Oral and Maxillofacial Surgery Syllabus
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1. Specialty Overview

Overview

Oral and Maxillofacial surgery is the surgical specialty concerned with the diagnosis and treatment of diseases affecting the mouth, jaws, face and neck. Specialists working in this area are known as Oral and Maxillofacial surgeons. The specialty is unique in requiring a dual qualification in medicine and dentistry and is a recognised international specialty that, within Europe, is defined under the Medical Directives. The scope of the specialty is extensive and includes facial injuries, head and neck cancers, salivary gland diseases, facial disproportion, facial pain, temporomandibular joint (TMJ) disorders, impacted teeth, cysts and tumours of the jaws as well as numerous problems affecting the oral mucosa such as mouth ulcers and infections. Oral and maxillofacial surgeons frequently work alongside other specialists including orthodontists, oncologists, neurosurgeons, plastic surgeons, and ENT surgeons. Specialty specific criteria, standards and evidence for the practice of oral and maxillofacial surgery in the UK have been defined by the specialty.

The majority of Maxillofacial Surgeons working in the United Kingdom have qualified in dentistry before qualifying in medicine. The specialty is, however, open to trainees qualifying first in medicine and then obtaining a qualification in dentistry. The majority of dental graduates will obtain an MFDS before or during their medical training. However, an MFDS is not a requirement for entry into specialist training.

ENTRY INTO SPECIALIST TRAINING

Specialist training is a continuum with the MRCS taken in the early years of training and an exit FRCS examination taken towards the end of specialist training. This, together with successful completion of the RITA assessment, allows the Specialist Registrar to be awarded a Certificate of Completion of Training (CCT) in Oral & Maxillofacial Surgery and, therefore, be eligible for appointment as a Consultant in Oral & Maxillofacial Surgery, and with registration with the GMC and GDC appear in the Specialist List in Oral & Maxillofacial Surgery held by the GMC. There are two areas of special interest, cleft lip and palate and head and neck surgery, and interface groups are developing the training requirements in these areas.

RELATIONS WITH OTHER SPECIALTIES

Oral & Maxillofacial (OMF) Surgeons are the specific experts on diseases affecting the mouth, face, jaw and neck; they diagnose and treat symptoms, pathology, deformity and trauma affecting the mouth, face, jaws and neck. As a result of treating diseases located in this well-defined anatomical region, OMF Surgeons can provide advice on multi-system pathology where this affects the head and neck. Furthermore, advice is provided for other specialties, such as clinical oncology, to minimise and treat complications in the head and neck, following therapies provided by these other specialty groups. A large number of medical and dental specialities, therefore, have a strong relationship with Oral & Maxillofacial Surgery as follows:

- Accident & Emergency - OMF Surgeons provide major support to all hospital A & E Departments, for soft and hard tissue injuries to the face, scalp and neck and for infections in this region.

- Sport injuries - Clinicians specialising in sports injuries seek OMFS advice in relation to facial injuries sustained during sporting activities. Neurosurgery & Neurosciences - OMF Surgeons collaborate on surgery for trauma, deformity and oncology, which straddles the face and head and are involved in the diagnosis of facial symptoms indicative of neural pathology. This is particularly important in the diagnosis and treatment of cervico-facial pain. OMF Surgeons conduct facial disassembly procedures for intra-cranial and spinal access surgery and provide skull base reconstruction for neurosurgeons, fulfilling an important role in Craniofacial Surgical Units. Ophthalmology - OMF Surgeons collaborate in...
the treatment of orbital trauma, oncology and deformity, and carry out orbital
decompression in thyroid eye disease.

_Dental Specialties_ - OMF Surgeons have a close relationship with orthodontists, restorative
dental surgeons in relation to prosthetics, periodontal disease and advanced restorative
procedures for dental implants. There is an important collaborative role in the preparation
of oral oncology patients before, during and after radiotherapy. OMF Surgeons work closely
with oral medicine consultants in the diagnosis and management of oral mucosal disease,
and dental hygienists have an important role in Maxillofacial Units. OMF surgeons send
tissue to oral pathologists who have specialist diagnostic skills in the orofacial region.

_Dermatology_ - OMF Surgeons consult with dermatologists in the treatment of patients with
vesiculobullous disease, oral mucosal disease and connective tissue disorders, such as
systemic sclerosis, and provide an important surgical service for facial skin cancer.

_Clinical Genetics_ - OMF Surgeons seek advice from geneticists for the families of children
with severe facial deformity and other head and neck syndromes.

_Clinical Oncology and Radiotherapy_ - OMF Surgeons have a leading role in the
management of head and neck neoplasia, working as part of multi-disciplinary teams with
a special relationship with oncology and radiotherapy. The speciality provides a surgical
service in the diagnosis and management of these conditions and can advise and manage
problems arising in the oral cavity in patients with other neoplasms, who become immuno-
suppressed.

OMF surgeons play a major role in reconstructing patients following ablative surgery for
head and neck malignancy as well as for post traumatic deformity. Frequently this may
include free tissue transfer and microsurgical vascular anastomoses.

_Anaesthetics_ - OMF Surgeons liaise closely with this specialty in patients with upper airway
problems. Anaesthetists are vital members of the team treating surgical disease in the
orofacial region, developing special expertise in this field.

_Endocrinology_ - OMF Surgeons can provide a surgical service to reduce the size of
prominent jaws in patients with acromegaly and Paget's disease and have the technical
expertise to provide a surgical service for thyroid and parathyroid disease.

_Cardiology and Cardiothoracic Surgery_ - OMF Surgeons advise on the oral and dental
status of patients with valvular heart disease and coronary heart disease.

_Paediatrics_ - OMF Surgeons collaborate with paediatricians in the diagnosis and treatment
of cervical and orofacial infections and neoplasia, and provide treatment for neonates with
craniofacial deformity, as part of the multi-disciplinary approach in cleft lip and palate and
craniofacial units. _Orthopaedics_ - OMF Surgeons provide vital expertise in the
multidisciplinary treatment of trauma patients.

_Otolaryngology_ - There is often a very close relationship between OMF Surgeons and their
ENT colleagues, with significant anatomical overlap in the areas of practice.

_Psychiatry_ - OMF Surgeons request psychiatric assessments on some patients, prior to
facial deformity surgery, and collaborate in the management of patients with facial pain.

_Rheumatology_ - OMF Surgeons collaborate in the management of patients with joint and
connective tissue diseases, where they affect the temporomandibular joint, face and
mouth. They also provide a surgical service for those patients with Sjögren's disease, who
have problems or develop lymphoma in their salivary glands. They provide a diagnostic
surgical service in suspected giant cell arteritis.

_Intensive Care_ - OMF Surgeons are trained to provide a surgical tracheostomy service for
those patients requiring prolonged endotracheal intubation
Respiratory Medicine - OMF Surgeons liaise with respiratory physicians and orthodontists for the provision of intra-oral devices to control obstructive sleep apnoea and surgically enlarge micrognathic mandibles by conducting jaw osteotomies in a select group of these patients. They also provide a surgical service for neck node biopsy in suspected cases of tuberculosis sarcoidosis, and other conditions.

We seek advice from these specialities in our patients with compromised respiratory efficiency before their surgery.

Gastroenterology - OMF Surgeons often see patients whose first manifestation of a gastroenterological disease is in the mouth and liaise with gastroenterologists over the management of these patients. The specialties have a close relationship in the provision of percutaneous endoscopic gastrostomies (PEG) in major head and neck procedures.

Renal Medicine - Following immuno-suppression, renal transplant patients are at risk of skin and oral cancer. We help with the management of these patients where the disease affects the face and mouth.

Allied Health Professions - OMF Surgeons have close relationships with speech and language therapists, dieticians, physiotherapists, occupational therapists, audiologists and other specialities allied to medicine in the management of a large range of patients requiring support and rehabilitation during and after treatment of conditions affecting the mouth, face, jaws and neck.

RESEARCH

Research has an essential role in the development of any industry and healthcare is no exception. Apart from allowing medical horizons to be widened, health economists are now keenly aware of the need to refine the application of past discoveries through service research and to identify the most cost-effective method of providing treatment, resulting in evidence-based medical practice.

Oral & Maxillofacial Surgery is well placed to meet these needs as the discipline has a strong academic base within the Dental Schools in the United Kingdom. Close links with the Universities provides access to laboratories and inter-action with complementary disciplines (oral pathology, virology, molecular biology, material sciences, etc.) that produce both the appropriate environment and critical mass that is fundamental to effective research. The future potential of maxillofacial surgery is readily found in its research portfolio.

There are active research projects in head & neck cancer, craniofacial trauma, day case and high volume surgery, facial deformity and salivary lithotripsy.

SAC Chair and Editor: Andrew Carton
2. Key Conditions

Key Conditions Oral and Maxillofacial Surgery

Key conditions are those that are considered core to the specialty. The conditions have associated key procedures. All trainees should have been routinely exposed to them, and have acquired the relevant clinical competencies, prior to the award of a CCT. Trainers should ensure that trainees are fully assessed in the management of these conditions/procedures in particular:

Important note: Competence in these conditions/procedures will be taken to denote competence in the management of closely related pathology or less complex procedures in the same anatomical area.

Key Conditions and Associated Core Procedures

- Management of a patient with dento-alveolar pathology
  - Surgical extraction of unerupted/impacted teeth and roots
  - Apical surgery / excision of jaw cyst
- Management of infections of the head and neck
  - Drainage of tissue space infection
- Management of patient with compromised airway
  - Surgical access to airway (tracheostomy / cricothyroidotomy)
- Management of maxillofacial trauma
  - Repair of facial lacerations
  - Reduction and fixation of fracture of mandible
  - Fracture of mandibular condyle - open reduction and fixation
  - Elevation and fixation of fractured zygoma
  - Fracture of orbital floor – repair and graft
- Management of salivary gland swellings
  - Submandibular gland excision
  - Parotidectomy
- Management of oro-facial pain / temporomandibular joint dysfunction
  - Temporomandibular joint arthrocentesis
- Management of a patient with benign jaw tumour
  - Resection of odontogenic tumour / fibro-osseous lesion
  - Harvest of bone graft
- Potentially malignant and malignant epithelial tumours of the mucosa and skin
  - Local skin flaps
  - Excision of malignant skin tumour
- Management of patient with a neck lump / swelling
  - Neck dissection(s)
- Management of a patient with developmental/acquired deformity of facial skeleton
  - Mandibular ramus osteotomy
  - Maxillary osteotomy
  - Rhinoplasty
- Cancer of the head and neck region
  - Excision of oral / oropharyngeal or jaw malignancy
- Reconstructive surgery
  - Pedicled flaps
  - Free tissue transfer
- Patient requiring osseointegrated implants
  - Insertion of intra-oral implants and abutment connection
3. Initial Stage

Four point scales

What the 4 point scale means for Knowledge

1. Knows of
2. Knows basic concepts
3. Knows generally
4. Knows both specifically and broadly

What the 4 point scales means for Clinical Skills and Technical Skills and Procedures

1. Has observed
2. Can do with assistance
3. Can do whole but may need assistance
4. Competent to do whole without assistance, including managing complications
3.1 Overview

Overview of Initial Stage

The purpose of the initial stage ST1 and 2 is to allow a trainee to acquire and develop the key fundamental skills that will form a basis for further progress in the specialty.

The initial stage of specialist training will combine experience in other surgical specialties with training in basic aspects of oral and maxillofacial surgery. The aim should be to acquire competencies and basic surgical skills that will improve understanding of the care of the surgical patient. The ‘Generic Surgical Skills and Knowledge - All Specialties’ is common across all the surgical specialties.

Related surgical disciplines that can contribute to training at this stage include:

- General surgery
- Otolaryngology
- Plastic surgery
- Orthopaedic surgery
- Neurosurgery
- Accident and emergency medicine

A logbook and training portfolio should be kept to allow assessment of relevant competencies that can be accepted towards specialist training. Successful attendance at basic surgical skills and ATLS courses would be expected during this stage of training. Instructional and skills courses in basic aspects of the specialty will also be attended during the first two years. These include, for example, head and neck anatomy and maxillofacial plating courses.

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

- Experience in at least one, and preferably two, related surgical specialties
- Generic skills to allow team working, and management of and communication with both colleagues and patients, as well as a high standard of professionalism
- Clear understanding of the basic sciences as they relate to the pathology and practice of surgery, and oral and maxillofacial surgery in particular
- Competence in basic operative skills
- Competence in the basic perioperative care of the surgical patient
- Competence in the diagnosis and clinical management of common oral and maxillofacial conditions
- Competence in the operative management of a range of common oral and maxillofacial conditions as defined below.

The syllabus details the areas that it is reasonable to expect a trainee in the initial stage of training to be able to deal with whether encountered as a result of being ‘on-call’ or working in an out-patient clinic setting. It is recognised that different trainees start with different levels of experience and will progress at different rates. The progress made will vary both with the trainee’s innate abilities and also the workload and casemix of the trainers with whom they work. Those trainees following an academic pathway will be expected to achieve the same level of competence at the end of ST2 as trainees undertaking a ‘Surgery in general – OMFS programme’.

The following problems are commonly encountered and should be managed competently by the end of ST2, up to and including operative intervention if appropriate.

- Diagnosis and management of dento-alveolar pathology
- Diagnosis and management of common oral mucosal disease
- Facial lacerations
• Fractures of the facial bones
• Diagnosis and management of temporomandibular joint pain and facial pain
• Diagnosis and investigation of salivary gland and neck swellings

The objective to be achieved for these conditions is:

• To be able to assess a patient presenting either acutely or in the out-patient clinic
• To be able to formulate a differential diagnosis and an investigation and management plan
• To be able to treat the patient appropriately up to and including operative intervention if appropriate
• To be able to communicate the above information at the required level to patients/carers/other team members

During this stage the trainee will gain competence to the level defined in the syllabus in a number of technical skills and procedures. A trainee would be expected to be able to perform all of the procedures listed below without the direct scrubbed assistance or supervision of a trainer. The list is not exhaustive, although it covers most of the common procedures expected at this stage.

It should be noted that competence in some additional procedures can be obtained at this stage rather than in the later stages in training. Once more this may be due to a number of reasons, such as increased exposure to the procedures, past experience and innate surgical ability.

Dento-alveolar Surgery

• Surgical extraction of retained/buried roots/teeth
• Surgical exposure of unerupted tooth
• Transplantation of tooth
• Apicectomy/retrograde root sealing
• Enucleation of jaw cyst
• Closure of oro-antral fistula
• Removal of tooth/root from maxillary antrum
• Excision of benign oral/gingival soft tissue lesion
• Lingual/labial frenectomy
• Excision of exostosis/benign lesion of bone

Maxillofacial Trauma

• Repair of facial lacerations
• Treatment of dento-alveolar fractures
• Reduction of fractured nasal bones

Salivary gland surgery

• Labial gland biopsy
• FNAC of salivary gland
• Excision of mucocoele of lip

Neck surgery

• Drainage of tissue space infection
• FNAC neck mass

Resection of malignant tumours
• Excision of malignant skin tumour

**Reconstructive surgery**

• Harvest of skin graft
• Harvest of intra-oral bone graft
• Local skin flaps

**ST1 Placement in Oral and Maxillofacial Surgery**

The purpose of a 4 or 6-month placement in an OMFS service during ST1 will include the following:

• To develop some of the key skills that will underpin further training and experience in the specialty
• To provide experience in OMFS for the trainee intending to take up a career in one of the head and neck surgical specialties

**Knowledge**

• Enhanced knowledge of regional and developmental head and neck anatomy
• Natural history and patho-physiology of common head and neck conditions with particular emphasis on oncology and trauma
• Management pathways for conditions presenting both as emergencies and electively to the OMFS service.

**Clinical Skills**

• The examination and investigation of common maxillo-facial clinical problems – elective and emergency
• The ability to construct an appropriate management plan for common OMFS patients
• Specialist examination techniques applicable to OMFS conditions, including endoscopic techniques
• The ability to apply and evaluate the results of head and neck imaging techniques

**Technical Skills**

• Perform minor oral surgical procedures under local and/or general anaesthetic.
• Become a competent assistant for OMFS surgical procedures
• By the end of the attachment to be competent to perform at least one intermediate surgical procedure in the head and neck under direct supervision e.g. excision of the submandibular salivary gland, excision of thyroglossal cyst

**Professional Skills**

In the context of OMFS practice:

• Demonstrate good team working skills, including teaching where appropriate and accepting and acting on feedback
• Demonstrate a caring, professional attitude to patients and their relatives.
• Demonstrate a satisfactory work ethic e.g. commitment to the patient, support of colleagues and task completion.
• Demonstrate good time-management
3.2 Conditions

Generic Surgical Skills and Knowledge- All Specialties

<table>
<thead>
<tr>
<th>Basic sciences</th>
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<tbody>
<tr>
<td><strong>Objective</strong></td>
</tr>
<tr>
<td>Underpinning basic science knowledge appropriate for the practice of surgery.</td>
</tr>
</tbody>
</table>

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

Radiology: Knowledge of diagnostic and interventional radiology

**Knowledge**

Applied anatomy:

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**

No content
Professional Skills

<table>
<thead>
<tr>
<th>Basic surgical skills</th>
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<tbody>
<tr>
<td><strong>Objective</strong></td>
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<tr>
<td>Acquisition of basic surgical skills in instrument and tissue handling.</td>
</tr>
<tr>
<td><strong>Incision of skin and subcutaneous tissue</strong>: Ability to incise superficial tissues accurately with suitable instruments.</td>
</tr>
<tr>
<td><strong>Closure of skin and subcutaneous tissue</strong>: Ability to close superficial tissues accurately.</td>
</tr>
<tr>
<td><strong>Knot tying</strong>: Ability to tie secure knots.</td>
</tr>
<tr>
<td><strong>Haemostasis</strong>: Ability to achieve haemostasis of superficial vessels.</td>
</tr>
<tr>
<td><strong>Tissue retraction</strong>: Use of suitable methods of retraction.</td>
</tr>
<tr>
<td><strong>Use of drains</strong>: Knowledge of when to use a drain and which to choose.</td>
</tr>
<tr>
<td><strong>Tissue handling</strong>: Ability to handle tissues gently with appropriate instruments.</td>
</tr>
<tr>
<td><strong>Skill as assistant</strong>: Ability to assist helpfully, even when the operation is not familiar.</td>
</tr>
</tbody>
</table>

**Knowledge**

- Incision of skin and subcutaneous tissue:
  - Langer's lines
  - Healing mechanism
  - Choice of instrument
  - Safe practice
  - Basic Surgical Skills course

- Closure of skin and subcutaneous tissue:
  - Options for closure
  - Suture and needle choice
  - Safe practice

- Knot tying:
  - Choice of material

- Haemostasis:
  - Techniques

- Tissue retraction:
  - Choice of instruments

- Use of drains:
  - Indications
  - Types
  - Management/removal

- Tissue handling:
  - Choice of instruments

**Clinical Skills**

- Incision of skin and subcutaneous tissue:
<table>
<thead>
<tr>
<th>Technical Skills</th>
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<tbody>
<tr>
<td>Ability to use scalpel, diathermy and scissors</td>
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<tr>
<td>Closure of skin and subcutaneous tissue:</td>
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<tr>
<td>4 Accurate and tension free apposition of wound edges</td>
</tr>
<tr>
<td>Knot tying:</td>
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<tr>
<td>4 Single handed</td>
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<tr>
<td>4 Double handed</td>
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<tr>
<td>4 Instrument</td>
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<tr>
<td>4 Superficial</td>
</tr>
<tr>
<td>4 Deep</td>
</tr>
<tr>
<td>Haemostasis:</td>
</tr>
<tr>
<td>4 Control of bleeding vessel (superficial)</td>
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<tr>
<td>4 Diathermy</td>
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<tr>
<td>4 Suture ligation</td>
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<tr>
<td>4 Tie ligation</td>
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<tr>
<td>4 Clip application</td>
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<tr>
<td>Tissue retraction:</td>
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<tr>
<td>4 Tissue forceps</td>
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<tr>
<td>4 Placement of wound retractors</td>
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<tr>
<td>Use of drains:</td>
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<tr>
<td>4 Insertion</td>
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<tr>
<td>4 Fixation</td>
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<tr>
<td>4 Removal</td>
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<tr>
<td>Tissue handling:</td>
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<tr>
<td>4 Appropriate application of instruments and respect for tissues</td>
</tr>
<tr>
<td>Skill as assistant:</td>
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<tr>
<td>4 Anticipation of needs of surgeon when assisting</td>
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<tr>
<td>Technical Skills</td>
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<tr>
<td>No content</td>
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<tr>
<td>Professional Skills</td>
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<td>No content</td>
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<table>
<thead>
<tr>
<th>The Assessment and Management of the Surgical Patient</th>
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<tbody>
<tr>
<td>Objective</td>
</tr>
<tr>
<td>Ability to assess the patient and manage the patient, and propose surgical or non-surgical management.</td>
</tr>
<tr>
<td>Knowledge</td>
</tr>
<tr>
<td>No content</td>
</tr>
<tr>
<td>Clinical Skills</td>
</tr>
<tr>
<td>3 Surgical history and examination (elective and emergency)</td>
</tr>
<tr>
<td>3 Construct a differential diagnosis</td>
</tr>
<tr>
<td>3 Plan investigations</td>
</tr>
<tr>
<td>3 Clinical decision making</td>
</tr>
<tr>
<td>3 Case work up and evaluation; risk management</td>
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<tr>
<td>3 Active participation in MDTs</td>
</tr>
<tr>
<td>3 Taking consent for intermediate level intervention; emergency and elective</td>
</tr>
<tr>
<td>3 Written clinical communication skills</td>
</tr>
<tr>
<td>3 Interactive clinical communication skills: patients</td>
</tr>
<tr>
<td>3 Interactive clinical communication skills: colleges</td>
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<tr>
<td>Technical Skills</td>
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<td>------------------</td>
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<tr>
<td>Professional Skills</td>
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### Perioperative care

#### Objective

*Ability to manage patient care in the perioperative period.*

*Preoperative assessment and management: Ability to assess the patient adequately prior to operation and manage any preoperative problems appropriately.*

*Intraoperative care: Ability to conduct safe surgery in the operating theatre environment.*

*Postoperative care: Ability to care for the patient in the postoperative period.*

#### Blood Products: Appropriate use of blood products.

**Antibiotics:** Appropriate use of antibiotics.

#### Knowledge

**Preoperative 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:**

- 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

**Postoperative 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 blood
- 4 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

#### Clinical Skills
Preoperative assessment and management:

4 History and examination
4 Interpretation of preop investigations
3 Management of comorbidity
4 Resuscitation

Intraoperative care:

4 Safe conduct of intraoperative care

Postoperative care:

4 Assessment of patient’s condition
4 Postoperative analgesia
4 Fluid and electrolyte management
4 Monitoring of postoperative 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 products
4 Management of the complications of blood product transfusion

Antibiotics:

4 Appropriate prescription of antibiotics

**Technical Skills**

No content

**Professional Skills**

Preoperative assessment and management:

0 Communication with patient and relatives
0 Liaison with physicians and ITU staff

Intraoperative care:

0 Communication with other staff members

Postoperative care:

0 Communication with patient and relatives
0 Liaison with physicians and ITU staff

Blood Products:

0 Communication with patient and relatives

---

### Assessment of multiple injured patients including children

**Objective**

Safely assess the multiply injured patient.

**Knowledge**

3 Anatomy
3 Pathogenesis of shock
1 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**
- 3 Central venous line insertion
- 3 Chest drain insertion
- 2 Diagnostic peritoneal lavage

**Professional Skills**
No content

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**Bleeding diathesis**

**Objective**

*Understand, Recognise and Manage bleeding diathesis in the surgical patient.*

**Diagnosis:** Diagnose possible bleeding diathesis in the surgical patient.

**Treatment:** Manage bleeding diathesis in the surgical patient.

**Knowledge**

**Diagnosis:**
- 3 Mechanism of haemostasis
- 3 Pathology of impaired haemostasis e.g. haemophilia, liver disease, massive haemorrhage

**Treatment:**
- 3 Understands use of blood products

**Clinical Skills**

**Diagnosis:**
- 4 Recognition of conditions likely to lead to the diathesis
- 3 Recognition of abnormal bleeding during surgery

**Treatment:**
- 3 Avoidance by correct surgical techniques
- 3 Corrective measures, e.g. warming, packing

**Technical Skills**
No content

**Professional Skills**

**Diagnosis:**
- 0 Communication with laboratory staff

**Treatment:**
- 0 Communication with anaesthetist, theatre team and laboratory staff

---

**Venous thrombosis + embolism**

**Objective**

*Understanding of practice in the prevention and management of Venous thrombosis and Embolism.*

**Coagulation:** Understanding of the physiology and pathophysiology of coagulation.

**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.

**Knowledge**
Coagulation:

2 Clotting mechanism (Virchow Triad)
2 Effect of surgery and trauma on coagulation
2 Tests for thrombophilia and other disorders of coagulation

Diagnosis:

2 Methods of investigation for suspected thromboembolic disease

Treatment:

4 Anticoagulation, heparin and warfarin
2 Role of V/Q scanning, CT angiography and thrombolysis
2 Place of pulmonary embolectomy

Prophylaxis:

3 Knowledge of methods of prevention, mechanical and pharmacological

Clinical Skills

Coagulation:

4 Recognition of patients at risk

Diagnosis:

3 Awareness of symptoms and signs associated with pulmonary embolism and DVT
2 Role of duplex scanning, venography and d-dimer measurement

Treatment:

3 Initiate and monitor treatment

Prophylaxis:

4 Awareness at all times of the importance of prophylaxis

Technical Skills

No content

Professional Skills

Coagulation:

0 Protocol management

Diagnosis:

0 Ability to organise and time appropriate investigation

Treatment:

0 Prioritisation of investigation and treatment
0 Patient counselling

Prophylaxis:

0 Able to implement in the team setting the culture of prophylaxis

Nutrition

Objective

Recognise the need for artificial nutritional support and arrange enteral nutrition.

Knowledge

3 Effects of malnutrition, both excess and depletion
3 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

No content

### Professional Skills

No content

---

### Academic activity

**Objective**

An introduction to research methodology and to teaching others.

Research: Ability to perform a simple research study and present the results.

Teaching: Ability to teach small groups such as medical students.

### Knowledge

#### Research:

1. 2 Research methodology

#### Teaching:

1. 2 Teaching methods

### Clinical Skills

#### Research:

1. 2 Ability to analyse published evidence

#### Teaching:

1. 3 Ability to teach small groups

### Technical Skills

No content

### Professional Skills

No content

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### Management of the dying patient

**Objective**

Ability to manage the dying patient appropriately.

Palliative Care: Good management of the dying patient in consultation with the palliative care team.

Principles of organ donation: Knowledge of the principles of organ donation.

#### Knowledge

Palliative Care:

1. 3 Care of the terminally ill
2. 4 Analgesia
3. Antiemetics
4. Laxatives

Principles of organ donation:

1. 3 Circumstances in which consideration of organ donation is appropriate
2. 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**

No content

**Professional Skills**

Palliative Care:

0 Communication with the patient and relatives
0 Liason with the palliative care team

Principles of organ donation:

0 Communication with relatives
0 Liason with the transplant team

0 Learn to cope with crisis and mortality

---

**Endocrine and Metabolic Disorders**

**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

Hyponatremia
4 Pathophysiology of fluid and electrolyte balance
4 Causes of hyponatremia

**Clinical Skills**

Thyrotoxicosis
4 History and examination
3 Investigation of thyrotoxicosis

Hypothyroidism
4 History and examination
4 Investigation

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

### Hyponatraemia
4 Treatment

#### Technical Skills
No content

#### Professional Skills
Liaise with endocrinologists
Liaise with diabetic team

---

### Child Protection

#### 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
No content

#### Professional Skills
No content
# Basic Science Knowledge

**Anatomy**

**Objective**

To understand the surgical anatomy that oral and maxillofacial surgeons will encounter during the management of surgical patients and the development of anatomical systems.

**Knowledge**

Skull, brain and cranial cavity:

- Embryogenesis of skull
- Functional knowledge of brain and its coverings
- Knowledge of common anatomical variations of skull
- Applied surgical anatomy.

Orbit and eye:

- Development of orbit and eye.
- Relations within maxillofacial skeleton
- Applied surgical anatomy

Nose and paranasal sinuses:

- Development of nose and paranasal sinuses.
- Relations of these structures to the maxillofacial skeleton
- Applied surgical anatomy

Facial musculature/soft tissues:

- Development of facial musculature and its effect on development of the head and neck in general
- Applied surgical anatomy

Temporomandibular joint and infratemporal fossa:

- Embryogenesis and development of the temporomandibular joint
- Functional anatomy of the TMJ
- Applied surgical anatomy of the TMJ and infratemporal fossa

External, middle and inner ear:

- Functional anatomy
- Applied surgical anatomy

Oral cavity, teeth and supporting structures, pharynx:

- Embryogenesis and development of the oral cavity and pharynx
- Applied surgical anatomy

Mandible and maxilla:

- Embryogenesis of maxilla and mandible
- Facial growth
- Disorders of development
- Applied surgical anatomy

Larynx, trachea, neck and thoracic inlet:

- Developmental anatomy of the neck.
Disorders of development
Applied surgical anatomy

Blood supply to skin, fascia, muscle and bone:
Knowledge of principles of blood supply to skin, fascia, muscle and bone
Applied surgical anatomy

Regional anatomy relevant to bone grafts and common pedicled/free flaps:
Applied surgical anatomy of limbs, thoracic cage, back, abdominal wall, groin and pelvis

Clinical Skills
Application of this knowledge appropriately in the clinical setting

Blood supply to skin, fascia, muscle and bone:
Application of this knowledge appropriately in relation to design of reconstructive flaps

Technical Skills
No content

Professional Skills
No content

Physiology

Objective
To understand the normal physiological processes at different ages and to understand the effects of disease and trauma in these processes as they relate to oral and maxillofacial surgery.

Knowledge
Oral mucosa and connective tissues of the mouth:
Metabolism and functions of the oral mucosa and connective tissues of the oral cavity

Calcium/phosphorus metabolism and calcification:
Mineral metabolism
Chemistry of calcium and phosphates
Composition of bone and teeth
Metabolism of bone and teeth
Mechanisms of calcification

Bone growth and remodelling:
Mechanisms of osteogenesis and ossification
Bone remodelling
Mechanisms of bone growth
Post-natal remodelling of the facial skeleton
Effects of soft tissues on skull growth

Mechanisms of tooth eruption:
Normal tooth eruption and theories
Abnormal tooth eruption
Factors affecting tooth eruption

Salivary glands and saliva
Composition and functions of saliva
Stimulus and mechanisms of salivation
Importance of saliva in relation to oral disease

Immunology and defence mechanisms of the mouth:
<table>
<thead>
<tr>
<th>Mechanical, chemical and hormonal factors protecting the oral cavity</th>
</tr>
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<tbody>
<tr>
<td>Immunological protective mechanisms</td>
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</table>

Mastication and deglutition:

- Properties and functions of the muscles of mastication
- Co-ordination of the masticatory system
- Taste and olfaction
- Phases of deglutition
- Control of deglutition
- Dysphagia

Effects of dietary deficiencies and hormonal imbalances:

- Physiological effects of dietary deficiency
- Physiological effects of hormonal imbalance
- Nutrition and malnutrition

Age changes in the oral structures:

- Physiological effects of aging within the head and neck

Physiological responses to surgical treatment:

- Physiology of stress
- The anxious patient
- Vasovagal reactions, hyperventilation and arrhythmias

Wound healing:

- Wounding agents and sequelae
- The inflammatory response
- Healing of oral and other wounds
- Abnormal healing

Oro-facial pain:

- Sensory innervation of the head and neck
- Transmission of trigeminal impulses within the central nervous system
- Pain perception
- Referred pain
- Theories of pain
- Physiological effects of pain

Clinical Skills
Application of this knowledge appropriately in the clinical setting

Technical Skills
No content

Professional Skills
No content

### Surgical Pathology (and Genetics)

**Objective**
To understand pathological processes as they present in the common oral and maxillofacial diseases/conditions/illnesses.

**Knowledge**
Biopsy principles and techniques:

- Rationale and techniques for biopsy (FNA, core biopsies, incisional and excisional)
- Preparation and preservation of pathological specimens
- Use of the pathology laboratory
Inflammatory reactive and infectious diseases:

- The acute inflammatory response
- The chronic inflammatory response
- Principles of wound healing
- Abnormal wound healing
- Healing in specialized tissues

Immune-based diseases:

- Pathological basis for the immune response
- Auto-immune disease

Conditions of developmental disturbance:

- Disorders of metabolism
- Disorders of nutrition

Hyperplasias, hamartomas, and neoplasms of soft tissues and bones:

- Disorders of growth and development
- Differential diagnosis
- Treatment modalities (if required)

Benign epithelial tumours of the mucosa and skin:

- Pathology of disorders of growth
- Differential diagnoses
- Treatment modalities

Potentially malignant and malignant epithelial tumours of the mucosa and skin:

- Mechanisms of tumour initiation and growth
- Malignant transformation
- Mechanisms of metastasis
- Tumour staging
- Treatment modalities

Effects of radiation and osteoradionecrosis:

- The effects of ionizing radiation

Benign soft tissue tumours of mesenchymal origin:

- Pathology of disorders of growth
- Differential diagnoses
- Treatment modalities

Malignant soft tissue tumours of mesenchymal origin:

- Mechanisms of tumour initiation and growth
- Malignant transformation
- Mechanisms of metastasis
- Tumour staging
- Treatment modalities

Non-neoplastic salivary gland diseases:

- Pathology of salivary gland disease
- Differential diagnosis
- Treatment modalities

Salivary gland neoplasms:
Mechanisms of tumour initiation and growth
Malignant transformation
Mechanisms of metastasis
Tumour staging
Treatment modalities

Odontogenic and non-odontogenic cysts:
Pathology of non-neoplastic conditions involving odontogenic tissues
Differential diagnosis
Treatment options

Odontogenic tumours, hamartomas and neoplasms:
Pathology of neoplastic conditions involving odontogenic tissues
Differential diagnosis
Treatment options

Pigmented lesions of the skin and mucosa:
Pathological basis of pigmentation
Normal and abnormal pigmentation
Diagnostic procedures
Treatment options

Fibro osseous diseases and systemic diseases affecting bone:
Pathology of disorders of growth
Differential diagnoses
Treatment modalities

Benign and malignant neoplasms of bone:
Pathology of disorders of growth
Calcium metabolism
Differential diagnoses
Mechanisms of tumour initiation and growth
Mechanisms of metastasis
Tumour staging
Treatment modalities

Neoplasms of the immune system:
Pathology of the immune response
Immunity to infection
Hypersensitivity, tissue grafts and autoimmunity

Trauma:
Haemorrhage and shock
Oedema
Fever and hypothermia

Oncology:
Mechanisms of tumour initiation and growth
Role of environmental factors
Role of genetic factors
Tumour staging
Treatment strategies
Mechanisms of chemotherapy and radiotherapy
### Clinical Pharmacology

**Objective**

To understand the uses and effects of therapeutic agents used in the treatment of conditions presenting to the oral and maxillofacial surgeon.

**Knowledge**

Adverse reactions to drugs:
- Incidence of adverse drug reactions
- Classification of adverse drug reactions
- Long-term and delayed effects causing adverse reactions
- Surveillance methods

Practical drug prescribing:
- Principles of prescribing
- Prescription writing
- Drug information

Drug interactions:
- Incidence of drug interactions
- Pharmaceutical interactions
- Pharmacokinetic interactions
- Pharmacodynamic interactions

Drug therapy in the young, the elderly, and in pregnancy:
- Differences in drug therapy
  - (a) in the young
  - (b) in the elderly
  - (c) in pregnancy

Patient compliance:
- Factors affecting compliance
- Measuring compliance
- Improving compliance

Placebos:
- The placebo effect
- Mode of action of placebos
- Adverse effects of placebos

Drug development and clinical trials:
- The pharmaceutical industry and the regulatory authorities
- Definition of a clinical trial
- The conduct of a clinical trial
- Ethics of clinical trials
Drug therapy of systemic disease relevant to maxillofacial surgical practice:

- Knowledge of specific agents, their effects and mechanisms of action

Relief of pain and anaesthesia:

- Anatomical and neuropharmacological mechanisms underlying pain sensation
- Mechanism of action of analgesics
- Practical use of analgesics
- Treatment of intractable pain (e.g. in terminal care)
- Local anaesthetics
- Analgesic effects of conscious sedation
- General anaesthetics

Drug dependence and abuse:

- Factors predisposing to drug dependence
- Pharmacology of specific drugs of dependence
- Treatment of drug dependence

Principles of cancer chemotherapy and immunosuppression:

- Actions of chemotherapeutic agents
- Pre-treatment evaluation
- Combination chemotherapy
- Adverse effects of drugs used in cancer chemotherapy
- Practical use of cytotoxic agents

Clinical Skills

- Application of this knowledge appropriately in the clinical setting

Technical Skills

No content

Professional Skills

No content

Clinical Microbiology

Objective

To understand the microbiology of common infections/conditions which affect the head and neck.

Knowledge

Classification and pathogenicity of micro-organisms:

- Classification of micro-organisms
- Pathogenesis
- Factors affecting the virulence and spread of micro-organisms

Use of the microbiology laboratory:

- Collection of clinically-relevant specimens
- Transport of specimens
- Laboratory procedures for microbiological diagnosis

Antimicrobial chemotherapy:

- Mode of action of antimicrobial agents
- Spectrum of activity
- Principles of clinical use
- Causes of treatment failure
- Antibiotic resistance
- Antibiotic prophylaxis

Pyrexia of unknown origin (PUO):
Definition and causes of PUO
Investigation of PUO

The immuno compromised patient:
Causes and related conditions
Specific precautions and management protocols

Septicaemia:
Clinical features and causative organisms
Investigation
Antimicrobial treatment

Opportunistic and fungal infections:
Opportunistic organisms and conditions
Diagnosis
Treatment
Antifungal agents

Specific infections of the head and neck:
Odontogenic infections
Infections of the paranasal sinuses
Osteomyelitis
Tissue space infections
Spreading infections
Skin infections
Necrotizing fasciitis

Infective endocarditis:
Incidence, clinical features and predisposing factors
Pathogenesis and causative organisms
Investigation
Treatment/prophylaxis

Hospital acquired infection:
Types of hospital-acquired infection
Surgical wound infections
Infection in intensive care units
Infections of risk to hospital staff
Isolation procedures

Principles of disinfection:
General considerations
Disinfection methods

Sterilisation:
General considerations
Sterilisation methods

Clinical Skills
Application of this knowledge appropriately in the clinical setting

Technical Skills
No content

Professional Skills
No content
## Dentoalveolar Pathology

### Impacted Wisdom Tooth

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<td>0 Methods of medical management including treatment of inflammation/infection</td>
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<td>0 Pharmacology and therapeutics of analgesia</td>
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<td>Surgical extraction of unerupted/impacted teeth and roots:</td>
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### Dental Extractions

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</table>
**Clinical Skills**
- Ability to formulate treatment plan
- Liaison with restorative dentist
- Treat/drain infection and/or remove tooth
- Safe and appropriate use of instruments
- Institute aftercare and review

**Technical Skills**
Surgical extraction of unerupted/impacted teeth and roots:
- Local anaesthetic and sedation techniques
- Carry out of steps of procedure safely and correctly
- Techniques of bone removal and tooth division
- Intra-oral suturing techniques

**Professional Skills**
No content

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**Unerupted tooth**

**Objective**
- To be able to assess a patient presenting either acutely or in the out-patient clinic
- To be able to formulate a differential diagnosis and an investigation and management plan
- To be able to treat the patient appropriately up to and including operative intervention if appropriate
- To be able to communicate the above information at the required level to patients/carers/other team members

**Knowledge**
- Signs and symptoms
- Differential diagnosis
- Investigations and radiographic interpretation
- Methods of medical management including treatment of inflammation/infection
- Pharmacology and therapeutics of analgesia
- Anatomy of mouth, jaws, teeth and supporting structures
- Anatomy of trigeminal nerve and infiltration / nerve block anaesthesia
- Potential complications
- Pharmacology and therapeutics of postoperative analgesia
- Physiology of sinus function
- Pathology of inflammatory sinus disease, including its potential to mimic dental pain
- Relevance of other related conditions e.g atypical facial pain and TMJ pathologies

- Indications and techniques

**Clinical Skills**
- Ability to formulate treatment plan
- Treat/drain infection and/or remove tooth
- Institute aftercare and review

**Technical Skills**
Surgical exposure or transplantation of unerupted tooth:
- Local anaesthetic and sedation techniques
- Carry out of steps of procedure safely and correctly
- Techniques of exposure and bone removal
- Packing and/or bonding of tooth
- Techniques of tooth splintage
- Intra-oral suturing techniques

**Professional Skills**
No content

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**Oro-antral communication/root in Maxillary antrum**

**Objective**
To be able to assess a patient presenting either acutely or in the out-patient clinic
To be able to formulate a differential diagnosis and an investigation and management plan
To be able to treat the patient appropriately up to and including operative intervention if appropriate
To be able to communicate the above information at the required level to patients/carers/other team members

**Knowledge**
- Signs and symptoms
- Differential diagnosis
- Investigations and radiographic interpretation
- Methods of medical management including treatment of inflammation/infection
- Relevance of endoscopic examination of maxillary antrum
- Pharmacology and therapeutics of analgesia
- Anatomy of mouth, jaws, teeth and supporting structures
- Anatomy of trigeminal nerve and infiltration / nerve block anaesthesia
- Potential complications
- Pharmacology and therapeutics of postoperative analgesia
- Physiology of sinus function
- Pathology of inflammatory sinus disease
- Indications and techniques

**Clinical Skills**
- Ability to formulate treatment plan
- Treat/drain infection and/or remove tooth
- Institute aftercare and review

**Technical Skills**
- Closure of oro-antral communication:
  - Local anaesthetic and sedation techniques
  - Carry out of steps of procedure safely and correctly
  - Techniques of local flap closure
  - Techniques of antral exploration / lavage
  - Antrostomy
  - Intra-oral suturing techniques
- Removal of root retained root or dental fragment from maxillary antrum
  - Endoscopic examination of maxillary antrum
  - Local anaesthetic and sedation techniques
  - Carry out of steps of procedure safely and correctly
  - Techniques of local flap closure
  - Techniques of antral exploration / lavage
  - Antrostomy
  - Intra-oral suturing techniques

**Professional Skills**
- No content

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<table>
<thead>
<tr>
<th>Prominant lingual / labial frenum</th>
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</table>

**Objective**
To be able to assess a patient presenting in the out-patient clinic
To be able to formulate a differential diagnosis and an investigation and management plan
To be able to treat the patient appropriately up to and including operative intervention if appropriate
To be able to communicate the above information at the required level to patients/carers/other team members

**Knowledge**
- Signs and symptoms
- Differential diagnosis
0 Investigations and radiographic interpretation
0 Pharmacology and therapeutics of analgesia
0 Anatomy of mouth, jaws, teeth and supporting structures
0 Anatomy of trigeminal nerve and infiltration / nerve block anaesthesia
0 Potential complications
0 Pharmacology and therapeutics of postoperative analgesia

0 Indications and techniques

Clinical Skills
0 Ability to formulate treatment plan
0 Treat/drain infection and/or remove tooth
0 Institute aftercare and review
0 Ability to discriminate between those who need surgery and those who don't and communicate this effectively

Technical Skills
0 Local anaesthetic and sedation techniques
0 Carry out of steps of procedure safely and correctly
0 Intra-oral suturing techniques

Professional Skills
No content

Jaw Cysts

Objective
To be able to assess a patient presenting either acutely or in the out-patient clinic
To be able to formulate a differential diagnosis and an investigation and management plan
To be able to treat the patient appropriately up to and including operative intervention if appropriate
To be able to communicate the above information at the required level to patients/carers/other team members

Knowledge
0 Signs and symptoms
0 Differential diagnosis
0 Investigations and radiographic interpretation
0 Methods of medical management
0 Cystic lesions of the jaw
0 Anatomy of mouth, jaws, teeth and supporting structures
0 Anatomy of trigeminal nerve and infiltration / nerve block anaesthesia
0 Pathogenesis of chronic infection and cystic lesions
0 Potential complications including management of compromised airway
0 Pharmacology and therapeutics of postoperative analgesia

Clinical Skills
0 Ability to formulate treatment plan
0 Relevance of early involvement of microbiologist
0 Treat/drain infection
0 Ability to manage compromised airway (surgical airway)
0 Recognition of systemic sepsis (sepsis syndrome)
0 Recognition of infection as an early indicator of immuno supression e.g. diabetes, immuno compromised states
0 Institute aftercare and review

Technical Skills
Apical surgery / excision of jaw cyst:
0 Local anaesthetic and sedation techniques
0 Carry out of steps of procedure safely and correctly
0 Techniques of exposure, bone removal and enucleation of pathology
0 Intra-oral suturing techniques

Professional Skills
No content

Benign oral soft tissue/hard tissue lesion

Objective
To be able to assess a patient presenting either acutely or in the out-patient clinic
To be able to formulate a differential diagnosis and an investigation and management plan
To be able to treat the patient appropriately up to and including operative intervention if appropriate
To be able to communicate the above information at the required level to patients/carers/other team members

Knowledge
0 Signs and symptoms
0 Differential diagnosis
0 Investigations and radiographic interpretation
0 Methods of medical management
0 Common oral mucosal & bony pathologies
0 Anatomy of mouth, jaws, teeth and supporting structures
0 Anatomy of trigeminal nerve and infiltration / nerve block anaesthesia
0 Pathogenesis of chronic infection and cystic lesions
0 Potential complications including management of compromised airway
0 Pharmacology and therapeutics of postoperative analgesia

Clinical Skills
0 Ability to formulate treatment plan
0 Relevance of early involvement of microbiologist
0 Treat/drain infection
0 Ability to manage compromised airway (surgical airway)
0 Recognition of systemic sepsis (sepsis syndrome)
0 Recognition of infection as an early indicator of immuno supression e.g. diabetes, immuno compromised states
0 Institute aftercare and review

Technical Skills
Excision / biopsy of benign oral soft tissue / hard tissue lesion:
0 Local anaesthetic and sedation techniques
0 Carry out of steps of procedure safely and correctly
0 Techniques of incisional / excisional biopsy
0 Control of haemorrhage
0 Techniques of local flap closure
0 Intra-oral suturing techniques

Professional Skills
No content

Abscess/Infection
Objective
To be able to assess a patient presenting either acutely or in the out-patient clinic
To be able to formulate a differential diagnosis and an investigation and management plan
To be able to treat the patient appropriately up to and including operative intervention if appropriate
To be able to communicate the above information at the required level to patients/carers/other team members

Knowledge
0 Signs and symptoms
0 Differential diagnosis
0 Investigations and radiographic interpretation
0 Methods of medical management
0 Anatomy of mouth, jaws, teeth and supporting structures
0 Anatomy of trigeminal nerve and infiltration / nerve block anaesthesia
0 Pathogenesis of chronic infection and cystic lesions
0 Potential complications including management of compromised airway
0 Pharmacology and therapeutics of postoperative analgesia

Clinical Skills
0 Ability to formulate treatment plan
0 Relevance of early involvement of microbiologist
0 Treat/drain infection
0 Ability to manage compromised airway (surgical airway)
0 Recognition of systemic sepsis (sepsis syndrome)
0 Recognition of infection as an early indicator of immuno supression e.g. diabetes, immuno compromised states
0 Institute aftercare and review

**Technical Skills**
Apical surgery / excision of jaw cyst:
0 Local anaesthetic and sedation techniques
0 Carry out of steps of procedure safely and correctly
0 Techniques of exposure, bone removal and enucleation of pathology
0 Intra-oral suturing techniques

**Professional Skills**
No content
Oral mucosal lesions

### Oral ulceration

**Objective**

*To be able to assess an patient presenting with a mucosal lesion either acutely or in the out-patient clinic*

*To be able to formulate a differential diagnosis and an investigation and management plan*

*To be able to treat the patient appropriately up to and including operative intervention if appropriate*

*To be able to communicate the above information at the required level to patients/carers/other team members*

**Knowledge**

- Aetiological factors and differential diagnosis
- Investigations
- Possible relationship to systemic disease
- Relevant pharmacology and therapeutics
- Signs of malignant disease

**Clinical Skills**

- Examination of the oral mucosa
- Biopsy/cytology techniques
- Ability to interpret results and formulate treatment plan

**Technical Skills**

- Local anaesthetic and sedation techniques
- Carry out of steps of procedure safely and correctly including harvesting pathologically appropriate specimen
- Intra-oral suturing techniques
- Ability to discriminate between those who need surgery and those who don't and communicate this effectively

**Professional Skills**

No content

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### Leukoplakia

**Objective**

*To be able to assess an patient presenting with a mucosal lesion either acutely or in the out-patient clinic*

*To be able to formulate a differential diagnosis and an investigation and management plan*

*To be able to treat the patient appropriately up to and including operative intervention if appropriate*

*To be able to communicate the above information at the required level to patients/carers/other team members*

**Knowledge**

- Aetiological factors and differential diagnosis
- Investigations
- Possible relationship to systemic disease
- Relevant pharmacology and therapeutics
- Signs of malignant disease

**Clinical Skills**

- Examination of the oral mucosa
- Biopsy techniques
- Ability to interpret results and formulate treatment plan

**Technical Skills**

- Local anaesthetic and sedation techniques
- Carry out of steps of procedure safely and correctly including harvesting pathologically appropriate specimen
- Intra-oral suturing techniques
- Ability to discriminate between those who need surgery and those who don't and communicate this effectively
Professional Skills
No content
Infections of the Head and Neck

Infections of the Head and Neck

Objective
To be able to assess a patient presenting with infections of the head and neck either acutely or in the out-patient clinic
To be able to formulate a differential diagnosis and an investigation and management plan
To be able to treat the patient appropriately up to and including operative intervention if appropriate
To be able to communicate the above information at the required level to patients/carers/other team members

Knowledge
0 Causes of swelling of head and neck
0 Differential diagnosis
0 Investigations
0 Methods of medical and principles surgical management

0 Head and neck anatomy
0 Head and neck pathology
0 Awareness of appropriateness of procedure and alternatives
0 Potential complications
0 Awareness of relevance of immunocompromised state
0 Anatomy of fascial spaces of head and neck
0 Microbiology of head and neck infection
0 Anatomy and physiology of the upper aerodigestive airway

0 Anatomy of lymphatic drainage and vital structures
0 Differential diagnosis of enlarged neck nodes
0 Relevant investigations
0 Understanding of microbiology of head and neck infections
0 Awareness of issues around blood borne infections

0 Anatomy of larynx, trachea and related structures
0 Techniques of non-surgical airway management
0 Physiology of respiration
0 Upper airway pathology
0 Techniques of surgical airway management
0 Local anaesthesia and analgesia techniques

Clinical Skills
0 Ability to take and interpret a thorough history
0 Clinical examination of the head, neck and salivary glands
0 FNAC technique
0 Treatment of acute infected swelling
0 Drainage of neck abscess

Recognition of infections specific to the head and neck:
0 Odontogenic infection
0 Infections of the paranasal sinuses
0 Osteomyelitis
0 Fascial space infections
0 Spreading infections
0 Necrotising fasciitis

0 Prevention of nosocomial infection

Technical Skills
Fine needle aspiration of neck mass:

0 Carry out of steps of procedure safely and correctly
0 Assemble equipment / precautions
0 Localisation of mass and aspiration
0 Prepare and confirm adequacy of specimen

Drainage of tissue space infection:

0 Appropriate aseptic preparation
0 Exposure and exploration of tissue space(s)
0 Collection of samples
0 Securing appropriate drains and dressings

Surgical access to airway (Tracheostomy / cricothyroidotomy):

0 Identify relevant instruments and support staff
0 Appropriate aseptic preparation
0 Exposure and access to airway
0 Control of haemorrhage
0 Placement and securing of tube in airway
0 Tracheostomy care

Professional Skills

No content
Cranio Maxillofacial Trauma

**Facial Laceration(s)**

**Objective**

To be able to fully assess an injured patient presenting either acutely or in the out-patient clinic
To be able to formulate a differential diagnosis and an investigation and management plan
To be able to treat the patient appropriately up to and including operative intervention if appropriate
To be able to communicate the above information at the required level to patients/carers/other team members

**Knowledge**

- Aetiology of facial trauma
- Principles of wound management and soft tissue repair
- Prevention/treatment of infections
- Anatomy of facial skin and underlying structures
- Assessment of cranial nerve function
- Anatomy of trigeminal nerve and infiltration / nerve block anaesthesia
- Wound healing and wound care
- Management/prevention of unfavourable scarring

**Clinical Skills**

- General assessment of the traumatised patient
- Assessment and examination of patient with facial laceration(s)
- Ability to recognise involvement of other anatomical structures e.g. nerves, parotid duct
- Ability to formulate a treatment plan and prioritise management
- Repair of facial lacerations under local anaesthesia

**Technical Skills**

Repair of facial laceration(s):

- Local anaesthetic and sedation techniques
- Carry out of steps of procedure safely and correctly
- Management of contaminated wound, thorough debridement
- Management of a laceration involving key structures or tissue loss
- Management of nerve/parotid duct injury
- Soft tissue handling and suturing techniques

**Professional Skills**

No content

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**Dental Trauma and dento-alveolar fractures**

**Objective**

To be able to assess an injured patient presenting either acutely or in the out-patient clinic
To be able to formulate a differential diagnosis and an investigation and management plan
To be able to treat the patient appropriately up to and including operative intervention if appropriate
To be able to communicate the above information at the required level to patients/carers/other team members

**Knowledge**

- Aetiology of facial trauma
- Priorities of management
- Assessment of airway and level of consciousness (Glasgow coma scale)
- Signs and symptoms of fractures of facial skeleton
- Eyes/ears assessment
- Investigations and radiographic interpretation
- Anatomy of mouth, jaws, teeth and supporting structures
- Anatomy of trigeminal nerve and infiltration / nerve block anaesthesia
- Classification of dental trauma and dento-alveolar fractures
- Assessment of head injury and cranial nerve function
### Nasal Fractures

#### Objective

To be able to assess an injured patient presenting either acutely or in the out-patient clinic  
To be able to formulate a differential diagnosis and an investigation and management plan  
To be able to treat the patient appropriately up to and including operative intervention if appropriate  
To be able to communicate the above information at the required level to patients/carers/other team members

#### Knowledge

- Aetiology of facial trauma  
- Priorities of management  
- Assessment of airway and level of consciousness (Glasgow coma scale)  
- Signs and symptoms of fractures of facial skeleton  
- Eyes/ears assessment  
- Investigations and radiographic interpretation

- Anatomy of mouth, jaws, teeth and supporting structures and relevance dental occlusion where appropriate  
- Anatomy of trigeminal nerve and infiltration / nerve block anaesthesia  
- Classification of dental trauma and dento-alveolar fractures  
- Assessment of head injury and cranial nerve function  
- Aetiology  
- Interpretation of radiographs  
- Potential complications  
- Pharmacology and therapeutics of postoperative analgesia

- Anatomy of facial skeleton  
- Physiology of nasal cavity
<table>
<thead>
<tr>
<th>Topic</th>
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<tbody>
<tr>
<td>0 Anatomy of scalp, facial skeleton, orbit and contents</td>
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<tr>
<td>0 Anatomy of eyelids</td>
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<tr>
<td>0 Classification of facial fractures</td>
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<tr>
<td>0 Physiology of sight and occulomotor function</td>
</tr>
<tr>
<td>0 Available techniques</td>
</tr>
</tbody>
</table>

**Clinical Skills**

| 0 General assessment of the traumatised patient                       |
| 0 Assessment and examination of patient with facial trauma            |
| 0 Airway management and emergency treatment of facial trauma         |
| 0 Ability to formulate a treatment plan and prioritise management    |
| 0 Pain control /prevention of infection                               |
| 0 infiltration / nerve block anaesthesia                              |

**Technical Skills**

| 0 Clinical examination of facial skeleton and cranial nerves          |
| 0 Carry out of steps of procedure safely and correctly               |
| 0 Manipulation of nasal bones and septum                              |
| 0 Management of epistaxis                                            |
| 0 Nasal packing and external splintage                               |

**Professional Skills**

No content

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**Fractured Zygoma**

**Objective**

To be able to assess an injured patient presenting either acutely or in the outpatient clinic
To be able to formulate a differential diagnosis and an investigation and management plan
To be able to treat the patient appropriately up to and including operative intervention if appropriate
To be able to communicate the above information at the required level to patients/carers/other team members

**Knowledge**

0 Aetiology of facial trauma
0 Priorities of management
0 Assessment of airway and level of consciousness (Glasgow coma scale)
0 Signs and symptoms of fractures of facial skeleton
0 Eyes/ears assessment
0 Investigations and radiographic interpretation
0 Anatomy of mouth, jaws, teeth and supporting structures
0 Anatomy of trigeminal nerve and infiltration / nerve block anaesthesia
0 Classification of dental trauma and dento-alveolar fractures
0 Assessment of head injury and cranial nerve function
0 Aetiology
0 Interpretation of radiographs
0 Potential complications
0 Pharmacology and therapeutics of postoperative analgesia
0 Anatomy of facial skeleton
0 Physiology of nasal cavity

0 Anatomy of scalp, facial skeleton, orbit and contents
0 Anatomy of eyelids
0 Classification of facial fractures
0 Physiology of sight and occulomotor function
0 Available techniques

0 Anatomy of facial skeleton, teeth and supporting structures
0 Dental occlusion

**Clinical Skills**

0 General assessment of the traumatised patient
0 Assessment and examination of patient with facial trauma
0 Airway management and emergency treatment of facial trauma
Fracture of mandible (excluding condyle)

Objective
To be able to assess an injured patient presenting either acutely or in the out-patient clinic
To be able to formulate a differential diagnosis and an investigation and management plan
To be able to treat the patient appropriately up to and including operative intervention if appropriate
To be able to communicate the above information at the required level to patients/carers/other team members

Knowledge
0 Aetiology of facial trauma
0 Priorities of management
0 Assessment of airway and level of consciousness (Glasgow coma scale)
0 Signs and symptoms of fractures of facial skeleton
0 Eyes/ears assessment
0 Investigations and radiographic interpretation
0 Anatomy of mouth, jaws, teeth and supporting structures
0 Anatomy of trigeminal nerve and infiltration / nerve block anaesthesia
0 Classification of dental trauma and dento-alveolar fractures
0 Assessment of head injury and cranial nerve function
0 Aetiology
0 Interpretation of radiographs
0 Potential complications
0 Pharmacology and therapeutics of postoperative analgesia
0 Anatomy of facial skeleton
0 Physiology of nasal cavity
0 Anatomy of scalp, facial skeleton, orbit and contents
0 Anatomy of eyelids
0 Classification of facial fractures
0 Physiology of sight and occulomotor function
0 Available techniques
0 Anatomy of facial skeleton, teeth and supporting structures
0 Dental occlusion

Clinical Skills
0 General assessment of the traumatised patient
0 Assessment and examination of patient with facial trauma
0 Airway management and emergency treatment of facial trauma
0 Ability to formulate a treatment plan and prioritise management
0 Pain control / prevention of infection
0 Infiltration / nerve block anaesthesia

Technical Skills
0 Clinical examination of teeth, oral cavity, facial skeleton and cranial nerves
0 Carry out of steps of procedure safely and correctly
0 Techniques for removal of damaged teeth/retained roots
0 Techniques of exposure of fracture site(s) and bone manipulation
0 Plate handling skills
### Fracture of mandibular condyle

**Objective**

*To be able to identify a patient who has sustained this injury.*

*To be alert for the potential for this injury to occur.*

*To understand the principles of surgical management of this injury.*

*To be able to carry out these procedures safely and competently*

**Knowledge**

- Anatomy of facial skeleton, TM joint, parotid gland, facial nerve
- Classification of condylar fractures
- Assessment of head injury and cranial nerve function
- Dental occlusion
- Selection and interpretation of relevant imaging
- Understanding the benefits and indications of both open and closed treatments
- Potential complications long and short term

**Clinical Skills**

- Ability to correctly interpret physical signs and relevant imaging
- Clinical examination of teeth, oral cavity, facial skeleton and cranial nerves
- Demonstrates clinical judgment appropriate to injury and patient needs

**Technical Skills**

- Carry out of steps of procedure safely and correctly
- Techniques for removal of damaged teeth / retained roots
- Techniques of intermaxillary fixation

#### Open Reduction:

- Carry out of steps of procedure safely and correctly
- Techniques for removal of damaged teeth / retained roots
- Techniques for exposure of fracture site and manipulation of condylar fragment
- Plate handling skills
- Techniques of intermaxillary fixation

**Professional Skills**

*No content*

### Fracture of maxilla

**Objective**

*To be able to identify a patient who has sustained this injury.*

*To be alert for the potential for this injury to occur.*

*To understand the principles of surgical management of this injury.*

*To be able to carry out these procedures safely and competently*

**Knowledge**

- Anatomy of facial skeleton
- Classification of mid-facial fractures
- Bone healing
- Head injury and cranial nerve function
- Dental occlusion
- Available techniques e.g. open fixation, closed fixation techniques
- Potential complications
- Awareness of possibility of other associated fractures
- Understanding the role of the maxillofacial technician

**Clinical Skills**

- Systematic clinical examination of teeth, oral cavity, facial skeleton and cranial nerves
- Interpretation of radiographs/scans
- Assessment of head injury and cranial nerve function
- Selection of treatment plan appropriate to the patients injury

**Technical Skills**

- Carry out of steps of procedure safely and correctly
- Techniques for removal of damaged teeth / retained roots
- Techniques of intermaxillary fixation

**Professional Skills**

*No content*
An awareness of other factors affecting timing of surgery
Involving the maxillofacial technician in treatment planning

**Technical Skills**
- Carry out of steps of procedure safely and correctly
- Techniques for removal of damaged teeth / retained roots
- Techniques for exposure of fracture sites and reduction of fragments
- Plate handling skills
- Techniques of intermaxillary fixation
- Techniques of cranio-maxillary fixation

**Professional Skills**
No content

**Fracture of orbital floor**

**Objective**
*To be able to identify a patient who has sustained this injury.*
*To be alert for the potential for this injury to occur.*
*To understand the principles of surgical management of this injury.*
*To be able to carry out these procedures safely and competently*

**Knowledge**
- Anatomy and physiology of facial skeleton, orbit and contents
- Awareness of head injury and cranial nerve function
- Potential for complications involving sight and early involvement where appropriate of ophthalmologists/orthoptists
- Surgical approaches to the orbit
- Available techniques for orbital wall reconstruction
- Potential complications

**Clinical Skills**
- Clinical examination of eyes, facial skeleton and cranial nerves
- Assessment of head injury and cranial nerve function
- Choice of appropriate surgical technique
- Interpretation of radiographs/scans

**Technical Skills**
- Carry out of steps of procedure safely and correctly
- Assessment of eye function
- Techniques for approach to orbital floor
- Safe exposure of fracture sites and reduction of fragments
- Bone grafting and plating skills

**Professional Skills**
No content

**Fractures of Naso-orbito-ethmoid complex**

**Objective**
*Can perform complete task without direct assistance of scrubbed trainer.*

**Knowledge**
- Anatomy of craniofacial skeleton, nasal bones, orbit and contents
- Classification of facial fractures
- Assessment of head injury and cranial nerve function
- Interpretation of radiographs/scans
- Available techniques
- Potential complications

- Anatomy of craniofacial skeleton, frontal bones, nasal bones, orbit and contents
- Anatomy and physiology of frontal sinus drainage
- Classification of frontal bone and facial fractures

**Clinical Skills**
- Clinical examination of eyes, facial skeleton and cranial nerves
- Carry out of steps of procedure safely and correctly

**Technical Skills**
Fractures of naso-orbito-ethmoid complex:
Fracture of frontal bones and craniofacial fractures:

- Techniques for approach to frontal bone fractures
- Safe exposure of fracture sites and reduction of fragments
- Management of frontal sinus involvement
- Bone grafting and plating skills

**Professional Skills**

No content

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Fracture of frontal bones and craniofacial fractures

**Objective**

*Can perform complete task without direct assistance of scrubbed trainer.*

**Knowledge**

- Anatomy of craniofacial skeleton, nasal bones, orbit and contents
- Classification of facial fractures
- Assessment of head injury and cranial nerve function
- Interpretation of radiographs/scans
- Available techniques
- Potential complications

- Anatomy of craniofacial skeleton, frontal bones, nasal bones, orbit and contents
- Anatomy and physiology of frontal sinus drainage
- Classification of frontal bone and facial fractures

**Clinical Skills**

- Clinical examination of eyes, facial skeleton and cranial nerves
- Carry out of steps of procedure safely and correctly

**Technical Skills**

Fractures of naso-orbito-ethmoid complex:

- Techniques for approach to naso-ethmoid complex
- Safe exposure of fracture sites and reduction of fragments
- Bone grafting and plating skills

Fracture of frontal bones and craniofacial fractures:

- Techniques for approach to frontal bone fractures
- Safe exposure of fracture sites and reduction of fragments
- Management of frontal sinus involvement
- Bone grafting and plating skills

**Professional Skills**

No content
### Facial pain

#### Oro-facial pain

**Objective**
- To be able to assess a patient presenting with pain either acutely or in the out-patient clinic
- To be able to formulate a differential diagnosis and an investigation and management plan
- To be able to treat the patient appropriately up to and including operative intervention if appropriate
- To be able to communicate the above information at the required level to patients/carers/other team members

**Knowledge**
- History of presenting conditions
- Signs and symptoms of common causes of oro-facial pain
- Differential diagnosis
- Investigations
- Methods of medical and surgical management
- Relevant pharmacology and therapeutics
- Understanding of various techniques of nerve blockade
- Understanding of relevant neurosurgical interventions

**Clinical Skills**
- Ability to elicit and interpret an accurate pain history
- Ability to examine
- Ability to formulate treatment plan

**Technical Skills**
- Local anaesthetic techniques including nerve blocks
- Cryoblockade, neurolysis and surgical nerve disruption

**Professional Skills**
- No content

### Temporomandibular joint disorders

**Objective**
- To be able to assess a patient presenting with pain either acutely or in the out-patient clinic
- To be able to formulate a differential diagnosis and an investigation and management plan
- To be able to treat the patient appropriately up to and including operative intervention if appropriate
- To be able to communicate the above information at the required level to patients/carers/other team members

**Knowledge**
- Signs and symptoms of TMJ dysfunction
- Differential diagnosis
- Investigations and radiographic interpretation
- Methods of medical and surgical management
- Relevant pharmacology and therapeutics

**Clinical Skills**
- Ability to take a comprehensive pain history
- Ability to examine TMJ and muscles of mastication
- Ability to formulate and instigate treatment plan
- Understanding of potential role of occlusion

**Technical Skills**
- Use of TENS devices
- Use of occlusal adjustment therapy
- Arthrocentesis, arthrograms and arthroscopy
- Open joint procedures e.g. disc plication, emminectomy

**Professional Skills**
- No content
# Peri-operative care

## Objective
To ensure the trainee has reached a level of competence in peri-operative care. The following should apply to each of the procedures in the common conditions and operative skills category.

### Knowledge

#### Pre-operative Care
- Indications for surgery
- Required preparation for surgery to include necessary pre-operative investigations
- Outcomes and complications of surgery
- Knowledge of the admission process

#### Intra-operative care
- Anatomy to be encountered during procedure
- Steps involved in operative procedure
- Knowledge of alternative procedures in case of encountering difficulties

#### Post-operative care
- Potential complications of procedure
- Outcomes of procedure
- Likely post-operative progress from disease process and intervention
- Physiological and pathological changes in condition as a result of intervention

### Clinical Skills

#### Pre-operative care
- Synthesis of history and examination into operative management plan
- Ability to explain procedure and outcomes to patient and parents at an appropriate level
- To be able to take informed consent
- To construct an appropriate theatre list
- Where appropriate to communicate with relevant other members of the theatre team e.g. anaesthetist, scrub nurse

#### Intra-operative care
- Appropriate use of assistance
- Communication with other members of theatre team

#### Post-operative Care
- Assessment of patient and physiological parameters
- Appropriate intervention to deal with changing parameters
- Communication skills for dealing with team members, patients and carers
- Ability to prioritise interventions
- Recognition of complications of procedure

### Technical Skills
- Necesssary hand-eye dexterity to complete procedure

### Professional Skills
- No content
# Salivary gland / Neck swellings

## Neck Swellings

<table>
<thead>
<tr>
<th><strong>Neck swellings</strong></th>
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</thead>
<tbody>
<tr>
<td><strong>Objective</strong></td>
</tr>
<tr>
<td>To be able to assess a patient presenting with a neck swelling either acutely or in the out-patient clinic</td>
</tr>
<tr>
<td>To be able to formulate a differential diagnosis and an investigation and management plan</td>
</tr>
<tr>
<td>To be able to treat the patient appropriately up to and including operative intervention if appropriate</td>
</tr>
<tr>
<td>To be able to communicate the above information at the required level to patients/carers/other team members</td>
</tr>
</tbody>
</table>

### Knowledge

- Causes of intermittent/persistent swelling of neck
- Differential diagnosis
- Investigations
- Methods of medical and principles surgical management
- Neck Anatomy
- Neck Pathology
- Awareness of appropriateness of procedure and alternatives
- Potential complications
- Individual steps of procedure
- Anatomy of fascial spaces of head and neck
- Microbiology of head and neck infection
- Anatomy and physiology of the upper aerodigestive airway
- Anatomy of lymphatic drainage and vital structures, including spinal accessory nerve and brachial plexus
- Differential diagnosis of enlarged neck nodes
- Relevant investigations
- Anatomy of larynx, trachea and related structures
- Techniques of non-surgical airway management
- Physiology of respiration
- Upper airway pathology
- Techniques of surgical airway management
- Local anaesthesia and analgesia techniques

### Clinical Skills

- Ability to take and interpret a thorough history
- Clinical examination of the neck and salivary glands
- FNAC technique
- Treatment of acute infected swelling
- Drainage of neck abscess

### Technical Skills

- Fine needle aspiration of neck mass:
- Carry out of steps of procedure safely and correctly
- Assemble equipment / precautions
- Localisation of mass and aspiration
- Prepare and confirm adequacy of specimen

- Drainage of tissue space infection:
- Appropriate aseptic preparation
- Exposure and exploration of tissue space(s)
- Collection of samples
0 Securing appropriate drains and dressings

Cervical node biopsy:
0 Carry out of steps of procedure safely and correctly
0 Localisation of mass and dissection
0 Wound closure

Surgical access to airway (Tracheostomy / cricothyroidotomy):
0 Identify relevant instruments and support staff
0 Appropriate aseptic preparation
0 Exposure and access to airway
0 Control of haemorrhage
0 Placement and securing of tube in airway
0 Tracheostomy care

**Professional Skills**

*No content*
## Salivary gland swellings

### Mucous Cyst

**Objective**
To be able to assess a patient presenting with a neck swelling either acutely or in the outpatient clinic
To be able to formulate a differential diagnosis and an investigation and management plan
To be able to treat the patient appropriately up to and including operative intervention if appropriate
To be able to communicate the above information at the required level to patients/carers/other team members

**Knowledge**
- Causes of intermittent/persistent swelling of major salivary gland
- Differential diagnosis
- Investigations
- Methods of medical and principles surgical management
- Anatomy of lip
- Anatomy of trigeminal nerve and infiltration / nerve block anaesthesia
- Potential complications
- Anatomy of submandibular / sublingual gland lingual nerve and and oral cavity
- Anatomy of trigeminal nerve and infiltration / nerve block anaesthesia
- Investigations including radiographs
- Anatomy of oral cavity, palate and minor salivary glands
- Differential diagnosis and pathology of salivary gland lesions
- Methods of local flap repair of palate

**Clinical Skills**
- Ability to take accurate relevant history
- Clinical examination of the neck and salivary glands
- FNAC technique
- Treatment of acute infected swelling

**Technical Skills**
Excision of mucocoele of lip / labial gland biopsy:
- Local anaesthetic techniques
- Intra-oral soft tissue dissection and suturing techniques
- Control of haemorrhage

**Professional Skills**
No content

### Stone Retrieval

**Objective**
To be able to assess a patient presenting with a neck swelling either acutely or in the outpatient clinic
To be able to formulate a differential diagnosis and an investigation and management plan
To be able to treat the patient appropriately up to and including operative intervention if appropriate
To be able to communicate the above information at the required level to patients/carers/other team members

**Knowledge**
- Causes of intermittent/persistent swelling of major salivary gland
- Differential diagnosis
- Investigations
- Methods of medical and principles surgical management
- Anatomy of lip
- Anatomy of trigeminal nerve and infiltration / nerve block anaesthesia
**Neoplasm Minor Salivary Gland**

**Objective**
- To be able to assess a patient presenting with a neck swelling either acutely or in the outpatient clinic
- To be able to formulate a differential diagnosis and an investigation and management plan
- To be able to treat the patient appropriately up to and including operative intervention if appropriate
- To be able to communicate the above information at the required level to patients/carers/other team members

**Knowledge**
- Causes of intermittent/persistent swelling of major salivary gland
- Differential diagnosis
- Investigations
- Methods of medical and principles surgical management
- Anatomy of lip
- Anatomy of trigeminal nerve and infiltration / nerve block anaesthesia
- Potential complications
- Anatomy of submandibular / sublingual gland lingual nerve and and oral cavity
- Anatomy of trigeminal nerve and infiltration / nerve block anaesthesia
- Investigations including radiographs
- Anatomy of oral cavity, palate and minor salivary glands
- Differential diagnosis and pathology of salivary gland lesions
- Methods of local flap repair of palate

**Clinical Skills**
- Ability to take accurate relevant history
- Clinical examination of the neck and salivary glands
- FNAC technique
- Treatment of acute infected swelling

**Technical Skills**
- Excision of neoplasm of minor salivary gland:
- Local anaesthetic techniques
- Biopsy techniques
- Excision and local flap repair
| No content | No content |
# Head and Neck Cancer

## Oro-Pharyngeal Cancer

### Objective
- To be able to assess a patient presenting either acutely or in the out-patient clinic
- To be able to formulate a differential diagnosis and an investigation and management plan
- To be able to treat the patient appropriately up to and including operative intervention if appropriate
- To be able to communicate the above information at the required level to patients/carers/other team members

### Knowledge
- Aetiological factors and differential diagnosis
- Specialised investigations
- Anatomy and physiology of mouth, jaws and face
- Pathology and modes of invasion / spread of common oro-facial malignancies
- Interpretation of radiographs / scans
- Common access techniques to oral and jaw cancers
- Common excisional techniques for oro-facial cancer including conservation surgery
- Requirements for functional rehabilitation
- Potential complications
- Alternatives to surgical treatment
- Anatomy and physiology of face, orbit and skull
- Understanding of mode of orbital spread of cancer
- Common excisional techniques for orbital cancer including conservation surgery
- Access techniques to orbitofacial lesions
- Individual steps to orbital exenteration
- Requirements for rehabilitation

### Clinical Skills
- History and examination of the patient with head and neck cancer
- FNAC/biopsy techniques
- Endoscopy techniques
- Ability to formulate treatment plan
- Carry out appropriate surgery according to competency
- Post-operative care and follow-up
- Demonstrate ability to function as part of a multidisciplinary team

### Technical Skills
- Biopsy techniques, incisional FNA trucut
- EUA
- FNA of neck nodes

**Excision of Oral / Oropharyngeal or Jaw Malignancy:**
- Aseptic preparation
- Sharp and blunt dissection of soft tissues
- Osteotomy technique and plate handling skills
- Safe isolation of tumour
- Safe adequate excision of tumour in three dimensions
- Preservation of vital structures
- Control of haemorrhage
- Appropriate drain placement and wound closure

**Orbital Exenteration:**
- Aseptic preparation
- Sharp and blunt dissection of soft tissues
- Osteotomy techniques and plate handling skills
- Safe isolation and exenteration of orbital contents
- Skin grafting skills
## Skin Cancer

### Objective

To be able to assess a patient presenting with a skin cancer either acutely or in the out-patient clinic

To be able to formulate a differential diagnosis and an investigation and management plan

To be able to treat the patient appropriately up to and including operative intervention if appropriate

To be able to communicate the above information at the required level to patients/carers/other team members

### Knowledge

- Anatomy of head and neck skin and lines of relaxation
- Awareness of age changes
- Aetiology and pathology of common skin cancers
- Principles of wound healing
- Techniques of skin excision and closure
- Understanding of common reconstructive skin procedures e.g skin grafts, local flaps

### Clinical Skills

- Ability to take a clear and thorough history
- To be able to communicate diagnosis to patient
- Ability to formulate treatment plan
- Institute aftercare and review

### Technical Skills

- Local anaesthetic and sedation techniques
- Carry out of steps of procedure safely and correctly
- Techniques of incisional / excisional biopsy
- Appropriate aseptic preparation
- Identification of lesion relevant vital structures and margin of normal tissue
- Excision of lesion
- Control of haemorrhage
- Techniques of local flap closure
- Appropriate wound closure

### Professional Skills

- No content
Reconstructive Surgery

Harvest of bone graft (non-vascularised bone grafts)

Objective
To be able to assess a patient requiring bone graft.
To be able to choose an anatomical site appropriate to requirements
To be able to harvest bone graft appropriately from either intra or extra oral sites
To be able to communicate this information to patients/carers/other team members

Knowledge
0 Anatomy of mouth, jaws, limbs, pelvis and skull
0 Bone healing
0 Use of alternative materials/methods
0 Advantages/disadvantages of different sites
0 Surgical approaches to different sites
0 Intraoral and extraoral donor sites
0 Risks and complications of procedure
0 Techniques of bone graft harvesting e.g. open versus closed, use of bone trephines

Clinical Skills
0 Selection of appropriate anaesthetic technique
0 Ability to choose site appropriate for graft of required size/type
0 Care of bone graft prior to fixation
0 Ensuring adequate mobilisation of patient post operatively

Technical Skills
0 Safe harvesting of graft of appropriate size/type
0 Repair of donor site
0 Insetting and fixation of graft to recipient site

Professional Skills
No content

Local Skin Flaps

Objective
To be able to assess a patient requiring local skin flap.
Ability to formulate treatment plan involving local skin flap.
To be able to carry out this procedure safely.
To be able to communicate information regarding this procedure to patients/carers/other team members

Knowledge
0 Anatomy of skin of the head and neck
0 Techniques of local flap design and use
0 Understanding the principles of skin tension lines

Clinical Skills
0 Ability to select the most appropriate flap to suit the individual defect
0 Utilising the principles of skin tension lines to the advantage of the surgical repair

Technical Skills
0 Local anaesthesia and analgesia techniques
0 Aseptic preparation
0 Raising, mobilising and insetting local flap
0 Tissue handling and suturing techniques
0 Management of complications of wound healing

Professional Skills
No content
### Aesthetic Surgery

<table>
<thead>
<tr>
<th>Scar Revision / Z-plasty</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective</strong></td>
</tr>
<tr>
<td>To be able to assess a patient requiring scar revision/z-plasty.</td>
</tr>
<tr>
<td>Ability to formulate treatment plan involving scar revision/z-plasty.</td>
</tr>
<tr>
<td>To be able to carry out this procedure safely.</td>
</tr>
<tr>
<td>To be able to communicate information regarding this procedure to patients/carers/other team members</td>
</tr>
<tr>
<td><strong>Knowledge</strong></td>
</tr>
<tr>
<td>0 Anatomy of head and neck skin and lines of relaxation</td>
</tr>
<tr>
<td>0 Pathophysiology of wound healing</td>
</tr>
<tr>
<td>0 Psychology of body dysmorphobia and post-traumatic stress</td>
</tr>
<tr>
<td>0 Techniques of scar revision and disguise</td>
</tr>
<tr>
<td>0 Techniques of non surgical scar modification</td>
</tr>
<tr>
<td><strong>Clinical Skills</strong></td>
</tr>
<tr>
<td>0 Careful patient selection.</td>
</tr>
<tr>
<td><strong>Technical Skills</strong></td>
</tr>
<tr>
<td>0 Aseptic preparation</td>
</tr>
<tr>
<td>0 Tissue handling and suturing techniques</td>
</tr>
<tr>
<td>0 Management of complications of wound healing</td>
</tr>
<tr>
<td><strong>Professional Skills</strong></td>
</tr>
<tr>
<td>No content</td>
</tr>
</tbody>
</table>
4. Intermediate Stage

Four point scales

What the 4 point scale means for Knowledge

1. Knows of  
2. Knows basic concepts  
3. Knows generally  
4. Knows both specifically and broadly

What the 4 point scale means for Clinical Skills and Technical Skills and Procedures

1. Has observed  
2. Can do with assistance  
3. Can do whole but may need assistance  
4. Competent to do whole without assistance, including managing complications
4.1 Overview

Overview of Intermediate Stage

The purpose of the intermediate stage is to allow a trainee to acquire and develop the specialist skills, knowledge and attitude that will allow further progress towards a CCT in the specialty.

The intermediate stage of specialist training will provide increasing exposure to the core aspects of oral and maxillofacial surgery. The aim is to acquire the competencies and specialist surgical skills that will form the basis for safe clinical practice in the generality of the specialty. The logbook should record development of operative skills and any deficiency in experience or competency during ST1 and 2 must be corrected during this period.

Instructional courses in various aspects of the specialty will probably be attended during this time. This will include a microsurgical skills course if not already attended. Attendances at regional study days, national and international conferences will be encouraged. Trainees should seek to develop their experience in audit, teaching, presentations and contributing to the specialty literature.

On completion of ST4 of specialist training the trainee will have acquired the following:

1. Increasing competence in the peri-operative care of the maxillofacial surgical patient
2. Competence in diagnosis and clinical management of most oral and maxillofacial conditions
3. Competence in the operative care of a greater range of oral and maxillofacial conditions (i.e. in addition to those listed for ST1 and 2).

This section gives examples of some other areas of the curriculum that it is

The following problems are commonly encountered and should be managed competently by the end of ST4, up to and including operative intervention if appropriate.

In addition to the conditions identified in the initial phase, trainees in the intermediate stage would be expected to be able to deal with, whether encountered as a result of being ‘on-call’ or working in an out-patient clinic setting the following:

1. Diagnosis and management of patient with developmental deformity of the facial skeleton
2. Diagnosis and management of patient presenting with oro-facial malignancy

During this stage the trainee will gain competence to the level defined in the syllabus in a number of technical skills and procedures. A trainee would be expected to be able to perform all of the procedures listed below without the direct scrubbed assistance or supervision of a trainer in addition to those identified in the initial stage. The list is not exhaustive, although it covers most of the common procedures expected at this stage.

Maxillofacial trauma

1. Open reduction and fixation of symphysis/body/angle of fractured mandible
2. Elevation of fractured zygoma
3. Open reduction and fixation of fractured zygoma
4. Reduction and fixation fractured maxilla (Le Fort I)

Salivary gland surgery
1. Removal of stone from submandibular duct
2. Excision of neoplasm of minor salivary gland
3. Sublingual gland excision
4. Submandibular gland excision
5. Partial/superficial parotidectomy
6. Total conservative parotidectomy
7. Radical parotidectomy

Orthognathic surgery

1. Genioplasty
2. Mandibular ramus osteotomy
3. Le Fort I maxillary osteotomy

Temporomandibular joint surgery

1. Arthrocentesis

Neck surgery

1. Tracheostomy/cricothroidotomy
2. Exploration/ligation of external carotid artery
3. Cervical node biopsy

Reconstructive surgery

1. Harvest of non-vascularised extra-oral bone graft

Aesthetic surgery

1. Scar revision/Z-plasty etc.

Neural surgery

1. Trigeminal nerve cryotherapy/neurectomy/chemolysis (peripheral)
## 4.2 Conditions

### Temporomandibular Disorders

<table>
<thead>
<tr>
<th>Intra-capsular TMJ and condylar head pathology</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective</strong></td>
</tr>
<tr>
<td><em>Can perform complete task without direct supervision of scrubbed trainer.</em></td>
</tr>
<tr>
<td><strong>Knowledge</strong></td>
</tr>
<tr>
<td>0 Applied anatomy of temporomandibular joint</td>
</tr>
<tr>
<td>0 Causes of TMJ/capsular/meniscal pathology</td>
</tr>
<tr>
<td>0 Procedures available</td>
</tr>
<tr>
<td>0 Indications for open surgery</td>
</tr>
<tr>
<td>0 Potential complications</td>
</tr>
<tr>
<td><strong>Clinical Skills</strong></td>
</tr>
<tr>
<td>0 Identification of relevant instruments and support staff</td>
</tr>
<tr>
<td><strong>Technical Skills</strong></td>
</tr>
<tr>
<td>0 Approaches to the TMJ and mandibular condyle</td>
</tr>
<tr>
<td><strong>Professional Skills</strong></td>
</tr>
<tr>
<td><em>No content</em></td>
</tr>
</tbody>
</table>
Cranio Maxillofacial Trauma

Facial Fractures

**Nasal Fractures**

**Objective**
To be able to assess an injured patient presenting either acutely or in the out-patient clinic
To be able to formulate a differential diagnosis and an investigation and management plan
To be able to treat the patient appropriately up to and including operative intervention if appropriate
To be able to communicate the above information at the required level to patients/carers/other team members

**Knowledge**
- Aetiology of facial trauma
- Priorities of management
- Assessment of airway and level of consciousness (Glasgow coma scale)
- Signs and symptoms of fractures of facial skeleton
- Eyes/ears assessment
- Investigations and radiographic interpretation
- Anatomy of mouth, jaws, teeth and supporting structures and relevance dental occlusion where appropriate
- Anatomy of trigeminal nerve and infiltration / nerve block anaesthesia
- Classification of dental trauma and dento-alveolar fractures
- Assessment of head injury and cranial nerve function
- Aetiology
- Interpretation of radiographs
- Potential complications
- Pharmacology and therapeutics of postoperative analgesia
- Anatomy of facial skeleton
- Physiology of nasal cavity
- Anatomy of scalp, facial skeleton, orbit and contents
- Anatomy of eyelids
- Classification of facial fractures
- Physiology of sight and oculomotor function
- Available techniques

**Clinical Skills**
- General assessment of the traumatised patient
- Assessment and examination of patient with facial trauma
- Airway management and emergency treatment of facial trauma
- Ability to formulate a treatment plan and prioritise management
- Pain control /prevention of infection
- Infiltration / nerve block anaesthesia

**Technical Skills**
- Clinical examination of facial skeleton and cranial nerves
- Carry out of steps of procedure safely and correctly
- Manipulation of nasal bones and septum
- Management of epistaxis
- Nasal packing and external splintage

**Professional Skills**
- No content

**Lacrimal/Parotid duct injury**

**Objective**
To be able to identify a patient who has sustained these injuries.
To be alert for the potential for these injuries to occur.
To be able to carry out these procedures safely and competently.

**Knowledge**
- Anatomy and physiology of parotid / lacrimal glands
- Appropriate investigations
- Principles of stenting of duct

**Clinical Skills**
- Examination of cranial nerves / recognition of case at risk
- Examination of eyelids and lacrimal apparatus
- Identify relevant instruments
- Identification of key structures

**Technical Skills**
- Use of loupes / operating microscope
- Surgical repair under magnification
- Ability to stent duct

**Professional Skills**
No content

---

**Fracture of mandibular condyle**

**Objective**
To be able to identify a patient who has sustained this injury.
To be alert for the potential for this injury to occur.
To understand the principles of surgical management of this injury.
To be able to carry out these procedures safely and competently

**Knowledge**
- Anatomy of facial skeleton, TM joint, parotid gland, facial nerve
- Classification of condylar fractures
- Assessment of head injury and cranial nerve function
- Dental occlusion
- Selection and interpretation of relevant imaging
- Understanding the benefits and indications of both open and closed treatments
- Potential complications long and short term

**Clinical Skills**
- Ability to correctly interpret physical signs and relevant imaging
- Clinical examination of teeth, oral cavity, facial skeleton and cranial nerves
- Demonstrates clinical judgment appropriate to injury and patient needs

**Technical Skills**
Closed reduction:
- Carry out of steps of procedure safely and correctly
- Techniques for removal of damaged teeth / retained roots
- Techniques of intermaxillary fixation

Open Reduction:
- Carry out of steps of procedure safely and correctly
- Techniques for removal of damaged teeth / retained roots
- Techniques for exposure of fracture site and manipulation of condylar fragment
- Plate handling skills
- Techniques of intermaxillary fixation

**Professional Skills**
No content

---

**Fracture of maxilla**

**Objective**
To be able to identify a patient who has sustained this injury.
To be alert for the potential for this injury to occur.
To understand the principles of surgical management of this injury.
To be able to carry out these procedures safely and competently

**Knowledge**
- Anatomy of facial skeleton
- Classification of mid -facial fractures
<table>
<thead>
<tr>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bone healing</td>
</tr>
<tr>
<td>Head injury and cranial nerve function</td>
</tr>
<tr>
<td>Dental occlusion</td>
</tr>
<tr>
<td>Available techniques e.g. open fixation, closed fixation techniques</td>
</tr>
<tr>
<td>Potential complications</td>
</tr>
<tr>
<td>Awareness of possibility of other associated fractures</td>
</tr>
<tr>
<td>Understanding the role of the maxillofacial technician</td>
</tr>
</tbody>
</table>

**Clinical Skills**

- Systematic clinical examination of teeth, oral cavity, facial skeleton and cranial nerves
- Interpretation of radiographs/scans
- Assessment of head injury and cranial nerve function
- Selection of treatment plan appropriate to the patient's injury
- An awareness of other factors affecting timing of surgery
- Involving the maxillofacial technician in treatment planning

**Technical Skills**

- Carry out of steps of procedure safely and correctly
- Techniques for removal of damaged teeth / retained roots
- Techniques for exposure of fracture sites and reduction of fragments
- Plate handling skills
- Techniques of intermaxillary fixation
- Techniques of cranio-maxillary fixation

**Professional Skills**

No content

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**Fracture of orbital floor**

**Objective**

To be able to identify a patient who has sustained this injury.
To be alert for the potential for this injury to occur.
To understand the principles of surgical management of this injury.
To be able to carry out these procedures safely and competently

**Knowledge**

- Anatomy and physiology of facial skeleton, orbit and contents
- Awareness of head injury and cranial nerve function
- Potential for complications involving sight and early involvement where appropriate of ophthalmologists/orthoptists
- Surgical approaches to the orbit
- Available techniques for orbital wall reconstruction
- Potential complications

**Clinical Skills**

- Clinical examination of eyes, facial skeleton and cranial nerves
- Assessment of head injury and cranial nerve function
- Choice of appropriate surgical technique
- Interpretation of radiographs/scans

**Technical Skills**

- Carry out of steps of procedure safely and correctly
- Assessment of eye function
- Techniques for approach to orbital floor
- Safe exposure of fracture sites and reduction of fragments
- Bone grafting and plating skills

**Professional Skills**

No content

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**Dental Trauma and dento-alveolar fractures**

**Objective**

To be able to assess an injured patient presenting either acutely or in the out-patient clinic.
To be able to formulate a differential diagnosis and an investigation and management plan.
To be able to treat the patient appropriately up to and including operative intervention if appropriate.
To be able to communicate the above information at the required level to patients/carers/other team members.
Knowledge
0 Aetiology of facial trauma
0 Priorities of management
0 Assessment of airway and level of consciousness (Glasgow coma scale)
0 Signs and symptoms of fractures of facial skeleton
0 Eyes/ears assessment
0 Investigations and radiographic interpretation
0 Anatomy of mouth, jaws, teeth and supporting structures
0 Anatomy of trigeminal nerve and infiltration / nerve block anaesthesia
0 Classification of dental trauma and dento-alveolar fractures
0 Assessment of head injury and cranial nerve function
0 Aetiology
0 Interpretation of radiographs
0 Potential complications
0 Pharmacology and therapeutics of postoperative analgesia
0 Anatomy of facial skeleton
0 Physiology of nasal cavity
0 Anatomy of scalp, facial skeleton, orbit and contents
0 Anatomy of eyelids
0 Classification of facial fractures
0 Physiology of sight and occulomotor function
0 Available techniques
0 Anatomy of facial skeleton, teeth and supporting structures
0 Dental occlusion

Clinical Skills
0 General assessment of the traumatised patient
0 Assessment and examination of patient with facial trauma
0 Airway management and emergency treatment of facial trauma
0 Ability to formulate a treatment plan and prioritise management
0 Pain control / prevention of infection
0 Infiltration / nerve block anaesthesia

Technical Skills
0 Clinical examination of oral cavity, facial skeleton and cranial nerves
0 Local anaesthetic and sedation techniques
0 Carry out of steps of procedure safely and correctly
0 Techniques for removal of damaged teeth/retained roots
0 Techniques of preservation of damaged teeth, reduction and fixation
0 Intra-oral soft tissue handling and suturing techniques

Professional Skills
No content

Fractured Zygoma

Objective
To be able to assess an injured patient presenting either acutely or in the out-patient clinic
To be able to formulate a differential diagnosis and an investigation and management plan
To be able to treat the patient appropriately up to and including operative intervention if appropriate
To be able to communicate the above information at the required level to patients/carers/other team members

Knowledge
0 Aetiology of facial trauma
0 Priorities of management
0 Assessment of airway and level of consciousness (Glasgow coma scale)
0 Signs and symptoms of fractures of facial skeleton
0 Eyes/ears assessment
0 Investigations and radiographic interpretation
0 Anatomy of mouth, jaws, teeth and supporting structures
### Fracture of mandible (excluding condyle)

**Objective**
- To be able to assess an injured patient presenting either acutely or in the out-patient clinic
- To be able to formulate a differential diagnosis and an investigation and management plan
- To be able to treat the patient appropriately up to and including operative intervention if appropriate
- To be able to communicate the above information at the required level to patients/carers/other team members

**Knowledge**
- Aetiology of facial trauma
- Priorities of management
- Assessment of airway and level of consciousness (Glasgow coma scale)
- Signs and symptoms of fractures of facial skeleton
- Eyes/ears assessment
- Investigations and radiographic interpretation
- Anatomy of mouth, jaws, teeth and supporting structures
- Anatomy of trigeminal nerve and infiltration / nerve block anaesthesia
- Classification of dental trauma and dento-alveolar fractures
- Assessment of head injury and cranial nerve function
- Aetiology
- Interpretation of radiographs
- Potential complications
- Pharmacology and therapeutics of postoperative analgesia
- Anatomy of facial skeleton
Fractures of Naso-orbito-ethmoid complex

Objective
Can perform complete task without direct assistance of scrubbed trainer.

Knowledge
0 Anatomy of craniofacial skeleton, nasal bones, orbit and contents
0 Classification of facial fractures
0 Assessment of head injury and cranial nerve function
0 Interpretation of radiographs/scans
0 Available techniques
0 Potential complications

0 Anatomy of craniofacial skeleton, frontal bones, nasal bones, orbit and contents
0 Anatomy and physiology of frontal sinus drainage
0 Classification of frontal bone and facial fractures

Clinical Skills
0 Clinical examination of eyes, facial skeleton and cranial nerves
0 Carry out of steps of procedure safely and correctly

Technical Skills
Fractures of naso-orbito-ethmoid complex:

0 Techniques for approach to naso-ethmoid complex
0 Safe exposure of fracture sites and reduction of fragments
0 Bone grafting and plating skills

Fracture of frontal bones and craniofacial fractures:

0 Techniques for approach to frontal bone fractures
0 Safe exposure of fracture sites and reduction of fragments
0 Management of frontal sinus involvement
0 Bone grafting and plating skills

Professional Skills
No content
Fracture of frontal bones and craniofacial fractures

**Objective**  
*Can perform complete task without direct assistance of scrubbed trainer.*

**Knowledge**  
- Anatomy of craniofacial skeleton, nasal bones, orbit and contents  
- Classification of craniofacial fractures  
- Assessment of head injury and cranial nerve function  
- Interpretation of radiographs/scans  
- Available techniques  
- Potential complications  
- Anatomy of craniofacial skeleton, frontal bones, nasal bones, orbit and contents  
- Anatomy and physiology of frontal sinus drainage  
- Classification of frontal bone and craniofacial fractures

**Clinical Skills**  
- Clinical examination of eyes, facial skeleton and cranial nerves  
- Carry out of steps of procedure safely and correctly

**Technical Skills**  
Fractures of naso-orbito-ethmoid complex:  
- Techniques for approach to naso-ethmoid complex  
- Safe exposure of fracture sites and reduction of fragments  
- Bone grafting and plating skills

Fracture of frontal bones and craniofacial fractures:  
- Techniques for approach to frontal bone fractures  
- Safe exposure of fracture sites and reduction of fragments  
- Management of frontal sinus involvement  
- Bone grafting and plating skills

**Professional Skills**  
No content
## Facial pain

### Temporomandibular joint disorders

| Objective | To be able to assess a patient presenting with pain either acutely or in the out-patient clinic  
| To be able to formulate a differential diagnosis and an investigation and management plan  
| To be able to treat the patient appropriately up to and including operative intervention if appropriate  
| To be able to communicate the above information at the required level to patients/carers/other team members |

| Knowledge | 0 Signs and symptoms of TMJ dysfunction  
| 0 Differential diagnosis  
| 0 Investigations and radiographic interpretation  
| 0 Methods of medical and surgical management  
| 0 Relevant pharmacology and therapeutics |

| Clinical Skills | 0 Ability to take a comprehensive pain history  
| 0 Ability to examine TMJ and muscles of mastication  
| 0 Ability to formulate and instigate treatment plan  
| 0 Understanding of potential role of occlusion |

| Technical Skills | 0 Use of TENS devices  
| 0 Use of occlusal adjustment therapy  
| 0 Arthrocentesis, arthograms and arthroscopy  
| 0 Open joint procedures e.g. disc plication, emminectomy |

| Professional Skills | 0 Approaches to the TMJ and zygomatic arch  
| 0 Appropriate wound closure |

## Ankolosis

| Objective | To be able to assess a patient presenting with pain either acutely or in the out-patient clinic  
| To be able to formulate a differential diagnosis and an investigation and management plan  
| To be able to treat the patient appropriately up to and including operative intervention if appropriate  
| To be able to communicate the above information at the required level to patients/carers/other team members |

| Knowledge | 0 Signs and symptoms of TMJ dysfunction  
| 0 Differential diagnosis  
| 0 Investigations and radiographic interpretation  
| 0 Methods of medical and surgical management  
| 0 Relevant pharmacology and therapeutics |

| Clinical Skills | 0 Ability to take a comprehensive pain history  
| 0 Ability to examine TMJ and muscles of mastication  
| 0 Ability to formulate and instigate treatment plan  
| 0 Understanding of potential role of occlusion |

| Technical Skills | 0 Use of TENS devices  
| 0 Use of occlusal adjustment therapy |
0 Arthrocentesis, arthograms and arthroscopy
0 Open joint procedures e.g. disc plication, emminectomy

**Professional Skills**
No content

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**Disc displacement**

**Objective**
To be able to assess a patient presenting with pain either acutely or in the out-patient clinic
To be able to formulate a differential diagnosis and an investigation and management plan
To be able to treat the patient appropriately up to and including operative intervention if appropriate
To be able to communicate the above information at the required level to patients/carers/other team members

**Knowledge**
0 Signs and symptoms of TMJ dysfunction
0 Differential diagnosis
0 Investigations and radiographic interpretation
0 Methods of medical and surgical management
0 Relevant pharmacology and therapeutics

**Clinical Skills**
0 Ability to take a comprehensive pain history
0 Ability to examine TMJ and muscles of mastication
0 Ability to formulate and instigate treatment plan
0 Understanding of potential role of occlusion

**Technical Skills**
0 Use of TENS devices
0 Use of occlusal adjustment therapy
0 Arthrocentesis, arthograms and arthroscopy
0 Open joint procedures e.g. disc plication, emminectomy

**Professional Skills**
No content
## Peri-operative care

<table>
<thead>
<tr>
<th>Peri-operative care</th>
<th>Objective</th>
<th>To ensure the trainee has reached a level of competence in peri-operative care. The following should apply to each of the procedures in the common conditions and operative skills category.</th>
</tr>
</thead>
</table>
| Knowledge | Pre-operative Care | 0 Indications for surgery  
0 Required preparation for surgery to include necessary pre-operative investigations  
0 Outcomes and complications of surgery  
0 Knowledge of the admission process |
| | Intra-operative care | 0 Anatomy to be encountered during procedure  
0 Steps involved in operative procedure  
0 Knowledge of alternative procedures in case of encountering difficulties |
| | Post-operative care | 0 Potential complications of procedure  
0 Outcomes of procedure  
0 Likely post-operative progress from disease process and intervention  
0 Physiological and pathological changes in condition as a result of intervention |
| Clinical Skills | Pre-operative care | 0 Synthesis of history and examination into operative management plan  
0 Ability to explain procedure and outcomes to patient and parents at an appropriate level  
0 To be able to take informed consent  
0 To construct an appropriate theatre list  
0 Where appropriate to communicate with relevant other members of the theatre team e.g. anaesthetist, scrub nurse |
| | Intra-operative care | 0 Appropriate use of assistance  
0 Communication with other members of theatre team |
| | Post-operative Care | 0 Assessment of patient and physiological parameters  
0 Appropriate intervention to deal with changing parameters  
0 Communication skills for dealing with team members, patients and carers  
0 Ability to prioritise interventions  
0 Recognition of complications of procedure |
| Technical Skills | 0 Necessary hand-eye dexterity to complete procedure |
| Professional Skills | No content |
Salivary gland / Neck swellings

Salivary gland swellings

Mucous cyst of sublingual saliva gland/ranula

Objective
To be able to assess a patient presenting with a neck swelling either acutely or in the out-patient clinic
To be able to formulate a differential diagnosis and an investigation and management plan
To be able to treat the patient appropriately up to and including operative intervention if appropriate
To be able to communicate the above information at the required level to patients/carers/other team members

Knowledge
0 Anatomy and physiology of major salivary glands
0 Anatomy of oral cavity and lingual nerve
0 Indications and techniques
0 Potential complications
0 Anatomy of facial and lingual nerves
0 Investigations
0 Indications and techniques
0 Anatomy of facial nerve
0 Investigations / FNAC technique
0 Indications for procedures and techniques

Clinical Skills
0 Identification of relevant instruments and support staff

Technical Skills
Sublingual gland excision:
0 Intra-oral dissection
0 Identification and protection of submandibular duct/lingual nerve

Professional Skills
No content

Tumour of sublingual salivary gland

Objective
To be able to assess a patient presenting with a neck swelling either acutely or in the out-patient clinic
To be able to formulate a differential diagnosis and an investigation and management plan
To be able to treat the patient appropriately up to and including operative intervention if appropriate
To be able to communicate the above information at the required level to patients/carers/other team members

Knowledge
0 Anatomy and physiology of major salivary glands
0 Anatomy of oral cavity and lingual nerve
0 Indications and techniques
0 Potential complications
0 Anatomy of facial and lingual nerves
0 Investigations
0 Indications and techniques
0 Anatomy of facial nerve
0 Investigations / FNAC technique
0 Indications for procedures and techniques
### Clinical Skills
0 Identification of relevant instruments and support staff

### Technical Skills
Sublingual gland excision:
0 Intra-oral dissection
0 Identification and protection of submandibular duct/lingual nerve

### Professional Skills
No content

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**Obstructive/inflammatory disease of submandibular gland**

<table>
<thead>
<tr>
<th>Objective</th>
<th>Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>To be able to assess a patient presenting with a neck swelling either acutely or in the out-patient clinic</td>
<td>0 Anatomy and physiology of major salivary glands</td>
</tr>
<tr>
<td>To be able to formulate a differential diagnosis and an investigation and management plan</td>
<td>0 Anatomy of oral cavity and lingual nerve</td>
</tr>
<tr>
<td>To be able to treat the patient appropriately up to and including operative intervention if appropriate</td>
<td>0 Indications and techniques</td>
</tr>
<tr>
<td>To be able to communicate the above information at the required level to patients/carers/other team members</td>
<td>0 Potential complications</td>
</tr>
</tbody>
</table>

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**Clinical Skills**
0 Identification of relevant instruments and support staff

**Technical Skills**
Submandibular gland excision:
0 Aseptic preparation
0 Skin incision and approach to gland
0 Identification and protection of facial nerve
0 Dissection of gland and ligation of duct
0 Appropriate drainage and closure

**Professional Skills**
No content

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**Tumour of Submandibular Gland**

<table>
<thead>
<tr>
<th>Objective</th>
<th>Knowledge</th>
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</thead>
<tbody>
<tr>
<td>To be able to assess a patient presenting with a neck swelling either acutely or in the out-patient clinic</td>
<td>0 Anatomy and physiology of major salivary glands</td>
</tr>
<tr>
<td>To be able to formulate a differential diagnosis and an investigation and management plan</td>
<td>0 Anatomy of oral cavity and lingual nerve</td>
</tr>
<tr>
<td>To be able to treat the patient appropriately up to and including operative intervention if appropriate</td>
<td>0 Indications and techniques</td>
</tr>
<tr>
<td>To be able to communicate the above information at the required level to patients/carers/other team members</td>
<td>0 Potential complications</td>
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<table>
<thead>
<tr>
<th>Knowledge</th>
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</thead>
<tbody>
<tr>
<td>0 Anatomy of facial and lingual nerves</td>
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<tr>
<td>0 Investigations</td>
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<tr>
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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>0 Anatomy of facial nerve</td>
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<tr>
<td>0 Investigations / FNAC technique</td>
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<td>0 Indications for procedures and techniques</td>
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<table>
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<tbody>
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<td>Submandibular gland excision:</td>
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<td>0 Identification and protection of facial nerve</td>
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<tr>
<th>Professional Skills</th>
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<tbody>
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</table>
Obstructive or Inflammatory disease

Objective
To be able to assess a patient presenting with a neck swelling either acutely or in the outpatient clinic
To be able to formulate a differential diagnosis and an investigation and management plan
To be able to treat the patient appropriately up to and including operative intervention if appropriate
To be able to communicate the above information at the required level to patients/carers/other team members

Knowledge
0 Anatomy and physiology of major salivary glands
0 Anatomy of oral cavity and lingual nerve
0 Indications and techniques
0 Potential complications

0 Anatomy of facial and lingual nerves
0 Investigations
0 Indications and techniques

0 Anatomy of facial nerve
0 Investigations / FNAC technique
0 Indications for procedures and techniques

Clinical Skills
0 Identification of relevant instruments and support staff

Technical Skills
Parotidectomy:
0 FNAC technique
0 Aseptic preperation
0 Skin incisions and approaches to facial nerve
0 Identification and protection of facial nerve
0 Dissection of gland/tumour and ligation of duct
0 Appropriate drainage and closure
0 Neural repair and grafting

Professional Skills
No content

Benign and Malignant Tumour

Objective
To be able to assess a patient presenting with a neck swelling either acutely or in the outpatient clinic
To be able to formulate a differential diagnosis and an investigation and management plan
To be able to treat the patient appropriately up to and including operative intervention if appropriate
To be able to communicate the above information at the required level to patients/carers/other team members
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<td>0 Neural repair and grafting</td>
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<tbody>
<tr>
<td>No content</td>
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</tbody>
</table>
Head and Neck Cancer

Management of Cancer of the head and neck region

Objective
To be able to assess a patient presenting either acutely or in the out-patient clinic
To be able to formulate a differential diagnosis and an investigation and management plan
To be able to treat the patient appropriately up to and including operative intervention if appropriate
To be able to communicate the above information at the required level to patients/carers/other team members
Can perform complete task without direct assistance of scrubbed trainer.

Knowledge
0 Aetiological factors and differential diagnosis
0 Specialised investigations
0 Anatomy and physiology of mouth, jaws and face
0 Pathology and modes of invasion/spread of common oro-facial malignancies
0 Interpretation of radiographs/scans
0 Common access techniques to oral and jaw cancers
0 Common excisional techniques for orofacial cancer including conservation surgery
0 Requirements for functional rehabilitation
0 Potential complications
0 Alternatives to surgical treatment
0 Anatomy and physiology of face, orbit and skull
0 Understanding of mode of orbital spread of cancer
0 Common excisional techniques for orbital cancer including conservation surgery
0 Access techniques to orbitofacial lesions
0 Individual steps to orbital exenteration
0 Requirements for rehabilitation

Clinical Skills
0 History and examination of the patient with head and neck cancer
0 FNAC/biopsy techniques
0 Endoscopy techniques
0 Ability to formulate treatment plan
0 Carry out appropriate surgery according to competency
0 Post-operative care and follow-up
0 Identify relevant instruments and support staff

Technical Skills
Excision of Oral / Oropharyngeal or Jaw Malignancy:
0 Aseptic preparation
0 Sharp and blunt dissection of soft tissues
0 Osteotomy technique and plate handling skills
0 Safe isolation of tumour
0 Safe adequate excision of tumour in three dimensions
0 Preservation of vital structures
0 Control of haemorrhage
0 Appropriate drain placement and wound closure

Orbital Exenteration:
0 Aseptic preparation
0 Sharp and blunt dissection of soft tissues
0 Osteotomy techniques and plate handling skills
0 Safe isolation and exenteration of orbital contents
0 Skin grafting skills
0 Methods of temporary obturation and/or reconstruction
<table>
<thead>
<tr>
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Facial Deformity

<table>
<thead>
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<tr>
<td>0 Classification of malocclusion/deformity</td>
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<td>0 History and examination of the patient with facial deformity</td>
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<td>0 Ability to formulate treatment plan</td>
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<td>0 Post-operative care and follow-up</td>
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### Orthognathic Surgery

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<td>0 Classification and assessment of facial deformity</td>
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<tr>
<td>0 Psychology of facial deformity</td>
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<tr>
<td>0 Norms of facial proportions</td>
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<tr>
<td>0 Techniques of cephalometric analysis</td>
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<tr>
<td>0 Potential complications</td>
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<tr>
<td><strong>Clinical Skills</strong></td>
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<td>0 History and examination of the patient with facial deformity</td>
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<tr>
<td><strong>Technical Skills</strong></td>
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<tr>
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<tr>
<td>0 Identification and protection of mental nerves</td>
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<td>0 Plating and fixation skills</td>
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<th>Maxillary osteotomy (Le Fort I and variants)</th>
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<td>Can perform complete task without direct supervision of scrubbed trainer</td>
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</table>

### Zygomatic osteotomy

**Objective**

*Can perform complete task without direct supervision of scrubbed trainer*

**Knowledge**

| 0 Developmental anatomy of facial skeleton / orbits |  
| 0 Classification and assessment of facial deformity |  
| 0 Psychology of facial deformity |  
| 0 Norms of facial proportions |  
| 0 Techniques of cephalometric analysis |  
| 0 Potential complications |  

**Clinical Skills**

| 0 History and examination of the patient with facial deformity |  
| 0 Ability to formulate treatment plan |  
| 0 Orthognathic surgery techniques |  
| 0 Post-operative care and follow-up |  
| 0 Identification of relevant instruments and support staff |  

**Technical Skills**

| 0 Approaches to the zygoma |  
| 0 Safe use of power tools |  
| 0 Plating and fixation skills |  
| 0 Control of haemorrhage |  

**Professional Skills**

*No content*
Reconstructive Surgery

Harvest of bone graft (Extra-oral sites)

Objective
Can perform complete task without direct assistance of scrubbed trainer.

Knowledge
- Anatomy and physiology of limbs, pelvis and skull
- Understanding of bone healing
- Advantages and disadvantages of various sites
- Use of alternative procedures
- Potential complications

Clinical Skills
- Identification of relevant instruments and support staff
- Aseptic preparation
- Skin incisions and approaches to bone graft sites
- Use of bone instruments / harvesting of bone
- Insetting and fixation of bone graft
- Management of donor site and closure

Technical Skills
No content

Professional Skills
No content

Pedicled flaps

Objective
Can perform complete task without direct assistance of scrubbed trainer.

Knowledge
- Anatomy of donor sites and principles of blood supply to skin, fascia and muscle
- Indications for different types of flap
- Limitation of techniques
- Potential complications

Clinical Skills
- Identification of relevant instruments and support staff
- Raising of pedicled cutaneous, muscle and myocutaneous flaps
- Insetting of flap
- Management of donor site and closure
- Management of complications

Technical Skills
No content

Professional Skills
No content

Free tissue transfer

Objective
Can perform complete task without direct assistance of scrubbed trainer

Knowledge
- Anatomy of donor sites and principles of blood supply to skin, fascia and muscle
- Anatomy of neck vessels
- Indications for different types of flap
- Principles of microvascular anastomosis
- Limitation of techniques
- Potential complications

Clinical Skills
- Identification of relevant instruments and support staff
- Raising of soft tissue and composite flaps
- Insetting of flap
- Use of operating microscope and loupes
- Preparation of donor and recipient vessels

Technical Skills
No content

Professional Skills
No content
0 Arterial and venous microvasacular anastomosis
0 Management of donor site and closure
0 Management of complications

**Technical Skills**
No content

**Professional Skills**
No content
5. Final Stage

Four point scales

What the 4 point scale means for Knowledge

1. Knows of
2. Knows basic concepts
3. Knows generally
4. Knows both specifically and broadly

What the 4 point scales mean for Clinical Skills and Technical Skills and Procedures

1. Has observed
2. Can do with assistance
3. Can do whole but may need assistance
4. Competent to do whole without assistance, including managing complications
5.1 Overview

Overview of the Final Stage

The purpose of the final stage is to allow a trainee to acquire and develop the specialist skills, knowledge and attitude that will allow final progress towards and achievement of a CCT in the specialty, with the beginning of special interest training as appropriate.

The final stage of specialist training will complete exposure to the essential aspects of oral and maxillofacial surgery and increase exposure to special interest areas of choice. By the end of ST6 all trainees including those who have followed an academic pathway should have acquired the competencies and specialist surgical skills that will form the basis for safe clinical practice in the generality of the specialty. The logbook should record further development of operative skills and any deficiency in experience or competency during levels 1-4 must be corrected during this period. Most trainees will identify areas of special interest during this final period of essential training and individual logbooks will probably reflect a bias towards these chosen aspects of clinical practice.

Typical areas of special interest relevant to oral and maxillofacial surgery are:

- Craniofacial trauma and secondary reconstruction
- Craniofacial surgery for congenital and acquired deformity
- Osseodistraction of the facial skeleton
- Cleft lip and palate
- Head and neck oncology
- Advanced reconstruction of the mouth, face and jaws (including free tissue transfer)
- Osseointegrated implant techniques and surgery for rehabilitation of the head and neck cancer patient
- Aesthetic maxillofacial surgery
- Temporomandibular joint surgery and reconstruction

Attendance at relevant courses and regional study days, national and international conferences will be expected. Trainees should continue to develop their experience in audit, research, teaching, presentations and contributing to the specialty literature.

By the end of ST6 the trainee will have encountered and should be able manage competently the following conditions, in addition to those in the preceding stages, up to and including operative intervention:

- Diagnosis and management of patient requiring extra-oral and intra-oral osseointegrated implant rehabilitation
- Diagnosis and assessment of patient requiring rhinoplasty

During this stage the trainee will gain competence to the level defined in the syllabus in a number of technical skills and procedures. A trainee would be expected to be able to perform all of the procedures listed below without the direct scrubbed assistance or supervision of a trainer in addition to those identified in the initial and intermediate stages. The list is not exhaustive, although it covers most of the common procedures expected at this stage.

Maxillofacial trauma

- Repair of lacrimal/parotid duct injury
- Repair of facial nerve injury
- Open reduction and fixation of symphysis/body/angle of fractured mandible
- Open reduction and internal fixation of condylar neck of mandible
- Elevation of fractured zygoma
• Open reduction and fixation of fractured zygoma
• Orbital floor/wall exploration and repair/graft
• Reduction and fixation fractured maxilla (Le Fort II/III)
• Open reduction and fixation of naso-orbito-ethmoid complex fracture
• Reduction and fixation of frontal bone fracture

**Salivary gland surgery**

• Removal of stone from submandibular duct
• Excision of neoplasm of minor salivary gland
• Sublingual gland excision
• Submandibular gland excision
• Partial/superficial parotidectomy
• Total conservative parotidectomy
• Radical parotidectomy

**Orthognathic surgery**

• Genioplasty
• Mandibular ramus osteotomy
• Le Fort I maxillary osteotomy
• Le Fort II/III maxillary osteotomy
• Zygomatic/orbital osteotomy
• Mandibular osteodistraction procedures
• Maxillary osteodistraction procedures

**Temporomandibular joint surgery**

• Arthrocentesis
• Arthroscopy
• Open operation on capsule/disc/condylar head
• Surgery for recurrent TMJ dislocation
• Excision of benign odontogenic tumours
• Excision of fibro-osseous jaw tumours/dysplasia

**Neck surgery**

• Excision of lymphoepithelial (branchial) cyst
• Excision of thyroglossal cyst/fistula
• Selective neck dissection
• Comprehensive neck dissection

**Resection of malignant tumours**

• Excision of tongue/oro-pharyngeal tumour
• Resection of mandible/maxilla
• Orbital exenteration
• Reconstructive surgery

**Harvest of skin graft**

• Harvest of non-vascularised extra-oral bone graft
• Mandibular reconstruction with non-vascularised bone graft
• Pedicled muscle/fascial/myocutaneous flap
• Vascularised free tissue transfer

**Osseointegrated implant surgery**
• Insertion of extra-oral implants/abutments
• Insertion of intra-oral implants/abutments
• Sinus lift/onlay graft

Aesthetic surgery

• Cervico-facial liposuction
• Rhinoplasty
• Zygomatic/chin/nasal onlays
• Pinnaplasty
• Blepharoplasty
• Browlift

Neural surgery

• Harvest of peripheral nerve (e.g. sural)
• Lingual nerve exploration/repair
• Facial nerve repair/graft
# 5.2 Conditions

## Cranio Maxillofacial Trauma

### Facial Fractures

#### Nasal Fractures

**Objective**

- To be able to assess an injured patient presenting either acutely or in the out-patient clinic
- To be able to formulate a differential diagnosis and an investigation and management plan
- To be able to treat the patient appropriately up to and including operative intervention if appropriate
- To be able to communicate the above information at the required level to patients/carers/other team members

**Knowledge**

- Aetiology of facial trauma
- Priorities of management
- Assessment of airway and level of consciousness (Glasgow coma scale)
- Signs and symptoms of fractures of facial skeleton
- Eyes/ears assessment
- Investigations and radiographic interpretation

- Anatomy of mouth, jaws, teeth and supporting structures and relevance to dental occlusion where appropriate
- Anatomy of trigeminal nerve and infiltration / nerve block anaesthesia
- Classification of dental trauma and dento-alveolar fractures
- Assessment of head injury and cranial nerve function
- Aetiology
- Interpretation of radiographs
- Potential complications
- Pharmacology and therapeutics of postoperative analgesia

- Anatomy of facial skeleton
- Physiology of nasal cavity

- Anatomy of scalp, facial skeleton, orbit and contents
- Anatomy of eyelids
- Classification of facial fractures
- Physiology of sight and ocularmotor function
- Available techniques

- Anatomy of facial skeleton, teeth and supporting structures
- Dental occlusion

**Clinical Skills**

- General assessment of the traumatised patient
- Assessment and examination of patient with facial trauma
- Airway management and emergency treatment of facial trauma
- Ability to formulate a treatment plan and prioritise management
- Pain control /prevention of infection
- Infiltration / nerve block anaesthesia

**Technical Skills**

- Clinical examination of facial skeleton and cranial nerves
- Carry out of steps of procedure safely and correctly
- Manipulation of nasal bones and septum
- Management of epistaxis
- Nasal packing and external splintage

**Professional Skills**

- No content

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**Fractured Zygoma**
**Objective**
To be able to assess an injured patient presenting either acutely or in the out-patient clinic
To be able to formulate a differential diagnosis and an investigation and management plan
To be able to treat the patient appropriately up to and including operative intervention if appropriate
To be able to communicate the above information at the required level to patients/carers/other team members

**Knowledge**
- Aetiology of facial trauma
- Priorities of management
- Assessment of airway and level of consciousness (Glasgow coma scale)
- Signs and symptoms of fractures of facial skeleton
- Eyes/ears assessment
- Investigations and radiographic interpretation
- Anatomy of mouth, jaws, teeth and supporting structures
- Anatomy of trigeminal nerve and infiltration / nerve block anaesthesia
- Classification of dental trauma and dento-alveolar fractures
- Assessment of head injury and cranial nerve function
- Anatomy of facial skeleton
- Physiology of nasal cavity
- Anatomy of scalp, facial skeleton, orbit and contents
- Anatomy of eyelids
- Classification of facial fractures
- Physiology of sight and oculomotor function
- Available techniques
- Anatomy of facial skeleton, teeth and supporting structures
- Dental occlusion
- Anatomy of facial skeleton, teeth and supporting structures

**Clinical Skills**
- General assessment of the traumatised patient
- Assessment and examination of patient with facial trauma
- Airway management and emergency treatment of facial trauma
- Ability to formulate a treatment plan and prioritise management
- Pain control / prevention of infection
- Infiltration / nerve block anaesthesia

**Technical Skills**
- Clinical examination of facial skeleton and cranial nerves
- Basic ophthalmic and orthoptic assessment
- Carry out of steps of procedure safely and correctly
- Techniques of exposure of fracture site(s) and bone manipulation
- Plate handling skills
- Soft tissue handling and suturing techniques

**Professional Skills**
No content

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**Fracture of mandible (excluding condyle)**

**Objective**
To be able to assess an injured patient presenting either acutely or in the out-patient clinic
To be able to formulate a differential diagnosis and an investigation and management plan
To be able to treat the patient appropriately up to and including operative intervention if appropriate
To be able to communicate the above information at the required level to patients/carers/other team members

**Knowledge**
- Aetiology of facial trauma
Fracture of mandibular condyle

**Objective**

*To be able to identify a patient who has sustained this injury.*
*To be alert for the potential for this injury to occur.*
*To understand the principles of surgical management of this injury.*
*To be able to carry out these procedures safely and competently*

**Knowledge**

0 Anatomy of facial skeleton, TM joint, parotid gland, facial nerve
0 Classification of condylar fractures
0 Assessment of head injury and cranial nerve function
0 Dental occlusion
0 Selection and interpretation of relevant imaging
0 Understanding the benefits and indications of both open and closed treatments
0 Potential complications long and short term

**Clinical Skills**

0 Ability to correctly interpret physical signs and relevant imaging
0 Clinical examination of teeth, oral cavity, facial skeleton and cranial nerves
0 Demonstrates clinical judgment appropriate to injury and patient needs
**Technical Skills**

Closed reduction:

- Carry out of steps of procedure safely and correctly
- Techniques for removal of damaged teeth / retained roots
- Techniques of intermaxillary fixation

Open Reduction:

- Carry out of steps of procedure safely and correctly
- Techniques for removal of damaged teeth / retained roots
- Techniques for exposure of fracture site and manipulation of condylar fragment
- Plate handling skills
- Techniques of intermaxillary fixation

**Professional Skills**

No content

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**Fracture of maxilla**

**Objective**

To be able to identify a patient who has sustained this injury.
To be alert for the potential for this injury to occur.
To understand the principles of surgical management of this injury.
To be able to carry out these procedures safely and competently

**Knowledge**

- Anatomy of facial skeleton
- Classification of mid -facial fractures
- Bone healing
- Head injury and cranial nerve function
- Dental occlusion
- Available techniques e.g. open fixation, closed fixation techniques
- Potential complications
- Awareness of possibility of other associated fractures
- Understanding the role of the maxillofacial technician

**Clinical Skills**

- Systematic clinical examination of teeth, oral cavity, facial skeleton and cranial nerves
- Interpretation of radiographs/scans
- Assessment of head injury and cranial nerve function
- Selection of treatment plan appropriate to the patients injury
- An awareness of other factors affecting timing of surgery
- Involving the maxillofacial technician in treatment planning

**Technical Skills**

- Carry out of steps of procedure safely and correctly
- Techniques for removal of damaged teeth / retained roots
- Techniques for exposure of fracture sites and reduction of fragments
- Plate handling skills
- Techniques of intermaxillary fixation
- Techniques of cranio-maxillary fixation

**Professional Skills**

No content

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**Fracture of orbital floor**

**Objective**

To be able to identify a patient who has sustained this injury.
To be alert for the potential for this injury to occur.
To understand the principles of surgical management of this injury.
To be able to carry out these procedures safely and competently

**Knowledge**

- Anatomy and physiology of facial skeleton, orbit and contents
- Awareness of head injury and cranial nerve function
- Potential for complications involving sight and early involvement where appropriate of
Fracture of frontal bones and craniofacial fractures

Objective
Can perform complete task without direct assistance of scrubbed trainer.

Knowledge
- Anatomy of craniofacial skeleton, nasal bones, orbit and contents
- Classification of facial fractures
- Assessment of head injury and cranial nerve function
- Interpretation of radiographs/scans
- Available techniques
- Potential complications
- Anatomy of craniofacial skeleton, frontal bones, nasal bones, orbit and contents
- Anatomy and physiology of frontal sinus drainage
- Classification of frontal bone and facial fractures

Clinical Skills
- Clinical examination of eyes, facial skeleton and cranial nerves
- Carry out of steps of procedure safely and correctly

Technical Skills
Fracture of frontal bones and craniofacial fractures:
- Techniques for approach to frontal bone fractures
- Safe exposure of fracture sites and reduction of fragments
- Management of frontal sinus involvement
- Bone grafting and plating skills

Professional Skills
No content

Fractures of Naso-orbito-ethmoid complex

Objective
Can perform complete task without direct assistance of scrubbed trainer.

Knowledge
- Anatomy of craniofacial skeleton, nasal bones, orbit and contents
- Classification of facial fractures
- Assessment of head injury and cranial nerve function
- Interpretation of radiographs/scans
- Available techniques
- Potential complications
- Anatomy of craniofacial skeleton, frontal bones, nasal bones, orbit and contents
- Anatomy and physiology of frontal sinus drainage
- Classification of frontal bone and facial fractures

Clinical Skills
- Clinical examination of eyes, facial skeleton and cranial nerves
**Dental Trauma and dento-alveolar fractures**

**Objective**
- To be able to assess an injured patient presenting either acutely or in the out-patient clinic
- To be able to formulate a differential diagnosis and an investigation and management plan
- To be able to treat the patient appropriately up to and including operative intervention if appropriate
- To be able to communicate the above information at the required level to patients/carers/other team members

**Knowledge**
- Aetiology of facial trauma
- Priorities of management
- Assessment of airway and level of consciousness (Glasgow coma scale)
- Signs and symptoms of fractures of facial skeleton
- Eyes/ears assessment
- Investigations and radiographic interpretation
- Anatomy of mouth, jaws, teeth and supporting structures
- Anatomy of trigeminal nerve and infiltration / nerve block anaesthesia
- Classification of dental trauma and dento-alveolar fractures
- Assessment of head injury and cranial nerve function
- Aetiology
- Interpretation of radiographs
- Potential complications
- Pharmacology and therapeutics of postoperative analgesia
- Anatomy of facial skeleton
- Physiology of nasal cavity
- Anatomy of scalp, facial skeleton, orbit and contents
- Anatomy of eyelids
- Classification of facial fractures
- Physiology of sight and oculomotor function
- Available techniques

- Anatomy of facial skeleton, teeth and supporting structures
- Dental occlusion

**Clinical Skills**
- General assessment of the traumatised patient
- Assessment and examination of patient with facial trauma
- Airway management and emergency treatment of facial trauma
- Ability to formulate a treatment plan and prioritise management
- Pain control / prevention of infection
- Infiltration / nerve block anaesthesia

**Technical Skills**
- Clinical examination of oral cavity, facial skeleton and cranial nerves
- Local anaesthetic and sedation techniques
- Carry out of steps of procedure safely and correctly
- Techniques for removal of damaged teeth/retained roots
- Techniques of preservation of damaged teeth, reduction and fixation
- Intra-oral soft tissue handling and suturing techniques

**Professional Skills**
## Temporomandibular Disorders

### Reconstruction of temporomandibular joint

**Objective**
*Can perform complete task without direct supervision of scrubbed trainer.*

**Knowledge**
- Applied anatomy of temporomandibular joint and surrounding structures
- Aetiology of TMJ ankylosis
- Aetiology of failure of development of TMJ
- Indications for joint replacement or reconstruction
- Knowledge of alloplastic joint replacements

**Clinical Skills**
- Identification of relevant instruments and support staff

**Technical Skills**
- Approaches to the TMJ and mandibular ramus
- Harvest of costochondral graft
- Bone plating skills
- (Optional: Selection and fitting of alloplastic joint replacement)

**Professional Skills**
*No content*

### Intra-capsular TMJ and condylar head pathology

**Objective**
*Can perform complete task without direct supervision of scrubbed trainer.*

**Knowledge**
- Applied anatomy of temporomandibular joint
- Causes of TMJ/capsular/meniscal pathology
- Procedures available
- Indications for open surgery
- Potential complications

**Clinical Skills**
- Identification of relevant instruments and support staff

**Technical Skills**
- Approaches to the TMJ and mandibular condyle

**Professional Skills**
*No content*
Peri-operative care

Objective
To ensure the trainee has reached a level of competence in peri-operative care. The following should apply to each of the procedures in the common conditions and operative skills category.

Knowledge
Pre-operative Care
- Indications for surgery
- Required preparation for surgery to include necessary pre-operative investigations
- Outcomes and complications of surgery
- Knowledge of the admission process

Intra-operative Care
- Anatomy to be encountered during procedure
- Steps involved in operative procedure
- Knowledge of alternative procedures in case of encountering difficulties

Post-operative Care
- Potential complications of procedure
- Outcomes of procedure
- Likely post-operative progress from disease process and intervention
- Physiological and pathological changes in condition as a result of intervention

Clinical Skills
Pre-operative Care
- Synthesis of history and examination into operative management plan
- Ability to explain procedure and outcomes to patient and parents at an appropriate level
- To be able to take informed consent
- To construct an appropriate theatre list
- Where appropriate to communicate with relevant other members of the theatre team e.g. anaesthetist, scrub nurse

Intra-operative Care
- Appropriate use of assistance
- Communication with other members of theatre team

Post-operative Care
- Assessment of patient and physiological parameters
- Appropriate intervention to deal with changing parameters
- Communication skills for dealing with team members, patients and carers
- Ability to prioritise interventions
- Recognition of complications of procedure

Technical Skills
- Necessary hand-eye dexterity to complete procedure

Professional Skills
- No content
## Orthognathic Surgery

### Osseodistraction techniques

**Objective**  
*Can perform complete task without direct supervision of scrubbed trainer.*

**Knowledge**  
- Developmental anatomy of facial skeleton and facial musculature  
- Classification and assessment of facial deformity  
- Psychology of facial deformity  
- Norms of facial proportions  
- Techniques of cephalometric analysis  
- Theory of osseodistraction  
- Indications for intra-oral and extra-oral osseodistraction  
- Potential complications

**Clinical Skills**  
Identification of relevant equipment and support staff

**Technical Skills**  
Osseodistraction techniques:

- Techniques for placement of intra-oral and extra-oral distractors  
- Safe use of power tools  
- Pinning, plating and fixation skills  
- Post-operative management and supervision during active distraction.

**Professional Skills**  
*No content*
Patient requiring osseointegrated implants

<table>
<thead>
<tr>
<th>Congenital or acquired loss of ear, orbital contents or nose</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective</strong></td>
</tr>
<tr>
<td>To be able to assess a patient requiring implants presenting in the out-patient clinic</td>
</tr>
<tr>
<td>To be able to formulate a differential diagnosis and an investigation and management plan</td>
</tr>
<tr>
<td>To be able to treat the patient appropriately up to and including operative intervention if appropriate</td>
</tr>
<tr>
<td>To be able to communicate the above information at the required level to patients/carers/other team members</td>
</tr>
<tr>
<td><strong>Knowledge</strong></td>
</tr>
<tr>
<td>0 Aetiological factors and differential diagnosis</td>
</tr>
<tr>
<td>0 Specialised investigations</td>
</tr>
<tr>
<td>0 Understanding of principles of osseointegration and facial prostheses</td>
</tr>
<tr>
<td><strong>Clinical Skills</strong></td>
</tr>
<tr>
<td>0 History and examination of the patient with loss of facial tissues</td>
</tr>
<tr>
<td>0 Ability to formulate treatment plan</td>
</tr>
<tr>
<td><strong>Technical Skills</strong></td>
</tr>
<tr>
<td>0 Osseointegration surgery techniques</td>
</tr>
<tr>
<td>0 Post-operative care and follow-up</td>
</tr>
<tr>
<td><strong>Professional Skills</strong></td>
</tr>
<tr>
<td>No content</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Congenital or acquired loss of teeth and/or alveolar supporting tissues for dental prostheses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective</strong></td>
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<tr>
<td>To be able to assess a patient requiring implants presenting in the out-patient clinic</td>
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<tr>
<td>To be able to communicate the above information at the required level to patients/carers/other team members</td>
</tr>
<tr>
<td><strong>Knowledge</strong></td>
</tr>
<tr>
<td>0 Aetiological factors affecting dental loss and alveolar resorption</td>
</tr>
<tr>
<td>0 Specialised investigations and classification of alveolar resorption</td>
</tr>
<tr>
<td>0 Understanding of principles of osseointegration and implant borne/retained dental prostheses</td>
</tr>
<tr>
<td><strong>Clinical Skills</strong></td>
</tr>
<tr>
<td>0 History and examination of the patient with dental loss and/or alveolar resorption</td>
</tr>
<tr>
<td>0 Ability to formulate treatment plan</td>
</tr>
<tr>
<td><strong>Technical Skills</strong></td>
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<tr>
<td>0 Osseointegration surgery techniques</td>
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<tr>
<td><strong>Professional Skills</strong></td>
</tr>
<tr>
<td>No content</td>
</tr>
</tbody>
</table>
Patients requiring rhinoplasty

<table>
<thead>
<tr>
<th>Nasal Deformity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective</strong></td>
</tr>
<tr>
<td>To be able to assess a patient requiring a rhinoplasty presenting in the out-patient clinic</td>
</tr>
<tr>
<td>To be able to formulate a differential diagnosis and an investigation and management plan</td>
</tr>
<tr>
<td>To be able to treat the patient appropriately up to and including operative intervention if appropriate</td>
</tr>
<tr>
<td>To be able to communicate the above information at the required level to patients/carers/other team members</td>
</tr>
<tr>
<td>Can perform complete task without direct assistance of scrubbed trainer.</td>
</tr>
</tbody>
</table>

**Knowledge**
- Aetiological factors
- Understanding of nasal anatomy and function
- Understanding of facial aesthetics and age changes in facial tissues
- Examination of nasal aesthetics and function
- Specialised investigations
- Understanding of psychological factors in facial deformity
- Anatomy of nasal bones, cartilages and soft tissues
- Physiology of nasal function
- Facial aesthetics
- Techniques of closed and open rhinoplasty
- Principles and technique of of septoplasty
- Indications and limitations of procedures
- Potential complications

**Clinical Skills**
- History and examination of the patient with nasal deformity
- Ability to formulate treatment plan
- Identify relevant instruments and support staff

**Technical Skills**
- Rhinoplasty and septo-rhinoplasty techniques
- Post-operative care and follow-up
- Approach to and osteotomy of nasal bones
- Exposure and handling of nasal cartilages / septum
- Bone and cartilage grafting techniques
- Wound closure and nasal packing / splinting

**Professional Skills**
- No content
### Reconstructive Surgery

#### Mandibular reconstruction (non-vascularised bone graft)

<table>
<thead>
<tr>
<th>Objective</th>
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</thead>
<tbody>
<tr>
<td>Can perform complete task without direct assistance of scrubbed trainer.</td>
</tr>
</tbody>
</table>

**Knowledge**
- Anatomy of mandible, neck and oral cavity
- Understanding of bone healing and vascularisation
- Advantages and disadvantages of various donor sites
- Techniques of block and cancellous chip grafts
- Use of alternative procedures (alloplasts)
- Potential complications

**Clinical Skills**
- Identification of relevant instruments and support staff
- Harvesting of bone grafts
- Insetting and fixation of bone graft
- Plating skills
- Management of donor site and closure
- Management of complications

**Technical Skills**
- No content

**Professional Skills**
- No content

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#### Pedicled flaps

<table>
<thead>
<tr>
<th>Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can perform complete task without direct assistance of scrubbed trainer.</td>
</tr>
</tbody>
</table>

**Knowledge**
- Anatomy of donor sites and principles of blood supply to skin, fascia and muscle
- Indications for different types of flap
- Limitation of techniques
- Potential complications

**Clinical Skills**
- Identification of relevant instruments and support staff
- Raising of pedicled cutaneous, muscle and myocutaneous flaps
- Insetting of flap
- Management of donor site and closure
- Management of complications

**Technical Skills**
- No content

**Professional Skills**
- No content

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#### Free tissue transfer

<table>
<thead>
<tr>
<th>Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can perform complete task without direct assistance of scrubbed trainer.</td>
</tr>
</tbody>
</table>

**Knowledge**
- Anatomy of donor sites and principles of blood supply to skin, fascia and muscle
- Anatomy of neck vessels
- Indications for different types of flap
- Principles of microvascular anastomosis
- Limitation of techniques
- Potential complications

**Clinical Skills**
- Identification of relevant instruments and support staff
- Raising of soft tissue and composite flaps
- Insetting of flap
- Use of operating microscope and loupes
0 Preparation of donor and recipient vessels
0 Arterial and venous microvasacular anastomosis
0 Management of donor site and closure
0 Management of complications

**Technical Skills**
No content

**Professional Skills**
No content
6. Special Interest Stage

Four point scales

What the 4 point scale means for Knowledge

1. Knows of
2. Knows basic concepts
3. Knows generally
4. Knows both specifically and broadly

What the 4 point scales means for Clinical Skills and Technical Skills and Procedures

1. Has observed
2. Can do with assistance
3. Can do whole but may need assistance
4. Competent to do whole without assistance, including managing complications
6.1 Overview
6.2 Conditions
7. Professional and Generic Skills

7.1. Initial

Professional Competencies to be acquired during the initial stage of surgical training.

<table>
<thead>
<tr>
<th>Medical Expert (Good Clinical Care; Maintaining Good Medical Practice)</th>
</tr>
</thead>
</table>

The specialty specific knowledge, clinical skills and technical skills and procedures relating to symptoms and conditions that a trainee will encounter during this stage of training are listed separately. The competencies listed below are generic competencies, which underpin the specialty specific competencies.

**Skills**

- Elicits a history that is relevant, concise, accurate and appropriate to the patient’s problem

**Behaviour**

- Demonstrates effective consultation skills in presenting well documented assessments and recommendations in written and/or verbal form in response to a request from another healthcare provider
- Demonstrates the attitudes and the skills necessary to retrieve and implement the information necessary to provide healthcare services to patients in meeting the needs and expectations of the community
- Demonstrates insight into his/her limitations by self assessment

<table>
<thead>
<tr>
<th>Communicator (Good Clinical Care; Maintaining Good Medical Practice)</th>
</tr>
</thead>
</table>

1. **Effective doctor/patient communication**

**Objective**

To establish a doctor/patient relationship characterised by understanding, trust, respect, empathy and confidentiality

**Skills**

- Able to gather information regarding the patient’s beliefs, concerns and expectations about the condition and consider the influence of factors such as the patient’s age, gender, ethnic, cultural and socio-economic background and spiritual values on that illness
- Able to elicit information regarding the beliefs, concerns and expectations of patients with regard to their presenting conditions.
- Able to evaluate factors such as the patient’s age, gender, ethnic, cultural, socio-economic and spiritual values and the impact that these may have on the management of that patient and condition.
- Able to deliver information to the patient and family humanely and in a way that is understandable, encourages discussion and promotes the patient’s participation in decision making to the level appropriate for the situation.
- Able to work with patients who present significant communication challenges such as anger or confusion, or an ethno-cultural background different from the doctor’s own.
2. **Communication with Colleagues**

**Objective**

To appreciate the importance of co-operation with other healthcare professionals involved in patient care and to ensure that the roles of these professionals are clear, consistent, understood by all involved, and that, appropriate and timely information is delivered to patients and their families.

**Skills**

- Able to communicate effectively with colleagues within and outside of the team
- Able to evaluate the roles and responsibilities of individuals within the clinical team and to ensure that these are understood by all concerned in the context of individual and general patient care.

**Collaborator (Good Clinical Care; Working with Colleagues)**

**Objective**

To achieve competence in the formulation and implementation of appropriate care plans in the clinical situation, in collaboration with members of an interdisciplinary team, incorporating assessment, investigation, treatment and continuing care.

**Skills**

- To achieve a goal related to patient care, a research problem, an educational activity or an administrative responsibility by using the expertise and being aware of the limitations of all members of an interdisciplinary team

**Manager (Working with Colleagues; Probity)**

**Objective**

be able to work effectively as a member of a team or a partnership and to accomplish tasks whether one is a team leader or a team member

**Health Advocate (Good Clinical Care; Probity)**

**Objective**

To demonstrate an understanding of determinants of health and public policy in relation to individual patients by identifying the patient’s status with respect to one or more determinants of health (i.e. unemployment)

**Skills**

- Adapts the assessment and management accordingly (i.e. the medical history to the patients social circumstances); and
- Assesses the patient’s ability to access various services in the health and social system and offer appropriate assistance.

**Scholar (Maintaining Good Medical Practice; Teaching and Training, Appraising and Assessing; Probity)**

1. **Clinical**
Objective

To demonstrate a rigorous approach to clinical problem solving

Skills

- Can pose a clinical question
- Recognises and identifies gaps in knowledge and expertise around a clinical question
- Formulates a plan to fill the gap by:
  - conducting an appropriate literature search based upon a clinical question
  - assimilating and critically appraise the literature
  - developing a system to store and retrieve relevant literature
  - consulting others (physicians and other healthcare professionals) in a collegiate manner
- Proposes a solution to the clinical question
- Implements the solution in practice. Evaluate the outcome and reassess the solution (re-enter the loop at c-i or c-ii)
- Identifies practice areas for research

2. Education and Teaching

Objective

Can demonstrate an understanding of, and the ability to apply, the principles of adult education, with respect to oneself and others

Skills

- Uses his/her understanding of preferred learning methods in dealing with students, trainees and colleagues

Professional (Relationships with Patients; Probity)

1. Discipline-Based Objectives

Objective

Displays attitudes commonly accepted as essential to Professionalism

Skills

- Use appropriate strategies to maintain and advance professional competence
- Continually evaluates one’s abilities, knowledge and skills and know one’s limitations of professional competence

2. Personal Professional Boundary Objectives

Objective

To balance personal and professional roles and responsibilities and to demonstrate ways of attempting to resolve conflicts and role strain

Skills

- Adopts specific strategies to heighten personal and professional awareness and explore and resolve interpersonal difficulties in professional relationships
3. **Ethics and Professional Bodies**

**Objective**

To recognise, analyse and know how to deal with unprofessional behaviours in clinical practice, taking into account local and national regulations

**Knowledge**

- Knows and understand the professional, legal and ethical codes of the General Medical Council and any other codes to which the physician is bound

**Skills**

- Recognises, analyses and attempts to resolve in clinical practice ethical issues such as truth telling, consent, advanced directives, confidentiality, end-of-life care, conflict of interest, resource allocation, research ethics etc
- Understands and is able to apply relevant legislation that relates to the health care system in order to guide one’s clinical practice
- Recognises, analyses and knows how to deal with unprofessional behaviours in clinical practice, taking into account local and national regulations
7.2. Intermediate

Professional Competencies to be acquired during the intermediate stage of surgical training. (New competencies are in bold)

Medical Expert (Good Clinical Care; Maintaining Good Medical Practice)

The specialty specific knowledge, clinical skills and technical skills and procedures relating to symptoms and conditions that a trainee will encounter during this stage of training are listed separately. The competencies listed below are generic competencies, which underpin the specialty specific competencies.

Skills

- Elicits a history that is relevant, concise, accurate and appropriate to the patient’s problem

Behaviour

- Demonstrates effective consultation skills in presenting well documented assessments and recommendations in written and/or verbal form in response to a request from another healthcare provider
- Demonstrates the attitudes and the skills necessary to retrieve and implement the information necessary to provide healthcare services to patients in meeting the needs and expectations of the community
- Demonstrates insight into his/her limitations by self assessment

Communicator (Good Clinical Care; Maintaining Good Medical Practice)

1. Effective doctor/patient communication

Objective

To establish a doctor/patient relationship characterised by understanding, trust, respect, empathy and confidentiality

Skills

- Able to gather information regarding the patient’s beliefs, concerns and expectations about the condition and consider the influence of factors such as the patient’s age, gender, ethnic, cultural and socio-economic background and spiritual values on that illness
- Able to elicit information regarding the beliefs, concerns and expectations of patients with regard to their presenting conditions.
- Able to evaluate factors such as the patient’s age, gender, ethnic, cultural, socio-economic and spiritual values and the impact that these may have on the management of that patient and condition.
- Able to deliver information to the patient and family humanely and in a way that is understandable, encourages discussion and promotes the patient’s participation in decision making to the level appropriate for the situation.
- Able to work with patients who present significant communication challenges such as anger or confusion, or an ethno-cultural background different from the doctor’s own.

2. Communication with Colleagues

Objective
To appreciate the importance of co-operation with other healthcare professionals involved in patient care and to ensure that the roles of these professionals are clear, consistent, understood by all involved, and that, appropriate and timely information is delivered to patients and their families.

**Skills**

- Able to communicate effectively with colleagues within and outside of the team
- Able to evaluate the roles and responsibilities of individuals within the clinical team and to ensure that these are understood by all concerned in the context of individual and general patient care.

**Collaborator (Good Clinical Care; Working with Colleagues)**

**Objective**

To achieve competence in the formulation and implementation of appropriate care plans in the clinical situation, in collaboration with members of an interdisciplinary team, following assessment, investigation, treatment and continuing care.

**Skills**

- To achieve a goal related to patient care, a research problem, an educational activity or an administrative responsibility by using the expertise and being aware of the limitations of all members of an interdisciplinary team

**Manager (Working with Colleagues; Probity)**

**Objective**

To be able to work effectively as a member of a team or a partnership and to accomplish tasks whether one is a team leader or a team member.

**Health Advocate (Good Clinical Care; Probity)**

**Objective**

To demonstrate an understanding of determinants of health and public policy in relation to individual patients by identifying the patient’s status with respect to one or more determinants of health (i.e. unemployment)

**Knowledge**

- Demonstrates an understanding of determinants of health and public policy in relation to:
  - Practice populations by work with specialty society and other organizations in identifying current “at risk” groups within a given specialty practice and applying the available knowledge about prevention to “at risk” groups within the practice; and contributing “group data” for better understanding of health problems within the population
  - General Population by describing in broad terms the key issues currently under debate regarding changes in the National Health System, indicating how these might affect societal health care outcomes and advocating to decrease the burden of illness (at a community or societal level) of a condition or problem relevant to
his/her specialty society, community based advocacy group, or other public education bodies, or private organizations

- Demonstrates an understanding of the determinants of health by identifying the most important determinants of health (i.e. poverty, unemployment, early childhood education, social support systems), being familiar with underlying research evidence, and applying this understanding to common problems and conditions in the trainees specialty

- Demonstrates an understanding of public health policy by describing how public policy is developed; identifying current policies that affect health, either positively or negatively (i.e. communicable diseases, tobacco, substance abuse); and citing examples of how policy was changed as a result of actions by physicians

Skills

- Adapts the assessment and management accordingly (i.e. the medical history to the patients social circumstances); and
- Assesses the patient’s ability to access various services in the health and social system and offer appropriate assistance.

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**Scholar (Maintaining Good Medical Practice; Teaching and Training, Appraising and Assessing; Probity)**

1. **Clinical**

   **Objective**

   To demonstrate a rigorous approach to clinical problem solving

   **Skills**

   - Can pose a clinical question
   - Recognises and identifies gaps in knowledge and expertise around a clinical question
   - Formulates a plan to fill the gap by:
     - conducting an appropriate literature search based upon a clinical question
     - assimilating and critically appraise the literature
     - developing a system to store and retrieve relevant literature
     - consulting others (physicians and other healthcare professionals) in a collegiate manner
   - Proposes a solution to the clinical question
   - Implements the solution in practice. Evaluate the outcome and reassess the solution (re-enter the loop at c-i or c-ii)
   - Identifies practice areas for research

2. **Education and Teaching**

   **Objective**

   Can demonstrate an understanding of, and the ability to apply, the principles of adult education, with respect to oneself and others.

   To be able to develop and deliver a teaching module or unit and supporting lecture notes for an undergraduate or peer teaching session.

   **Skills**
Uses his/her understanding of preferred learning methods in dealing with students, trainees and colleagues

- Plans educational activities which clearly set out aims and intended learning outcomes
- Prepares appropriate teaching materials which meet learners’ needs

**Behaviours**

- Shows a commitment to teaching and learning

3. **Research**

**Objective**

To demonstrate a rigorous approach to research through: a successful application to the ethics committee; or a successfully completing a formal audit application; or presenting to a local mortality and morbidity meeting; or presenting to a national meeting.

**Skills**

- To be able to pose a research question (clinical, basic or population health)
- Develops a proposal to solve the research question:
  - Conduct an appropriate literature search on the research question
  - Identify, consult and collaborate with appropriate content experts to conduct the research
  - Propose the methodological approach to solve the question
- Carries out the research outlined in the proposal
- Defends and disseminate the results of the research
- Identifies areas for further research that flow from the results

**Professional (Relationships with Patients; Probity)**

1. **Discipline-Based Objectives**

**Objective**

Displays attitudes commonly accepted as essential to professionalism

**Skills**

- Use appropriate strategies to maintain and advance professional competence
- Continually evaluates one’s abilities, knowledge and skills and know one’s limitations of professional competence

2. **Personal Professional Boundary Objectives**

**Objective**

To balance personal and professional roles and responsibilities and to demonstrate ways of attempting to resolve conflicts and role strain

**Skills**

- Adopts specific strategies to heighten personal and professional awareness and explore and resolve interpersonal difficulties in professional relationships
3. **Ethics and Professional Bodies**

*Objective*

To recognise, analyse and know how to deal with unprofessional behaviours in clinical practice, taking into account local and national regulations

*Knowledge*

- Knows and understand the professional, legal and ethical codes of the General Medical Council and any other codes to which the physician is bound

*Skills*

- Recognises, analyses and attempts to resolve in clinical practice ethical issues such as truth telling, consent, advanced directives, confidentiality, end-of-life care, conflict of interest, resource allocation, research ethics etc
- Understands and is able to apply relevant legislation that relates to the health care system in order to guide one’s clinical practice
- Recognises, analyses and knows how to deal with unprofessional behaviours in clinical practice, taking into account local and national regulations
7.3. Final

Professional Competencies to be acquired during the final stage of surgical training. (New competencies are in bold)

<table>
<thead>
<tr>
<th>Medical Expert (Good Clinical Care; Maintaining Good Medical Practice)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The specialty specific knowledge, clinical skills and technical skills and procedures relating to symptoms and conditions that a trainee will encounter during this stage of training are listed separately. The competencies listed below are generic competencies, which underpin the specialty specific competencies.</td>
</tr>
</tbody>
</table>

**Skills**

- Elicits a history that is relevant, concise, accurate and appropriate to the patient’s problem

**Behaviour**

- Demonstrates effective consultation skills in presenting well documented assessments and recommendations in written and/or verbal form in response to a request from another healthcare provider
- Demonstrates the attitudes and the skills necessary to retrieve and implement the information necessary to provide healthcare services to patients in meeting the needs and expectations of the community
- Demonstrates insight into his/her limitations by self assessment
- **Demonstrates medical expertise in situations other than those involving direct patient care**

<table>
<thead>
<tr>
<th>Communicator (Good Clinical Care; Maintaining Good Medical Practice)</th>
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</thead>
<tbody>
<tr>
<td><strong>1. Effective doctor/patient communication</strong></td>
</tr>
</tbody>
</table>

**Objective**

To establish a doctor/patient relationship characterised by understanding, trust, respect, empathy and confidentiality

**Skills**

- Able to gather information regarding the patient’s beliefs, concerns and expectations about the condition and consider the influence of factors such as the patient’s age, gender, ethnic, cultural and socio-economic background and spiritual values on that illness
- Able to elicit information regarding the beliefs, concerns and expectations of patients with regard to their presenting conditions.
- Able to evaluate factors such as the patient’s age, gender, ethnic, cultural, socio-economic and spiritual values and the impact that these may have on the management of that patient and condition.
- Able to deliver information to the patient and family humanely and in a way that is understandable, encourages discussion and promotes the patient’s participation in decision making to the level appropriate for the situation.
- Able to work with patients who present significant communication challenges such as anger or confusion, or an ethno-cultural background different from the doctor’s own.

2. **Communication with Colleagues**
Objective

To appreciate the importance of co-operation with other healthcare professionals involved in patient care and to ensure that the roles of these professionals are clear, consistent, understood by all involved, and that, appropriate and timely information is delivered to patients and their families.

Skills

- Communicates effectively with colleagues within and outside of the team
- Evaluates the roles and responsibilities of individuals within the clinical team and to ensure that these are understood by all concerned in the context of individual and general patient care.

Collaborator (Good Clinical Care; Working with Colleagues)

Objective

To achieve competence in the formulation and implementation of appropriate care plans in the clinical situation, in collaboration with members of an interdisciplinary team, following assessment, investigation, treatment and continuing care.

To understand how healthcare governance influences patient care, research and educational activities at a local, regional and national level

Skills

- To achieve a goal related to patient care, a research problem, an educational activity or an administrative responsibility by using the expertise and being aware of the limitations of all members of an interdisciplinary team
- Ability to accept, consider and respect the opinion of others team members, while contributing specialty-specific expertise him/herself in an interdisciplinary team meeting
- Ability to communicate with members of an interdisciplinary team in the resolution of conflicts, provide feedback, and where appropriate, assume a leadership role

Manager (Working with Colleagues; Probity)

Objectives

To be able to work effectively as a member of a team or a partnership and to accomplish tasks whether one is a team leader or a team member.

To make clinical decisions and judgments based upon sound evidence for the benefit of individuals and the population served.

Skills

- Is able to function effectively in a healthcare organization from individual clinical practice to organisations at the local, regional and national level
- Through understanding the structure, financing, and operation of the NHS and its facilities, is able to function effectively within it playing an active role in its change
- Ability to access and apply a broad base of information to the care of patients in community care, hospital and other healthcare settings
- Uses population based approaches to healthcare services and recognises their implication for medical practice
• Uses planning, budgeting, evaluation to maximise the outcomes of a patient care

**Health Advocate (Good Clinical Care; Probity)**

**Objective**

To demonstrate an understanding of determinants of health and public policy in relation to individual patients by identifying the patient’s status with respect to one or more determinants of health (i.e. unemployment)

**Skills**

- Adapts the assessment and management accordingly (i.e. the medical history to the patients social circumstances); and
- Assesses the patient’s ability to access various services in the health and social system and offer appropriate assistance.

**Scholar (Maintaining Good Medical Practice; Teaching and Training, Appraising and Assessing; Probity)**

1. **Clinical**

   **Objective**

   To demonstrate a rigorous approach to clinical problem solving

   **Skills**

   - Can pose a clinical question
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   - Identifies practice areas for research

2. **Education and Teaching**

   **Objective**

   Can demonstrate an understanding of, and the ability to apply, the principles of adult education, with respect to oneself and others.

   To develop and deliver a teaching module or unit and supporting lecture notes for an undergraduate or peer teaching session.

   **To supervise and mentor learners (trainees) in a work setting.**

   **To teach trainees in a work setting**
Skills

- Uses his/her understanding of preferred learning methods in dealing with students, trainees and colleagues
- Plans educational activities which clearly set out aims and intended learning outcomes
- Prepares appropriate teaching materials which meet learners’ needs
- **Provides effective feedback to learners**
  - Optimises opportunistic teaching and learning in
    - Operating theatre
    - Bedside
    - Outpatients
- Can highlight ways in which their clinical teaching might be improved
- Able to evaluate the use of reflective practice, learning agreements, portfolios and journals
- Uses different methods of assessment appropriate to what is being assessed e.g. knowledge, skills, judgment and professionalism
- Can differentiate between appraisal and assessment

Behaviours

- Shows a commitment to teaching and learning
- Shows a willingness to supervise the work of less experienced colleagues
- Shows sensitivity to the needs of learner and responds appropriately.

3. Research

Objective

To demonstrate a rigorous approach to research through: the publication of a paper in a peer review journal; or participation in a systematic review with defined outcomes; publishing guidance at trust, regional, specialty or national level.

Skills

- To be able to pose a research question (clinical, basic or population health)
- Develops a proposal to solve the research question:
  - Conduct an appropriate literature search on the research question
  - Identify, consult and collaborate with appropriate content experts to conduct the research
  - Propose the methodological approach to solve the question
- Carries out the research outlined in the proposal
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Professional (Relationships with Patients; Probity)

1. Discipline-Based Objectives

**Objective**

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**Skills**
2. Personal Professional Boundary Objectives

Objective

To balance personal and professional roles and responsibilities and to demonstrate ways of attempting to resolve conflicts and role strain

Skills

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3. Ethics and Professional Bodies

Objective

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Skills

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- Understands and is able to apply relevant legislation that relates to the health care system in order to guide one's clinical practice
- Recognises, analyses and knows how to deal with unprofessional behaviours in clinical practice, taking into account local and national regulations