from child/parent.
	DATA INTERPRETATION 3 Assessment of plain radiography at a basic level e.g. recognition of gross
Clinical Skills	abnormalities on chest radiograph. Awareness of the range of imaging options
Chincar Dishing	available e.g. sonography, CT, MR scanning.
	PATIENT MANAGEMENT
	3 Emergency airway care
	3 The role of surgery
	4 Flexible endoscopy
	4 Incision drainage neck abscess
and Procedures	4 Biopsy neck node
	3 Other surgical procedures depending on experience gained
Professional Skills	Please see the Professional Skills and Behaviour » Final section for these skills

Topic	Speech delay, disorders of articulation
Category	Paediatric
Sub-category:	Speech and language development
Objective	Awareness of the epidemiology and presentation of delayed speech and its relevance to ENT disorders. Awareness of the main disorders of articulation e.g hyponasal and hypernasal speech.
Knowledge	3 The normal developmental milestones with an emphasis on speech and language acquisition. Major causes of delayed speech4 Pathology that underlies hyponasal and hypernasal speech. Role of the adenoids
Clinical Skills	 HISTORY AND EXAMINATION 4 Ability to take a through history from child/parent 3 Ability to distinguish hyponasal and hypernasal speech i.e clinical assessment of speech 4 Otoscopy 4 Flexible endoscopy DATA INTERPRETATION 4 Pure tone audiometry 3 Hearing tests in pre-school child PATIENT MANAGEMENT

3 Multidisciplinary teams in the management of children with speech and other developmental problems
 Technical Skills 4 Flexible endoscopy, examination of the nasopharynx 4 Division of tongue tie
 Professional Skills Please see the Professional Skills and Behaviour » Final section for these skills

Topic	Main cancers that affect the head and neck in children, including lymphoma
Category	Paediatric
Sub-category:	Oncology
Objective	Awareness of the epidemiology presentation and principles of management of malignant disease in the head and neck.
Knowledge	3 Classification of the main malignancies, knowledge of typical presentations, understanding of the natural history of childhood cancers with an emphasis on differences between adult and childhood disease. Awareness of issues relating to the management of the child and family with cancer including palliative care e.g. management of epistaxis.
Clinical Skills	 HISTORY AND EXAMINATION 4 Ability to take a through history from child/parent 4 Examination of the neck 4 Examination of the cranial nerves 4 Otoscopy 4 Flexible endoscopy
	DATA INTERPRETATION 3 Awareness of the range of diagnostic tests available particularly imaging
	PATIENT MANAGEMENT 4 Initial diagnosis and liaison with colleagues 4 Flexible endoscopy, 4 Examination of the nasopharynx
Technical Skills and Procedures	4 Neck node biopsy 4 Biopsy of tumours

Торіс	Congenital lesions including cysts, sinus's and fistulas; abnormalities of the pinna; inflammatory disease of the ear canal
Category	Paediatric
Sub-category:	Disorders of the external ear in children
Objective	Recognition and classification of the principle congenital anomalies; management of otitis externa; management of uncomplicated lesions of the pinna e.g. accessory auricles, sebaceous cysts
Knowledge	4 Recognition of the clinical features of foreign bodies in the ear nose and throat; knowledge of the natural history and the complications associated with treatment.
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; Otoscopy
	DATA INTERPRETATION 4 Age-appropriate assessment of hearing; Tympanometery; Awareness of the imaging techniques and principle findings in microtia.
	PATIENT MANAGEMENT 3 Rehabilitation of hearing loss in microtia; selection of children for referral for ear reconstruction/prostheses; Counselling of families but not definitive management of microtia and other major anomalies of the external ear.
Technical Skills and Procedures	4 Otomicroscopy4 Excision of simple lesions in and around the external ear3 Surgery for prominent ears requires specific training
Professional Skills	Please see the Professional Skills and Behaviour » Final section for these skills

Торіс	Congenital deafness, classification of causes, investigation and rehabilitation
Category	Paediatric
Sub-category:	Deafness excluding otitis media and its complications
Objective	Awareness of the epidemiology and presentation of deafness, good knowledge of range of causes, awareness of diagnostic and investigative strategies and knowledge of the principles that underpin rehabilitation including amplification and cochlear implantation
Knowledge	 3 Applied embryology of the ear including congenital deformities of the ear and their relationship to deafness 3 Differential diagnosis 3 Genetic, syndromic and non-syndromic deafness 3 The principles of audiometric screening 3 The principles of audiological testing and the range of tests available 3 Rehabilitation of the deaf child with an emphasis on hearing aids 3 Cochlear implantation
Clinical Skills	HISTORY AND EXAMINATION 4 Ability to take a through history from child/parent. 4 Otoscopy DATA INTERPRETATION 3 Awareness of the range of investigative options available especially the principles of genetic testing e.g connexin measurements, imaging e.g. sonography, CT, MR scanning PATIENT MANAGEMENT As above
Technical Skills and Procedures	4 Microscopic examination of the ear 2 All other surgical procedures but the nature will depend on the training available
Professional Skills	Please see the <u>Professional Skills and Behaviour » Final</u> section for these skills

Торіс	Acute otitis media, recurrent acute otitis media, otitis media with effusion
	(OME), chronic otitis media, mastoiditis, intracranial sepsis

Category	Paediatric
Sub-category:	Otitis media and its complications
Objective	<i>Definitive secondary-care management of inflammatory middle –ear disease and its complications</i>
Knowledge	 4 Epidemiology, classification, aetiology and natural history of each variant of otitis media. 4 Thorough understanding of the evidence base which underpins current treatment approaches. 4 Except for the surgical management of cholesteatoma and the use of bone-anchored hearing aids trainees are expected to progress to level 4.
Clinical Skills	 HISTORY AND EXAMINATION 4 Ability to take a through history from child/parent 4 Otoscopy 4 Examination of the cranial nerves 3 Neurological examination DATA INTERPRETATION 4 Pure Tone Audiometry 4 Tympanometery 3 Diagnostic imaging e.g. ST scan, MRI 3 Laboratory investigations e.g. blood tests, lumbar puncture and bacteriology results PATIENT MANAGEMENT 4 Comprehensive management including surgery as appropriate 4 Referral and team working for children with complications of acute otitis media
Technical Skills and Procedures	 4 Otomicroscopy 4 Tympanostomy tubes 4 Tympanoplasty 4 Cortical Mastoidectomy 3 Other procedures depending on experience and exposure
Professional Skills	Please see the Professional Skills and Behaviour » Final section for these skills

Торіс	Congenital and acquired causes that are of particular importance in children and the principles of management and rehabilitation with an emphasis on how these differ in children
Category	Paediatric
Sub-category:	Facial Palsy
Objective	Safe primary management of children with facial palsy, recognition of clinical pathologies that present with facial palsy.
Knowledge	4 Basic knowledge of the range of aetiologies, the natural history of the main causes, and the evidence base that underpins current investigation and management (This section complements the adult curriculum)
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 DATA INTERPRETATION 2 Awareness of the range of diagnostic tests and the principles that govern their

	use e.g. electroneuronography, imaging of the facial nerve
	 PATIENT MANAGEMENT 4 Principles of pharmacological management (e.g steroids, anti-viral agents) 4 Emergency care 4 Eye protection
	4 Myringotomy (3 to 4) 4 Drainage of mastoid abscess
Professional Skills	Please see the Professional Skills and Behaviour » Final section for these skills

Topic	Rhinitis, allergic rhinitis
Category	Paediatric
Sub-category:	Inflammatory nasal disease (including allergic rhinitis)
Objective	Optimum recognition and management of children with rhinitis.
Knowledge	4 Thorough knowledge of the pathophysiology, epidemiology, natural history and current approach to treatment of allergic rhinitis to include awareness of the evidence base for current treatment regimens. HISTORY AND EXAMINATION
	4 Ability to take a thorough history from the child/carer
	4 Anterior Rhinoscopy
	4 Flexible Nasendoscopy
	4 Rigid Nasendoscopy
	4 Examination of the neck
	4 Otoscopy
Clinical Skills	DATA INTERPRETATION
	4 Skin tests for allergies; Blood tests for allergies;
	3 Awareness of imaging techniques; assessment of abnormalities on CT scanning of the paranasal sinuses
	3 Knowledge of immunological tests, ciliary function tests/nasal biopsy.
	PATIENT MANAGEMENT
	4 Medical and surgical management of rhinitis
Technical Skills and Procedures	4 Submucous diathermy
Professional Skills	Please see the <u>Professional Skills and Behaviour » Final</u> section for these skills

Торіс	Inflammatory nasal polyposis; nasal masses e.g. encephalocoele, rare nasal tumours
Category	Paediatric
Sub-category:	Nasal Polyps in Children
Objective	None
Knowledge	 4 Recognition of the aetiology and clinical features of foreign nasal polyps including cystic fibrosis and the contents of the anterior cranial fossa presenting as nasal polyps 4 Knowledge of the natural history and the complications associated with treatment

	 4 The relationship to other respiratory disease including those in the lower respiratory tract HISTORY AND EXAMINATION 4 Ability to take a thorough history from the child/carer 4 Anterior Rhinoscopy 4 Flexible Nasendoscopy 4 Rigid Nasendoscopy 4 Examination of the neck 4 Otoscopy
Clinical Skills	DATA INTERPRETATION 3 Awareness of imaging techniques; assessment of abnormalities on CT scanning of the paranasal sinuses 3 Knowledge of immunological tests, ciliary function tests/nasal biopsy
	PATIENT MANAGEMENT 4 Medical and surgical management of nasal polyposis Investigation of nasal masses (2 to 4)
Technical Skills and Procedures	4 Nasal Polypectomy either endoscopically or with direct vision1 Anterior ethmoidectomy in children2 Middle meatal antrostomy
Professional Skills	Please see the Professional Skills and Behaviour » Final section for these skills

Topic	Adnenoid and tonsillar pathology in adults
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 and children 4 Surgical management of post-operative bleeding following adenotonsillar surgery

Торіс	Airway obstruction in adults
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 3 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 intuation 4 Be proficient at performing a surgical tracheostomy in the elective & emergency setting both under general and local anaesthesia 4 Be competent at foreign body removal from the airway in adults 3 Debulking procedures (laser/microdebrider)

Торіс	Aetiology and management of the craniocervical trauma in adults
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
Clinical Skills	 4 Be able to elicit and 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 Be able to secure the airway through intubation or tracheostomy 4 Be able to explore the traumatized neck and secure bleeding vessels. 4 Be able to manage penetrating injury to the viscera of the upper aerodigestive tract 3 Be able to undertake microsurgical reanastomosis of divided nerves where appropriate

Topic	Disorders of swallowing
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, 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 Understand the anatomy of the pharynx, and physiology of swallowing. 4 Understand causes of odynophagia. 4 Understand 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
Clinical Skills	 4 Elicit an appropriate clinical history and clinical signs. 4 Be able to examine the pharynx and oesophagus with mirrors and endoscopes in outpatients 4 Be able to work in cooperation with Speech & language therapists in the management of dysphagia
Technical Skills	4 Flexible fibreoptic nasopharyngolaryngoscopy

and Procedures	 4 Interpretation of videofluoroscopic swallowing studies 4 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 Be able to perform competently endoscopic and open pharyngeal pouch
	surgery

Topic	Aetiology and management of cervical sepsis
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 Understand 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 open incision and drainage of a deep cervical abscess, as well as demonstrating awareness of the complications of such procedures.
Professional Skille	Please see the Professional Skills and Rehaviour » Final section for these skills

Topic	Aetiology and management of congenital abnormalities of the head and neck affecting adults
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. 4 Understand the embryology of the head and neck. 4 Understand 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
Knowledge	including branchial cyst, collaural fistula, external ear malformations,thyroglossal duct related malformations, cervical sinuses and fistulae.3 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. 3 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 anesthesia. 3 Understand the principles of genetic counselling of patients or the parents of children with congenital abnormalities of the head and neck.
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. 4 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. 4 Be able to excise a pharyngeal diverticulum using open and 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. 3 Be able to excise a branchial fistula
Professional Skills	Please see the Professional Skills and Behaviour » Final section for these skills

Topic	Cervical lymphadenopathy in adults
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 The need for endoscopic assessment of a neck mass this comes in under demonstrating knowledge of aetiology & pathology therefore 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 histology and microbiological causes of cervical lyphadenopathy. 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. 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 cytology4 Out patient and in-patient endoscopy of the UADT.4 Excision of cervical lymph nodes and deal with the complications2 Block dissections of lymph nodes

Торіс	Head and neck malignancies in the upper aerodigestive tract excluding the oral cavity
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. 3 Understand 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. 3 Understand the role of surgical and medical treatment in palliative management of patients 3 Understand the indications for reconstructive and rehabilitative surgery (including surgical voice restoration) in HNC 3 Know the various reconstructive options available in HNC
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
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) 3 Total Laryngectomy 3 Comprehensive and selective neck dissection 2 Partial laryngectomy 2 Transoral laser surgery 2 Reconstructive surgery with myocutaneous (pedicled) flaps 2 Reconstructive surgery with free flaps 4 Be able to manage safely acute complications of Head & Neck surgery 4 Be able to replace a tracheooesophageal valve in clinic.

Topic	Investigation and management of the neck and lump
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. 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 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 correctly4 Demonstrate a rational approach to investigation of a neck lump
Technical Skills and Procedures	 4 Perform (FNAC) 4 Out patient and in patient endoscopy of the Upper aerodigestive tract 4 Perform excision biopsy of cervical lymph nodes and deal with the complications. 4 Branchial cyst excision and management of complications

Topic	Neoplastic salivary gland disease
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 tumours. 4 Understand inflammatory swellings 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 3 Understand the principles of management (surgical & non surgical) of malignant salivary gland disease 3 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 3 Manage patients with malignant disease in a multidisciplinary team
Technical Skills and Procedures	 4 FNAC 4 Be able to perform a submandibular gland excision 3 Biopsy of a minor salivary gland tumour 3 Be able to perform a superficial parotidectomy 2 Total parotidectomy 2 Selective & comprehensive neck dissection

1 Facial nerve grafting & facio-hypoglossal anastomosis **Professional Skills** Please see the <u>Professional Skills and Behaviour » Final</u> section for these skills

Topic	Benign salivary gland disease
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, computerized 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 3 Be able to perform submandibular gland excision 2 Total parotidectomy for inflammatory disease

Торіс	Thyroid and parathyroid disease
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 Be able to elicit an appropriate clinical history from a patient with thyroid or parathyroid gland disease.
Clinical Skills	4 Be able to demonstrate relevant clinical signs in a patient with thyroid or parathyroid gland disease
	4 Be able to obtain appropriate samples for fine needle cytology or microtrephine biopsy from a patient with a thyroid or parathyroid mass.3 Be able to perform thyroid surgery.
Technical Skills	3 Be able to perform surgical exploration of the neck for parathyroid disease.
and Procedures	1 Be able to explore the superior mediastinum for thyroid and parathyroid neoplasia.
Professional Skills	Please see the Professional Skills and Behaviour » Final section for these skills

Professional Skills Please see the	Professional	Skills and	d Behaviour »	<u>Final</u>	section for these skills

Topic	Oral pathology
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 3 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 4 Be able to elicit an appropriate clinical history and interpret physical signs
Clinical Skills	 correctly 4 Demonstrate the ability to detect 'red flag' symptoms & signs of malignant disease. 4 Order the most appropriate imaging modality 4 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
	 4 Perform a biopsy of an oral lesion 3 Remove and treat benign oral lesions 2 Partial glossectomy 2 Submandibular gland transposition for drooling 3 Simple dental extractions 2 closure of oroantral fistulae 1 Mandibulotomy and excision of floor of mouth lesion 1 Total glossectomy

Topic	Sleep related breathing disorders
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.
	4 Be able to perform palatal surgery for snoring/OSAS
Technical Skills	4 Be able to perform surgery to correct nasal airway obstruction.
and Procedures	4 Be able to perform sleep nasendoscopy and out patient flexible fibreoptic
	nasendoscopy
Duefersional Chills	Discourse the Drofessional Skills and Debasions - Final section for these skills

Topic	Voice disorders
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	 4 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 4 Understand the classification of dysphonias and the various hypotheses relating to the aetiology of dysphonias. 4 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). 4 Know the principles of Speech and Language Therapy
Clinical Skills	 4 Know about inflammatory and neoplastic laryngeal disorders 4 Elicit an appropriate clinical history from and demonstrate clinical signs in a dysphonic patient 4 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 4 Videostroboscopic laryngoscopy in an outpatient setting 4 Microscopic / endoscopic laryngeal surgery and intralaryngeal injection techniques 4 Laryngeal framework surgery 2 Laryngeal electromyography
Professional Skills	Please see the <u>Professional Skills and Behaviour » Final</u> section for these skills

Торіс	Ranula
Category	Head and Neck

Sub-category:	Salivary gland disorders
Objective	No content
	Embryogenesis of the salivary glands.
Knowledge	Anatomy of the salivary glands.
	Investigations of patients with salivary gland disorders.
	Management of the patient a ranula.
Clinical Skills	Surgical excision of a ranula.
Technical Skills and Procedures	No content
Professional Skills	Please see the <u>Professional Skills and Behaviour » Final</u> section for these skills

Topic	Sialadenitis
Category	Head and Neck
Sub-category:	Salivary gland disorders
Objective	No content
	Embryogenesis of the salivary glands.
	Anatomy of the salivary glands.
	Presenting symptoms of the common ENT infections.
	Microbiology of the common ENT infections.
Knowledge	Antimicrobial investigations and therapy of the common ENT infections
	Investigations of patients with sialadenitis.
	Management of the patient with sialadenitis.
	Knowledge of complications associated with sialadenitis.
	Surgical management of the patient with sialadenitis.
Clinical Skills	Incision and drainage of acute salivary gland infections.
Technical Skills and Procedures	No content
Professional Skills	Please see the <u>Professional Skills and Behaviour » Final</u> section for these skills

Topic	Sialolithiasis
Category	Head and Neck
Sub-category:	Salivary gland disorders
Objective	No content
	Embryogenesis of the salivary glands.
Knowledge	
	Anatomy of the salivary glands.

	Presenting symptoms of salivary gland obstruction.
	Microbiology of the common ENT infections.
	Antimicrobial investigations and therapy of the common ENT infections
	Investigations of patients with salivary gland obstruction.
	Management of the patient with salivary gland obstruction.
	Knowledge of complications associated with salivary gland obstruction.
	Surgical management of the patient with salivary gland obstruction. Intra oral parotid stone excision.
Clinical Skills	Intraoral submandibular duct stone excision.
	Submandibular gland excision.
Technical Skills and Procedures	No content
Professional Skills	Please see the <u>Professional Skills and Behaviour » Final</u> section for these skills

Topic	Submandibular and parotid gland tumours
Category	Head and Neck
Sub-category:	Salivary gland disorders
Objective	No content
	Embryogenesis of the salivary glands.
	Anatomy of the salivary glands.
	Knowledge of salivary gland pathology.
	Knowledge of the pathogenesis of parotid gland tumours.
Knowledge	Presenting symptoms of parotid gland tumours.
	Investigations of patients with parotid gland tumours.
	Management of the patient with a parotid gland tumour.
	Surgical management of the patient with parotid gland tumour.
	Knowledge of complications associated with salivary gland excision. Fine needle cytology.
Clinical Skills	Superficial parotidectomy.
	Total conservative parotidectomy.

Selective and radical neck dissections

Facial nerve grafting.

Facial-hypoglossal anastamosis.

Technical Skills and Procedures No content

Professional Skills Please see the Professional Skills and Behaviour » Final section for these skills

Торіс	Acquired lesions including osteoma, exostosis and atresia, dermatological conditions, benign and malignant lesions, affect of ionizing irradiation on the temporal none. Trauma and foreign bodies.
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.
Knowledge	 4 systemic conditions affecting external ear 4 dermatological conditions of the external ear 4 pharmocolgy of medications used in treatment 4 aetiology, pathology, presentation and management of benign and malignant disease 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 ear HISTORY AND EXAMINATION
Clinical Skills	 4 obtain appropriate history 4 clinical examination 4 Ototoscopy 4 microscopy DATA INTERPRETATION 3 interpretation of audiological 3 awareness and interpretation of radiological investigations PATIENT MANAGEMENT Medical management Comprehensive management including surgery as appropriate 4 Referral and team working
Technical Skills and Procedures	 4 Aural toilet including microsuction and application of dressings 4 Biopsy of lesion of external ear 3 Wedge excision 3 Oncological and reconstructive surgery 3 Meatoplasty 3 Removal of osteoma / exostosis 4 Otomicroscopy and removal of FB's 4 Drainage of haematoma of pinna 4 Suturing of pinna

Торіс	Comprehensive management of otitis externa, furunculosis, otomycosis, myringitis granular and benign, herpetic lesions and malignant otitis externa
Category	Otology
Sub-category:	Infective conditions of the external ear including otitis externa, furunculosis, otomycosis, myringitis granular and benign/herpetic
Objective	<i>To understand the aetiology, pathology, presentation and management of infective conditions of the external ear.</i>
Knowledge	 4 Anatomy, physiology and pathology of the external ear and relationship of disease to the temporal bone. 4 Microbiology of external ear 4 Knowledge of antimicrobial and antiviral agents and pharmacology of medications used in treatment 4 The pathogenesis of disorders of the external ear. 4 Differential diagnosis and management of inflammatory conditions 4 Necrotising otitis externa.
Clinical Skills	 HISTORY AND EXAMINATION History taking, clinical examination including neuro – otological 4 Interpret audio vestibular tests. 4 Understand principles of patient management. DATA INTERPRETATION Awareness and interpretation of radiological investigations inc bone scanning microbiological reports 4 interpretation of laboratory investigations
Technical Skills and Procedures Professional Skills	PATIENT MANAGEMENT Medical management Indications for surgical intervention 4 Microscopy 4 suction clearance 4 biopsy of lesion of external ear 5 Please see the <u>Professional Skills and Behaviour » Final</u> section for these skills

Topic	Trauma
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.
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. 4 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 Page 90 of 123
	4 The effects of barotrauma

	 and inner ear. HISTORY AND EXAMINATION 4 History taking, clinical examination, 4 Audiological and vestibular assessment 4 Neurophysiological assessment of facial nerve 3 Significance of radiological findings. 4 Interpret audia unstibular tests
	4 Interpret audio-vestibular tests.4 Principles of patient management
Clinical Skills	DATA INTERPRETATION 4 objective and subjective audiological and vestibular tests 3 Radiological imaging of the temporal bone, head and neck 4 Laboratory investigations
	 PATIENT MANAGEMENT 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 The importance of teamwork in managing critically ill patients
Technical Skills and Procedures	Microscopy Suction clearance of ear 3 meatoplasty 4 Drainage of haematoma of pinna 4 suturing of pinna 2 reconstructive surgery of the pinna 3 exploratory tympanotomy 4 myringoplasty 2 ossiculoplasty 2 facial nerve decompression / anastomosis 2 repair of perilymph leak

Торіс	Acute otitis media including mastoiditis, skull base infection, chronic otitis media and sequelae
Category	Otology
Sub-category:	Middle ear
Objective	Demonstrate communication skills and empathy. To understand the aetiology, presenting signs, symptoms and management of infection of the middle ear. 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 Anatomy, physiology and pathology of the ear and temporal bone 4 The microbiology related to acute and chronic ear infections. 4 Complications of acute otitis media. 4 Principles and practice of audiology including pure tone audiometry, tympanometry 4 Principle and practice of objective tests of hearing

	 4 Interpretation of radiological investigations 4 Pharmacology of medications used in medical treatment HISTORY AND EXAMINATION 4 Otological and neuro-otological examination 4 Audiological assessment 4 History taking, clinical examination, 4 Understand principles of patient management 4 Microscope assessment of the ear
Clinical Skills	DATA INTERPRETATION 4 Principle and practice of objective tests of hearing 3 Interpretation of radiological investigations PATIENT MANAGEMENT medical and surgical treatments of acute infection to the middle ear and temporal bone
	 4 suction clearance 4 microsuction and myringotomy 4 myringotomy and grommet 4 T tube insertion 4 Grommet removal 4 Myringoplasty 4 Cortical mastoidectomy 3 Modified radical mastoidectomy

Торіс	Management of adult deafness presenting as sudden or progressive conductive, mixed and sensorineural hearing loss
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. The 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. 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 3 Radiological imaging of the inner ear and central vestibular pathways 3 The genetics of otological diseases 4 The aetiology, pathogenesis and management of disorders of the ear and hearing; including both benign and malignant disease 4 Noise induced hearing loss; preservation of hearing 3 Central auditory processing disorders, auditory neuropathy, obscure auditory dysfunction 3 Auditory rehabilitation including the use of hearing aids and other assistive devices.

Clinical Skills	 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. HISTORY AND EXAMINATION 4 History taking, clinical examination inc neuro-otological 4 Objective and subjective audiological assessment 4 Principles of a holistic approach to the management of hearing loss 4 Vestibular assessment, including electro physiological testing, and clinical examination 3 Radiological assessment 3 genetic counseling
	DATA INTERPRETATION 4 audiological and vestibular tests 3 Radiological imaging of the temporal bone , head and neck 4 Laboratory investigations
	PATIENT MANAGEMENT
	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 Microscopy 4 Suction clearance of ear 4 Aural polypectomy 4 Myringotomy +/- grommet 3 Exploratory tympanotomy 4 Myringoplasty 3 Tympanoplasty 3 Open and closed mastoidectomy 3 Ossiculoplasty 2 Stapedotomy / stapedectomy 2 Cochlear implantation 2 Middle ear implantation 3 Insertion of Bone anchored hearing aid abutment 3 closure of perilymph leak 1 The surgical approaches to the CP angle
Professional Skills	Please see the Professional Skills and Behaviour » Final section for these skills

Topic	Objective and subjective tinnitus
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. The 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 pathogenesis of disorders of the ear and hearing 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
	3 Psycho-acoustical tests, pitch and loudness match, minimum masking level, residual inhibition
	4 The various hypotheses relating to the aetiology of tinnitus both objective and subjective
	 4 The psychological effects of tinnitus 3 Principles of tinnitus retraining and rehabilitation and the principles of support and counselling 3 function of hearing aid(s) and masking
	HISTORY AND EXAMINATION
	4 History taking, clinical examination including neuro-otological 4 Otoscopy
	4 Microscopy 3 Significance of radiological findings
	DATA INTERPRETATION
Clinical Skills	4 Interpretation of neuro-otological radiology
	4 Interpretation of neuro-physiological tests
	PATIENT MANAGEMENT
	4 Principles of patient management
	4 Demonstrate communication skills and empathy.
	4 Be able to advise the patient of the treatment options, discuss risks and potential benefits.
	3 Perform pure tone audiometry, tympanometry
and Procedures	2 Pitch matching and masking
Professional Skills	Please see the <u>Professional Skills and Behaviour » Final</u> section for these skills

Topic	Upper and lower motor neuron disease of the facial nerve
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. The 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 2 The relevant clinical neurological, vascular, radiological, biochemical, serological and electrophysiological investigations Per-operative facial nerve monitoring 2 Principles of rehabilitation for facial paralysis 1 Understand the psychological effects of facial disfigurement
Clinical Skills	HISTORY AND EXAMINATION 4 The anatomy and physiology of facial nerve and related structures 4 The aetiology classification and neuro-physiology of facial paralysis 3 The relevant clinical neurological, vascular, radiological, biochemical, serological and electrophysiological investigations

	4 Principles of rehabilitation for facial paralysis
	4 Understand the psychological effects of facial disfigurement
	DATA INTERPRETATION 4 neuro-physiological tests of inner ear function and facial nerve 4 Neuro-otological radiological tests 4 Laboratory investigations
	 PATIENT MANAGEMENT 4 Demonstrate communication skills and empathy 4 Be able to advise the patient/parents or carers of the treatment options, discuss risks and potential benefits, potential complications and obtain informed consent. Liaise with other health care professionals.
Technical Skills and Procedures	 2 Tarsorraphy 4 Cortical mastoidectomy 3 Modified radical mastoidectomy 2 Decompression of facial nerve 2 Facial nerve anastomosis

Topic	Dizziness
Category	Otology
Sub-category:	Dizziness
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.
	 4 Anatomy, neuro-anatomy and physiology of related to maintenance of balance [this was to encompass all this vestibular system, visual, locomotor and cardiovascular systems] 4 Pathology and pathogenesis of diseases of the ear 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
Knowledge	 4 The handicaps related to age related sensory and proprioceptive degeneration psychological aspects of dizziness 3 The relevant clinical neurological, vascular, radiological, biological, immunological and serological investigations 4 The relationship of vestibular disorders to legislation relating to employment and driving 4 The principles of vestibular rehabilitation 4 The principles of particle repositioning manoeuvres 4 Treatment options both non-surgical and surgical HISTORY AND EXAMINATION
Clinical Skills	 4 History and clinical examination 4 Vestibular assessment, including electro physiological testing
	DATA INTERPRETATION

4	Interpret audio-vestibular tests Interpret neuro-physiological tests Interpret neuro-otological radiological investigations
4 4 4 7 4 4 4 4 4 4 4 4 2 2 2 2 2	ATIENT MANAGEMENT Demonstrate communication skills and empathy Be able to advise the patient of the treatment options, discuss risks and otential benefits, potential complications and obtain informed consent Perform particle re-positioning maneuvers microscopy Myringotomy and grommet Cortical mastoidectomy Decompression of endolymphatic sac Closure of perilymph fistula surgical procedures for Ménière's disease, vestibular schwannoma removal of lesions of the IAM and cerebro-pontine angle

Topic	Disorders of equilibrium including Meniere's disorder
Category	Otology
Sub-category:	Disorders of equilibrium including Meniere's disorder
Objective	To understand the aetiology, presenting signs, symptoms and management of common ORL conditions. 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.
	Clinical anatomy, neuro-anatomy and physiology of the vestibular system, loccomotor, CVS and cardiovascular systems and vision.
	Pathology and pathogenesis of diseases of the ear.
	The pathology and various hypotheses relating to the aetiology of Meniere's Disease.
Knowledge	The relevant clinical neurological, vascular, radiological, biochemical, immunological and serological investigations.
	The relationship of vestibular disorders to legislation relating to employment and driving.
	4 The principles of vestibular rehabilitation.

Elicit clinical history and clinical signs.

Perform relevant audio vestibular tests

Interpret audio vestibular tests

Interpret neurophysiological tests

4 Principles of patient management

Technical Skills
and Procedures1 LabrinthectomyProfessional SkillsPlease see the Professional Skills and Behaviour » Final section for these skills

Topic	Disequilibrium of ageing.
Category	Otology
Sub-category:	Disorders of equilibrium including Meniere's disorder
Objective	To understand the aetiology, presenting signs, symptoms and management of common ORL conditions. 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.
	Clinical anatomy, neuro-anatomy and physiology of the vestibular system, loccomotor, CVS and cardiovascular systems and vision
	Pathology and pathogenesis of diseases of the ear
Knowledge	The relevant clinical neurological, vascular, radiological, biological, immunological and serological investigations
Knowledge	The relationship of vestibular disorders to legislation relating to employment and driving
	The principles of vestibular rehabilitation
	4 The handicaps related to age related sensory and proprioceptive degeneration
	Vestibular assessment, including electro physiological testing, and clinical examination
	Elicit clinical history and clinical signs.
Clinical Skills	Perform relevant audio vestibular tests
	Interpret audio vestibular tests
	Interpret neurophysiological tests
	4 principles of patient management
Technical Skills and Procedures	No content

Topic	Neurological and Vascular causes of vertigo
Category	Otology
Sub-category:	Disorders of equilibrium including Meniere's disorder
Objective	To understand the aetiology, presenting signs, symptoms and management of common ORL conditions. 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.
	Clinical anatomy, neuro-anatomy and physiology of the vestibular system, loccomotor, CVS and cardiovascular systems and vision
	Pathology and pathogenesis of diseases of the ear
Knowledge	The relevant clinical neurological, vascular, radiological, biological, immunological and serological investigations
	The relationship of vestibular disorders to legislation relating to employment and driving
	4 The principles of vestibular rehabilitation Vestibular assessment, including electro physiological testing, and clinical examination
	Elicit clinical history and clinical signs
Clinical Skills	Perform relevant audio vestibular tests.
	Interpret audio vestibular tests
	Interpret neurophysiological tests
	4 principles of patient management
Technical Skills and Procedures	No content

Professional Skills Please see the Professional Skills and Behaviour » Final section for these skills

Topic	Vestibular Schwannoma
Category	Otology
Sub-category:	Disorders of equilibrium including Meniere's disorder
Objective	To understand the aetiology, presenting signs, symptoms and management of common ORL conditions. 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	Clinical anatomy, neuro-anatomy and physiology of the vestibular system, loccomotor, CVS and cardiovascular systems and vision

Pathology and pathogenesis of diseases of the ear

	The relevant clinical neurological, vascular, radiological, biological, immunological and serological investigations
	The relationship of vestibular disorders to legislation relating to employment and driving
	The principles of vestibular rehabilitation
	The genetics of vestibular schwannomas and genetic counselling.
	The surgical and non-surgical management options.
Clinical Skills	4 The surgical approaches to the CP angle Vestibular assessment, including electro physiological testing, and clinical examination
	Elicit clinical history and clinical signs
	Perform relevant audio vestibular tests
	Interpret audio vestibular tests
	Interpret neurophysiological tests
	4 principles of patient management
Technical Skills and Procedures	1 The surgical approach for trans labyrintheine and other surgical approaches to resection

Topic	Benign Paroxysmal Positional Vertigo
Category	Otology
Sub-category:	Disorders of equilibrium including Meniere's disorder
Objective	To understand the aetiology, presenting signs, symptoms and management of common ORL conditions. 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.
	Clinical anatomy, neuro-anatomy and physiology of the vestibular system, loccomotor, CVS and cardiovascular systems and vision
	Pathology and pathogenesis of diseases of the ear
Knowledge	The relevant clinical neurological, vascular, radiological, biological, immunological and serological investigations
	The relationship of vestibular disorders to legislation relating to employment and driving
	The principles of vestibular rehabilitation

	Treatment options both non-surgical and surgical
	4 The pathology and various hypotheses relating to the aetiology of BPPV Vestibular assessment, including electro physiological testing, and clinical examination
	Elicit clinical history and clinical signs
	Perform relevant audio vestibular tests
Clinical Skills	Interpret audio vestibular tests
	Interpret neurophysiological tests
	4 principles of patient management
	1 The surgical approach for trans labyrinthine and other surgical approaches to resection
Technical Skills and Procedures	4 Perform particle re-positioning manoeuvres
Professional Skills	Please see the <u>Professional Skills and Behaviour » Final</u> section for these skills

Topic	Acute vestibular failure
Category	Otology
Sub-category:	Disorders of equilibrium including Meniere's disorder
Objective	To understand the aetiology, presenting signs, symptoms and management of common ORL conditions. 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.
	Clinical anatomy, neuro-anatomy and physiology of the vestibular system, loccomotor, CVS and cardiovascular systems and vision
	Pathology and pathogenesis of diseases of the ear
Knowledge	The various hypotheses relating to the aetiology of sudden vestibular failure
	The relevant clinical neurological, vascular, radiological, biological, immunological and serological investigations
	The relationship of vestibular disorders to legislation relating to employment and driving
	4 The principles of vestibular rehabilitation
	Vestibular assessment, including electro physiological testing, and clinical examination
Clinical Skills	Elicit clinical history and clinical signs
	Perform relevant audio vestibular tests

Interpret audio vestibular tests

Interpret neurophysiological tests

4 principles of patient management

Technical Skills and Procedures No content

Professional Skills Please see the Professional Skills and Behaviour » Final section for these skills

Topic	Epistaxis
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 infections.
Knowledge	 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.
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	 3 Diagnostic nasendoscopy 3 Packing of nose 3 Removal of nasal packing 3 Cautery of nasal septum 3 Ethmoid Artery ligation 3 Sphenopalatine artery ligation

Topic	Nasal trauma and deformity
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 Understanding of the anatomy of the nose, paranasal sinuses and facial skeleton. 4 Understanding of the mechanisms of trauma responsible for nasal and facial injuries. 4 Knowledge of the appropriate imaging techniques 4 Knowledge of the specific complications of nasal trauma 4 Knowledge of the management of nasal trauma

Clinical Skills	 4 Knowledge of the management of nasal deformity 4 Ability to take a relevant history and perform an appropriate clinical examination 4 Knowledge of the relevant special investigations and correct interpretation 4 Ability to adequately resuscitate the critically ill patient
Technical Skills	4 Fracture nose reduction
and Procedures	4 Packing of nose

Topic	Nose and sinus infections
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 Knowledge of rarer pathogens responsible for rhinosinusitis 4 understanding of special investigations to inform the diagnosis 4 Understanding of the differences in management between acute and chronic rhinosinusitis. 4 Knowledge of the indications for and techniques of surgical management 4 Knowledge of the complications of sinusitis and their management. 4 Demonstrate an ability to take an appropriate history and perform a nasal
Clinical Skills	 examination with a speculum and endoscope. 4 Awareness of the indications for imaging including CT and MRI 4 Awareness of indications for other special investigations including microbiology, immunology etc
Technical Skills and Procedures	 4 nasendoscopy 4 antral washout – direct vision 4 inferior meatal antrostomy – direct vision + endoscopic 4 middle meatal antrostomy – endoscopic 4 nasal polypectomy – endoscopic 4 uncinectomy – endoscopic 4 uncinectomy + bulla – endoscopic 3 anterior ethmoidectomy - endoscopic 3 Caldwell-Luc – direct vision 3 Intranasal ethmoidectomy – direct vision
Professional Skills	Please see the Professional Skills and Behaviour » Final section for these 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. 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 Understand the place of surgery in management of nasal and sinus inflammation
Clinical Skills	 4 Ability to take an appropriate history and perform a relevant examination of the nose and sinuses. 4 Ability to perform nasendoscopy 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 nasendoscopy 4 turbinate cautery 4 turbinate surgery 4 antral washout – direct vision 4 inferior meatal antrostomy – direct vision + endoscopic 4 middle meatal antrostomy – endoscopic 4 nasal polypectomy – endoscopic 4 uncinectomy – endoscopic 4 uncinectomy + bulla – endoscopic 3 anterior ethmoidectomy - endoscopic 3 Caldwell-Luc – direct vision 3 Intranasal ethmoidectomy – direct vision

Topic	Congenital abnormalities
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.
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	 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 & emergency settings.
Clinical Skills	4 Ability to take an appropriate history form the parent and child and perform relevant examination.4 Nasendocopy if appropriate
Technical Skills and Procedures	4 Nasendoscopy 3 Examination under anaesthesia

Topic	Facial pain
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 face, including the 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 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 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
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 A detailed understanding of the aetiologies and conditions associated with nasal polyps.

Clinical Skills	 4 Knowledge of the clinical features of nasal polyps 4 Understand the medical and surgical management options of nasal polyps 4 Understand the clinical significance of unilateral nasal polyps 4 Ability to take an appropriate history and perform an examination including nasal endoscopy. 4 Awareness of imaging techniques
	1 nasal polypectomy
	2 nasendoscopy
	2 antral washout – direct vision
	1 inferior meatal antrostomy – direct vision + endoscopic
Technical Skills	1 middle meatal antrostomy – endoscopic
and Procedures	1 uncinectomy – endoscopic
	1 uncinectomy + bulla – endoscopic
	1 anterior ethmoidectomy - endoscopic
	1 Caldwell-Luc – direct vision
	1 Intranasal ethmoidectomy – direct vision

Topic	Granulomatous conditions
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 features of non specific granulomatous conditions eg sarcoidosis and Wegener's 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 examination4 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
Professional Skills	Please see the <u>Professional Skills and Behaviour » Final</u> section for these skills

Topic	Rhinological oncology
Category	Rhinology
Sub-category:	None
Objective	To understand the aetiology, clinical presentation and management of 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. 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 malignancy in the nose and paranasal sinuses. 4 Understanding of the principles of medical and surgical management of malignancy of the nose and sinuses. 4 Knowledge of the complications of both the disease and its management.
Clinical Skills	4 Ability to take a relevant history, perform an appropriate examination and interpret clinical findings correctly4 Demonstrate a rational approach to special investigations
Technical Skills and Procedures	4 Examination of nose under anaesthesia4 Biopsy of nose - external4 Biopsy of nose - internal

Торіс	Septorhinoplasty
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 the embryology of the nose 4 Understanding of the mechanisms of trauma responsible for nasal and facial injuries. 4 Understanding methods of assessment of the facial skeleton 4 Knowledge of the specific complications of nasal surgery
Clinical Skills	4 Ability to take a relevant history and perform an appropriate clinical examination4 Ability to assess photographs and devise a surgical plan
	4 Septoplasty3 Septorhinoplasty4 Packing of nose4 Sphenopalatine artery ligation

Topic	Congenital abnormalities
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
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	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
Clinical Skills	elective & emergency settings.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 of external nose 4 Examination of internal nose with headlight 4 Nasendoscopy 4 Examination under anaesthesia 4 Resection of nasal lesion NEC 4 Excision skin lesion

Topic	Cosmetic Surgery
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 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 examination4 Ability to assess facial deformity and devise a management plan
Technical Skills and Procedures	 4 Examination of external nose 4 Examination of internal nose with headlight 4 Resection of nasal lesion 3 Flaps used in reconstruction 4 SMR 4 Septoplasty 4 Excision skin lesion
Drofossional Skills	Diagona the Professional Skills and Pahaviour v Final section for these skills

Topic	Reconstruction
Category	Rhinology
Sub-category:	Facial Plastics
Objective	To understand the methods available for facial reconstruction involving, 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 anatomical areas of the face 4 Understanding of the blood supply and innervation of the face 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 examination4 Ability to assess facial defects and devise a management plan
and Procedures	 4 Resection of nasal lesion 4 Lip- wedge resection 4 Excision skin lesion 4 Suture skin
Professional Skills	Please see the Professional Skills and Behaviour » Final section for these skills

Special Interest Stage

Cleft Lip and Palate Surgery deals with the soft and hard tissue deformities of the commonest orofacial congenital disorder. In collaboration with other medical and dental disciplines, and nonmedical health professionals, the surgeon contributes to the correction of respiratory, hearing, feeding, speech and facial growth disorders and facial deformity. The diagnosis of some forms of clefting may be made by pre-natal ultrasound; thus the surgical care of cleft patients and their families may start before birth. It continues in many cases throughout childhood and adolescence and concludes only at the cessation of growth, and when the patient is satisfied with the result; or when further care is required only from a different discipline.

Special interest training in cleft lip and palate may commence only after the trainees have passed the inter-collegiate board examinations in the home specialty (see paragraph "Entry to training" below). Trainees will thus have proved abilities in the generality of their own specialty, including operative skills. They will also have acquired skills in diagnosis, investigation, non-operative management, and in communication with patients and colleagues. Specific skills involved in the multi-disciplinary delivery of health care to children will also have been developed.

Cleft Lip and Palate – Service Need

Nationwide there are 11 Cleft centres, although the majority of them work on more than one hub site, and all of them work in collaboration with district hospital and community health services.

There are 1000 to 1200 new patients with clefts born each year. Because of the effects on facial growth, dentition, hearing and speech, psychological effects and the associations with other congenital anomalies and genetic disorders, the great majority of the patients need follow-up at least until the facial skeleton has ceased growing (age 16 roughly), and many need continuing care in the first few years of adulthood. This equates to follow-up lists totalling 12,000 children or more, and a number of adults. Surgeons of three different disciplines are involved at any or all stages of care (Plastic, Oral & Maxillofacial, Otorhinolaryngology).

The current staffing arrangements in the Cleft centres vary according to how much the surgeons contribute to the generality of their "home" specialty. There are a very few exclusively "cleft" surgeons but they are the minority, and it does not look as if this will be the pattern in the near future. There are around 30 surgeons nationally operating on infant patients, and some more (OMFS) surgeons operating on older children and adults. There will therefore only be opportunities for a maximum of one or two trainees per year to develop the special interest.

Entry to training

Trainees wishing to pursue a special interest in Cleft Lip and Palate Surgery will be drawn from the following four specialties: Oral and Maxillo-Facial Surgery, Oto-rhino-laryngology (ENT), Paediatric Surgery and Plastic Surgery. Entry to Cleft Lip and Palate special interest training is by competitive interview. Candidates should either have passed the inter-collegiate board examination in their "home-specialty" or be within 6 months of taking it.

Length of training

The training is competency based but it is anticipated that the period of training will take more than one year but not exceed two years.

It is expected that trainees will have acquired some exposure to the management of cleft patients in a training setting in their home specialty, or in allowed periods "out of programme". Experience obtained in non-training settings (e.g. "Cleft camps") cannot be counted in a trainee's log-book. However, it is clear that skills acquired in this manner can be assessed subsequently in the training setting.

All training in Cleft Lip and Palate Surgery is acknowledged by the four contributing specialties as counting towards the acquisition of the Certificate of Completion of Training (CCT).

The training interface group recognises that training in Cleft Lip and Palate Surgery should take place with the full facilities of a Paediatric environment. A trainee with a special interest in Cleft Lip and Palate Surgery must be able to demonstrate that he/she can function as part of a multidisciplinary team. He/she must also demonstrate an appropriate relationship, directly or by correspondence, with all other relevant Paediatric Departments and Specialists, including: Fetal Medicine, Clinical Genetics, Nutrition and Dietetics, Anaesthetics, General Paediatrics, Community Paediatrics.

The training will cover the full range of primary and secondary cleft surgical procedures. Some of the related procedures that the advanced trainee (and later the consultant) will undertake will depend on their parent speciality (e.g. insertion of grommets, aspects of dental surgical management).

The purpose of the syllabus is to guide trainees as to the skills they will need to develop, in a multidisciplinary setting, to treat cleft children and assist their families.

Click on Workplace Based Assessments to view the assessment forms including DOPS and PBAs

Topics

Торіс	Basic science
Category	Cleft Lip and Palate Stage 1 Key Objectives to be achieved in the first 6 months
Sub-category:	Basic science as applied to Cleft surgery
Objective	No content
	Oro-facial embryology Process and timing of facial, branchial arch and otological development Teratogenic effects
	Genetics of cleft lip and palate and common cranio-facial syndromes Genetics of cleft lip and palate, cleft syndromes, common cranio-facial syndromes, cleft syndromes with risk of disability in other systems
Knowledge	Pathogenesis of cleft lip and palate Risk factors (medication and illness in pregnancy, family history, syndromes)
	Basic knowledge of dental development Out-line of normal development of deciduous dentition, mixed dentition phase, permanent dentition Common dental anomalies in clefts
	Surgical anatomy Skeleton and soft tissues of cleft and non-cleft patients, face, jaws, oral cavity,

pharynx, upper airway

Normal physiology of infants and children Cardio-respiratory physiology of newborn, energy requirements, growth, development milestones in the first year of life, IV fluid management, principles of resuscitation (APLS/PALS)

Normal oro-facial physiology Feeding mechanisms, swallowing, relation of infant feeding and later speech mechanisms, nasal and Eustachian tube and middle ear physiology

Clinical Skills No content Technical Skills and Procedures No content

Professional Skills Please see the Professional Skills and Behaviour » Final section for these skills

Торіс	History taking
Category	Cleft Lip and Palate Stage 1 Key Objectives to be achieved in the first 6 months
Sub-category:	Patient/Parent management
Objective	None
Knowledge	Symptom patterns, pregnancy and family history
Clinical Skills	Elicit relevant history Elicit pregnancy history Take history in difficult circumstances (English not first language, parents with psychological or social problems, confrontational parents)
Technical Skills and Procedures	None

Professional Skills Please see the Professional Skills and Behaviour » Final section for these skills

Topic	Clinical Examination
Category	Cleft Lip and Palate Stage 1 Key Objectives to be achieved in the first 6 months
Sub-category:	Patient/Parent management
Objective	None
Knowledge	Patterns of clinical signs in clefting Signs of appropriate development
Clinical Skills	Appropriate explanation of procedure to parents Ability to examine without causing undue discomfort elicit signs and use appropriate equipment
Technical Skills and Procedures	None

Topic	Peri-operative management
Category	Cleft Lip and Palate Stage 1 Key Objectives to be achieved in the first 6

	months
Sub-category:	Patient/Parent management
Objective	None
Knowledge	Appropriate health for undergoing anaesthesia and operation Basic knowledge of anaesthesia for cleft infants Post-operative management, including introduction of feeding
Clinical Skills	Appropriate pre-operative examination Communication with anaesthetists Post-operative fluid management (Intravenous and oral) Use of prophylactic antibiotics
Technical Skills and Procedures	None

Topic	Surgical Technique
Category	Cleft Lip and Palate Stage 1 Key Objectives to be achieved in the first 6 months
Sub-category:	Patient/Parent management
Objective	None
Knowledge	Principles and techniques of primary cleft surgery of lip and palate Principles and techniques of secondary cleft surgery, including unilateral alveolar bone graft
Clinical Skills	Demonstrates appropriate knowledge of surgical anatomy Demonstrates appropriate knowledge of operation rationale Appropriate tissue handling Appropriate selection of instruments Appropriate selection of suture material
Technical Skills and Procedures	None

Professional Skills Please see the Professional Skills and Behaviour » Final section for these skills

Topic	Speech investigations
Category	Cleft Lip and Palate Stage 1 Key Objectives to be achieved in the first 6 months
Sub-category:	Patient/Parent management
Objective	None
Knowledge	Indications for speech investigations Methods and limitations Radiation protection
Clinical Skills	Assessing appropriateness of referral for speech investigations Assessing likely cooperation of patient Basic interpretation of results
Technical Skills and Procedures	None

Topic	Team working
Category	Cleft Lip and Palate Stage 1 Key Objectives to be achieved in the first 6 months
Sub-category:	Multidisciplinary management
Objective	None
Knowledge	Understanding the expertise and role of other disciplines in cleft management
Clinical Skills	Effective communication with other disciplines Presentation of clinical cases
Technical Skills and Procedures	None
Drofossional Skills	Places see the Professional Skills and Pahaviour v Final section for these skills

Topic	Communication
Category	Cleft Lip and Palate Stage 1 Key Objectives to be achieved in the first 6 months
Sub-category:	Multidisciplinary management
Objective	None
Knowledge	Methods and timing of involvement of other disciplines in cleft care
Clinical Skills	Appropriate involvement of other professionals
Technical Skills and Procedures	None

Professional Skills Please see the Professional Skills and Behaviour » Final section for these skills

Topic	Empathy and sensitivity, ethics, consent
Category	Cleft Lip and Palate Stage 1 Key Objectives to be achieved in the first 6 months
Sub-category:	Multidisciplinary management
Objective	None
Knowledge	Range of patient and parent reaction to cleft deformity and its consequences Knowledge of ethical issues in cleft management
Clinical Skills	Identifying patients and parents concerns Take consent effectively for primary cleft operations Ability to discuss ethical issues and potential complications
Technical Skills and Procedures	None

Topic	Antenatal diagnosis
Category	Cleft Lip and Palate Stage 1 Key Objectives to be achieved in the first 6 months
Sub-category:	Multidisciplinary management
Objective	None

Knowledge	Possibilities and limitations of antenatal diagnosis Likelihood of undiagnosed coexistent abnormalities
Clinical Skills	Ability to ascertain details of antenatal diagnosis Ability to prioritise information Ability to use simple language in discussing diagnoses
Technical Skills and Procedures	None
Professional Skills	Please see the <u>Professional Skills and Behaviour » Final</u> section for these skills

Topic	Organisation and planning
Category	Cleft Lip and Palate Stage 1 Key Objectives to be achieved in the first 6 months
Sub-category:	Multidisciplinary management
Objective	None
Knowledge	Systematic approach to patient management
Clinical Skills	Starting with important tasks Improvement of efficiency Discussing prioritisation with colleagues in the team
Technical Skills and Procedures	None

Topic	Data and record management
Category	Cleft Lip and Palate Stage 1 Key Objectives to be achieved in the first 6 months
Sub-category:	Multidisciplinary management
Objective	None
Knowledge	Understand how data are recorded by different specialties in cleft management
Clinical Skills	Contribute accurate records Understand significance of data recorded by others
Technical Skills and Procedures	None

Торіс	Audit/Evidence based medicine
Category	Cleft Lip and Palate Stage 1 Key Objectives to be achieved in the first 6 months
Sub-category:	Multidisciplinary management
Objective	None
Knowledge	Principles of EBM Important clinical trials in cleft management Ongoing audit in cleft management
Clinical Skills	Critically appraise evidence Competent use of paper and electronic data sources Ability to discuss evidence with parents and patients at appropriate level Page 114 of 123

Ability to carry out audit project

Technical Skills and Procedures None

Professional Skills Please see the Professional Skills and Behaviour » Final section for these skills

Topic	Research
Category	Cleft Lip and Palate Stage 1 Key Objectives to be achieved in the first 6 months
Sub-category:	Multidisciplinary management
Objective	None
Knowledge	Place of research in aiding patient management Different methods of research and application of these
Clinical Skills	Involvement in departmental research project Using critical analysis skills to determine research questions
Technical Skills and Procedures	None

Professional Skills Please see the Professional Skills and Behaviour » Final section for these skills

Topic	Embryology
Category	Cleft Lip and Palate Stage 2 Objectives to be Achieved within 18 months
Sub-category:	Core knowledge
Objective	None
Knowledge	Process and timing of facial, branchial arch and otological development Teratogenic effects
Clinical Skills	Ability to relate deformity/anomaly to embryology
Technical Skills and Procedures	None
Professional Skills	Please see the <u>Professional Skills and Behaviour » Final</u> section for these skills

Topic	Genetics, syndromes
Category	Cleft Lip and Palate Stage 2 Objectives to be Achieved within 18 months
Sub-category:	Core knowledge
Objective	None
Knowledge	Genetics of cleft lip and palate Cleft syndromes Common cranio-facial syndromes Cleft syndromes with risk of disability in other systems
Clinical Skills	Sensitive discussion of new findings Use of clinical genetics inputs
Technical Skills and Procedures	None

Topic Category	Growth and development in infant/child nutrition Cleft Lip and Palate Stage 2 Objectives to be Achieved within 18 months
Sub-category:	Core knowledge
Objective	None
Knowledge	Cardio-respiratory physiology of newborn Energy requirements Growth Development milestones in the first year of life IV fluid management Principles of resuscitation (APLS/PALS) Feeding mechanisms, swallowing, relation of infant feeding and later speech mechanisms, nasal and Eustachian tube and middle ear physiology
Clinical Skills	Use of growth charts, recognising growth/development exceptions in syndromic patients, appropriate referral of developmental delay, learning difficulties, childhood disability
Technical Skills and Procedures	None
Profossional Skills	Please see the Professional Skills and Behaviour » Final section for these skill

Topic	Speech Development
Category	Cleft Lip and Palate Stage 2 Objectives to be Achieved within 18 months
Sub-category:	Core knowledge
Objective	None
	Feeding mechanisms, swallowing, relation of infant feeding and later speech mechanisms, nasal and Eustachian tube and middle ear physiology
Knowledge	
	Range of normal speech development mechanisms at risk in cleft, effect of otitis media with effusion, speech skills at school entry
Clinical Skills	Effective liaison with Speech Therapists, effective liaison with ENT, appropriate interventions in pre-school child and school child
Technical Skills and Procedures	None
Professional Skills	Plance see the Professional Skills and Pahaviour v Final section for these skill

Topic	Peri-operative Management
Category	Cleft Lip and Palate Stage 2 Objectives to be Achieved within 18 months
Sub-category:	Core knowledge
Objective	None
Knowledge	Range of normal pre-operative parameters in children, significant dangers for anaesthetics and operation, principles of post-operative fulid management, antibiotic policy
Clinical Skills	Appropriate examination, liaison with Anaesthetics and Ward staff, counselling of parents, post-operative fluids and feeding management, thresholds for Intensive Care interventions
Technical Skills	None

and Procedures

Topic	Antenatal management
Category	Cleft Lip and Palate Stage 2 Objectives to be Achieved within 18 months
Sub-category:	Antenatal management
Objective	No content
Knowledge	Possibilities and limitations of antenatal diagnosis, likelihood of undiagnosed coexistent abnormalities
Clinical Skills	Ability to ascertain details of antenatal diagnosis, ability to prioritise information, ability to use simple language in discussing diagnoses
	Ability to conduct ante-natal counselling, demonstrate appropriate liaison with Fetal Medicene Department
Technical Skills and Procedures	No content
Professional Skills	Please see the <u>Professional Skills and Behaviour » Final</u> section for these skills

Topic	Airway
Category	Cleft Lip and Palate Stage 2 Objectives to be Achieved within 18 months
Sub-category:	Post natal management
Objective	None
Knowledge	Airway in Pierre Robin, choanal and laryngeal anomalies
Clinical Skills	Airway management in collaboration with other professionals
Technical Skills and Procedures	None
Professional Skills	Please see the <u>Professional Skills and Behaviour » Final</u> section for these skills

Topic	Feeding
Category	Cleft Lip and Palate Stage 2 Objectives to be Achieved within 18 months
Sub-category:	Post natal management
Objective	None
Knowledge	Energy requirements and preferred methods of feeding in clefts, feeding problems in syndromic and premature babies
Clinical Skills	Liaise with other professionals on optimisation of cleft patients' feeding
Technical Skills and Procedures	None
Professional Skills	Please see the <u>Professional Skills and Behaviour » Final</u> section for these skills

Topic	Counselling
Category	Cleft Lip and Palate Stage 2 Objectives to be Achieved within 18 months
Sub-category:	Post natal management
Objective	None

Knowledge	Understanding of techniques and priorities of informing parents of new patients
Clinical Skills	Counselling parents of new patients, ability to use simple language, ability to demonstrate priorities to parents

Technical Skills None

and Procedures

Professional Skills Please see the Professional Skills and Behaviour » Final section for these skills

Topic	Principles of pre-surgical orthodontics
Category	Cleft Lip and Palate Stage 2 Objectives to be Achieved within 18 months
Sub-category:	Post natal management
Objective	None
Knowledge	Awareness of orthodontic preferences, awareness of situations indicating pre- surgical orthodontics
Clinical Skills	Appropriate discussion with Orthodontic colleagues
Technical Skills and Procedures	None
Ductorianal Skills	Diagon and the Professional Skills and Pahaviour v. Final section for these skills

Topic	Primary lip repair
Category	Cleft Lip and Palate Stage 2 Objectives to be Achieved within 18 months
Sub-category:	Primary surgery
Objective	None
Knowledge	Surgical anatomy, pathological anatomy, techniques and timing, rationale of different sequences
Clinical Skills	No content
Technical Skills and Procedures	Operative skill to repair the lip and appropriate other structures according to Unit protocol
Professional Skills	Please see the <u>Professional Skills and Behaviour » Final</u> section for these skills

Topic	Primary Palate repair
Category	Cleft Lip and Palate Stage 2 Objectives to be Achieved within 18 months
Sub-category:	Primary surgery
Objective	None
Knowledge	Surgical anatomy, pathological anatomy, techniques and timing, rationale of different sequences
Clinical Skills	No content
Technical Skills	Operative skill to repair the palate and appropriate other structures according to
and Procedures	Unit protocol
Professional Skills	Please see the <u>Professional Skills and Behaviour » Final</u> section for these skills

Topic	Lip revision and fistula closure
Category	Cleft Lip and Palate Stage 2 Objectives to be Achieved within 18 months

Sub-category:	Secondary surgery
Objective	None
Knowledge	Appropriate assessment of lip/fistula disability, awareness of patient perceptions
Clinical Skills	None
Technical Skills and Procedures	Ability to make appropriate lip revision, ability to make appropriate fistula closure
Professional Skills	Please see the <u>Professional Skills and Behaviour » Final</u> section for these skills

Investigation of velo-pharyngeal function
Cleft Lip and Palate Stage 2 Objectives to be Achieved within 18 months
Secondary surgery
None
Indications for speech investigations, methods and limitations, radiation protection
No content
Assessing appropriateness of referral for speech investigations, assessing likely co-operation of patient, basic interpretation of results Full interpretation of the results and formation of clinical plan

Topic	Secondary palatal surgery, surgical management of VPI
Category	Cleft Lip and Palate Stage 2 Objectives to be Achieved within 18 months
Sub-category:	Secondary surgery
Objective	None
Knowledge	Anatomy and physiology of palatal function and abnormalities after cleft closure, pathophysiology of VPI
Clinical Skills	No content
Technical Skills and Procedures	Judgement on correct operations for secondary repair and control of VPI, skilful dissection of palate after previous repair, surgical skills in speech surgery, pharyngoplasty

Topic	Alveolar bone graft
Category	Cleft Lip and Palate Stage 2 Objectives to be Achieved within 18 months
Sub-category:	Secondary surgery
Objective	None
Knowledge	Preparation for bone grafting, correct assessment of evolution of secondary dentition, understanding of orthodontic investigations and treatment
Clinical Skills	None
Technical Skills and Procedures	Surgical skills in alveolar bone grafting, correct peri-operative management
Professional Skills	Please see the <u>Professional Skills and Behaviour » Final</u> section for these skills

Topic	Rhinoplasty
Category	Cleft Lip and Palate Stage 2 Objectives to be Achieved within 18 months
Sub-category:	Secondary surgery
Objective	None
Knowledge	Anatomy and pahthological anatomy of the cleft nose, understanding of corrective procedures
Clinical Skills	None
Technical Skills	Demonstrate surgical skills in cleft rhinoplasty, management of cleft airway
and Procedures	and nasal septum
Professional Skills	Please see the Professional Skills and Behaviour » Final section for these skills

Topic	Cleft related orthognathic surgery
Category	Cleft Lip and Palate Stage 2 Objectives to be Achieved within 18 months
Sub-category:	Secondary surgery
Objective	None
Knowledge	Understanding of anatomy and pathological anatomy, understanding of planning, surgical principles in orthognathic appliances and their usage, methods of distraction osteogenesis
Clinical Skills	None
Technical Skills and Procedures	Ability to perform orthognathic surgery under supervision
Professional Skills	Please see the <u>Professional Skills and Behaviour » Final</u> section for these skills

Topic	Basic Otology and hearing assessment
Category	Cleft Lip and Palate Stage 2 Objectives to be Achieved within 18 months
Sub-category:	Multidisciplinary teamworking
Objective	None
Knowledge	Interpretation of audiogram and tympanometry study, understanding the principles of brain stem evoked response audiometry
Clinical Skills	Ability to refer from appropriate history and audiogram
Technical Skills and Procedures	None

Topic	Orthodontics
Category	Cleft Lip and Palate Stage 2 Objectives to be Achieved within 18 months
Sub-category:	Multidisciplinary teamworking
Objective	No content
Knowledge	Understanding of orthodontic role in cleft care, planning AGB, planning orthognathic surgery, orthodontic measurement of mid-facial growth
Clinical Skills	Appropriate liaison with Orthodontists

Technical Skills and Procedures No content

Professional Skills Please see the Professional Skills and Behaviour » Final section for these skills

Торіс	Speech and language therapy
Category	Cleft Lip and Palate Stage 2 Objectives to be Achieved within 18 months
Sub-category:	Multidisciplinary teamworking
Objective	None
Knowledge	Speech and language therapy input into cleft management, tools for examining speech development, surgical and orthodontic assistance to speech therapy
Clinical Skills	Appropriate liaison with Speech and language therapists, partaking in policy formation for patients concerning speech managementbg
Technical Skills and Procedures	None
	Discussed as Desfront and Chills and Datassisson. Discussion for the second site

Professional Skills Please see the Professional Skills and Behaviour » Final section for these skills

Topic	Paediatric and restorative dentistry
Category	Cleft Lip and Palate Stage 2 Objectives to be Achieved within 18 months
Sub-category:	Multidisciplinary teamworking
Objective	None
Knowledge	Understanding of the role of Paediatric Dentists, understanding basics of oral and dental hygiene, understanding principles of restorative dentistry
Clinical Skills	Appropriate referral to Paediatric and Restorative Dentist
Technical Skills and Procedures	None

Topic	Child and adolescent psychology
Category	Cleft Lip and Palate Stage 2 Objectives to be Achieved within 18 months
Sub-category:	Multidisciplinary teamworking
Objective	None
Knowledge	Awareness of the role of Psychologists in childhood and adolescence, understanding of situations requiring psychology therapy
Clinical Skills	Care in selection of appropriate patients/families for referral
Technical Skills and Procedures	None
Professional Skills	Please see the <u>Professional Skills and Behaviour » Final</u> section for these skills

Topic	Children with disabilities
Category	Cleft Lip and Palate Stage 2 Objectives to be Achieved within 18 months
Sub-category:	Multidisciplinary teamworking
Objective	None

Knowledge	Understanding the role of Community Paediatrics and associated professionals, special needs teaching, awareness of communication disorders
Clinical Skills	Appropriate liaison with community agencies, ability to write relevant reports
Technical Skills and Procedures	None
Professional Skills	Please see the <u>Professional Skills and Behaviour » Final</u> section for these skills

Topic	Ethical issues
Category	Cleft Lip and Palate Stage 2 Objectives to be Achieved within 18 months
Sub-category:	Multidisciplinary teamworking
Objective	None
Knowledge	Understanding of consent in older children and adolescents, Gillick competence, ethics of new procedures
Clinical Skills	Ability to take consent from older children and adolescents, ability to communicate medical ethics to parents and older children
Technical Skills and Procedures	None
Professional Skills	Please see the <u>Professional Skills and Behaviour » Final</u> section for these skills

Topic	General paediatric issues
Category	Cleft Lip and Palate Stage 2 Objectives to be Achieved within 18 months
Sub-category:	Multidisciplinary teamworking
Objective	None
Knowledge	Understanding resuscitation of children Understanding issues of non-accidental injury and child protection
	Maintenance of API S/PAI S skills

Clinical Skills	Ability to recognise signs of NAI, risk factors, family pathology, awareness of NAI referral pathways to child protection
Technical Skilla	In Air Telefrai patiways to enine protection

Technical Skills and Procedures None

Professional Skills Please see the Professional Skills and Behaviour » Final section for these skills

Topic	Management of residual cleft deformity in adults
Category	Cleft Lip and Palate Stage 2 Objectives to be Achieved within 18 months
Sub-category:	Multidisciplinary teamworking
Objective	None
Knowledge	Understanding of situation at cessation of facial growth, basic understanding of nasal septal deformity, understanding of adult self-image problems, understanding of adult communication problems
Clinical Skills	Ability to assemble appropriate professionals to solve adults' concerns
Technical Skills and Procedures	None
Profossional Skills	Please see the Professional Skills and Behaviour > Final section for these skills

Topic	Children with disabilities
Category	Cleft Lip and Palate Stage 2 Objectives to be Achieved within 18 months
Sub-category:	Multidisciplinary teamworking
Objective	None
Knowledge	Understanding the role of Community Paediatrics and associated professionals, special needs teaching, awareness of communication disorders
Clinical Skills	Appropriate liaison with community agencies, ability to write relevant reports
Technical Skills and Procedures	None
Professional Skills	Please see the Professional Skills and Behaviour » Final section for these skills

Topic	Rhinoplasty
Category	Cleft Lip and Palate Stage 2 Objectives to be Achieved within 18 months
Sub-category:	Secondary surgery
Objective	None
Knowledge	Anatomy and pathological anatomy of the cleft nose, understanding of corrective procedures
Clinical Skills	None
	Demonstrate surgical skills in cleft rhinoplasty, management of cleft airway and nasal septum