

Specialisation programme in the field of

MAXILLO-FACIAL SURGERY

for doctors who do not hold a relevant first or second degree specialisation or a specialist title in a relevant field of medicine or completed and passed the relevant basic module (applies to doctors who started specialisation training as a result of the qualification procedure - spring 2023).

> I approve under the authority of the Minister for Health Piotr Bromber Undersecretary of State /electronically signed document/

Warsaw 2023

The specialisation programme was developed by a team of experts consisting of:

- 1. Dr Mariusz Szuta national consultant in maxillo-facial surgery;
- 2. Prof. Dr. Hanna Gerber representative of the national consultant;
- 3. Prof. Dr. Marcin Kozakiewicz representative of the Polish Society of Dental and Maxillofacial Surgery;
- 4. Dr Jan Borys representative of the Supreme Medical Council;
- Dr Barbara Drogoszewska representative of the Medical Centre for Postgraduate Education;
- 6. Dent. Jan Harasiewicz representative of the Supreme Medical Council undergoing specialisation training.

I. OBJECTIVES OF SPECIALTY TRAINING

1. General objectives

The aim of the specialty training is to train an oral and maxillofacial surgeon with the knowledge and practical skills to independently diagnose and surgically treat diseases and carry out rehabilitation tasks according to the highest standards in contemporary oral and maxillofacial surgery.

In pursuit of this objective, it is expected that the doctor will, in the course of specialty training, master the full range of required contemporary knowledge as defined by this programme, acquire the necessary proficiency in the performance of surgical procedures the application of medical procedures and acquire skills in the use of contemporary methodology.

1. Professional competences acquired

The aim of the specialty training is to obtain specific qualifications in maxillofacial surgery enabling in accordance with modern medical knowledge:

 diagnosis and surgical treatment of soft tissue diseases of the craniofacial region and neck, oral cavity, craniofacial bones including the base of the anterior cranial fossa, temporomandibular joints mandibular, potentially malignant disorders and benign tumours and

malignancies of the face, mouth and neck and craniofacial region, craniomaxillofacial trauma, congenital and acquired cranio-maxillofacial malformations;

- 2) providing medical assistance in the event of a health emergency;
- 3) supervising and managing the rehabilitation of patients;
- to decide on the need for therapeutic rehabilitation, incapacity for work, incapacity for gainful or farm work, damage to health and disability due to diagnosed and treated diseases;
- 5) Preparing opinions, judgements and conclusions on treated patients;
- providing medical consultations in the field of maxillo-facial surgery to doctors of other specialities;
- 7) conducting health promotion and disease and injury prevention;
- the practice of individual specialised medical practice or the provision of health services as part of a group medical practice in the field of maxillofacial surgery;
- 9) Directing an oral and maxillofacial surgery clinic, department or outpatient clinic;
- Directing the specialty training in maxillo-facial surgery of other doctors and dentists;
- 11) continuing professional development for other medical professionals;
- 12) Directing a medical examination in the field of maxillo-facial surgery.

2. Acquired social competences

During specialty training, the doctor shapes and develops an ethical

attitude and improves social competence, in particular:

- being guided in their actions by the overriding principle of the well-being of the patient;
- respecting a socially acceptable system of values and deontological principles;
- ability to take decisions and willingness to take responsibility for the conduct of himself and the team entrusted to him;
- ability to organise one's own work properly and to work harmoniously in a team;
- the ability to establish a relationship with the patient, the patient's family and the patient's carer, respecting personal dignity and cultural, ethnic and social diversity;

- 6) knowledge of the psychological determinants of the doctor-patient relationship;
- the ability to communicate health status, prognosis and diagnostic and therapeutic management.

II. KNOWLEDGE REQUIRED

Upon completion of specialty training in maxillofacial surgery, the doctor is expected to demonstrate the knowledge outlined below:

- 1) the management of respiratory and cardiovascular resuscitation at the level provided for the *Immediate Life Support* (ILS) course;
- 2) principles of emergency medical management in:
 - a) acute cardiopulmonary failure,
 - b) sudden cardiac arrest,
 - c) acute upper airway obstruction,
 - d) shock,
 - e) acute post-traumatic upper respiratory tract bleeding,
 - f) multi-organ trauma;
- 3) indications and methods of performing a tracheotomy;
- 4) pathology and diagnosis of traumatic shock, haemorrhagic shock, burns and septic and treatment of shock;
- pathogenesis, diagnosis, differentiation and treatment of haemorrhages and determination of indications for surgical and conservative treatment in haemorrhages;
- 6) Principles of recognition and tactics for management of multiple injuries;
- 7) principles of diagnosis and management of spinal and limb injuries;
- 8) principles of diagnosis and management of thoracic trauma;
- causes, diagnosis and management of gastrointestinal bleeding gastrointestinal;
- 10) Pathogenesis, diagnosis, differentiation, treatment and prognosis of acute abdominal surgical diseases;
- pathogenesis, diagnosis and treatment options for coagulation disorders (plasma and vascular blemishes and thromboembolism);
- 12) diagnosis and treatment of arterial blockages;

- 13) principles of prophylactic anticoagulant management;
- 14) Pathogenesis, diagnosis, treatment and prognosis of burn disease;
- Pathogenesis, prevention and treatment of renal failure in surgical patients;
- disorders of protein, carbohydrate, water-electrolyte, acid-base and calcium-phosphate metabolism;
- Pathophysiology of healing and treatment of clean and infected wounds and management of purulent infections;
- 18) principles of parenteral and enteral nutrition;
- 19) basics of transplant surgery;
- diagnostic and treatment options and fundamentals of surgical techniques used in maxillofacial surgery, surgical accesses used in maxillofacial surgery, methods of surgical suturing, types of sutures, pathophysiology of soft tissue healing;
- 21) indications and contraindications for elective and elective surgery urgency, preparation of the patient for surgery and anaesthesia and assessment of the

surgical and anaesthetic risks;

- postoperative management, prevention, recognition and treatment of postoperative complications, principles of postoperative pain management;
- 23) specifics of diagnosis and treatment in paediatric surgery;
- 24) diagnosis and diagnosis of congenital malformations in children;
- 25) Fundamentals of developmental traumatology, with particular emphasis on multiple organ injuries and craniocerebral trauma;
- 26) Fundamentals of management in neurotraumatology and neurosurgery, and in particular concerning;
 - a) fractures of the bones of the cranial vault,
 - b) intracranial haematomas,
 - c) surgical treatment of tumours in the anterior cranial fossa,
 - d) treatment of post-traumatic meningeal tears with cerebrospinal fluid leakage in the anterior cranial fossa area;
- 27) sinus anatomy;
- 28) principles of diagnosis and treatment of diseases of the nose, pharynx and larynx;

29) diagnosis, differentiation and treatment of peri-tonsillar abscesses;

- 30) diagnosis, differentiation and treatment of cancer of the larynx and pharynx;
- 31) sinusitis;
- 32) Epidemiology, aetiopathogenesis and complications of maxillary sinusitis;
- 33) Causes, treatment methods and complications of dental sinusitis;
- 34) Tumours of the maxillary sinuses diagnosis, treatment;
- 35) The usefulness of imaging studies in the diagnosis of maxillary sinus disease;
- Surgical anatomy of the craniofacial skeleton, with particular emphasis on the orbit;
- 37) Epidemiology of craniofacial skeletal fractures, clinical and anatomopathological classification of fractures;
- 38) modern diagnosis of injuries to the cerebral and facial parts of the skull;
- Imaging diagnosis of craniofacial skeletal fractures, conventional examinations, CT (computed tomography), MRI (magnetic resonance imaging), ultrasound (ultrasonography);
- Post-traumatic visual impairment in craniofacial skeletal fractures diagnosis, differentiation, treatment, prognosis;
- 41) Ophthalmic examination and specialised assessment of visual damage;
- 42) Intracranial complications following trauma to the craniofacial skeleton;
- 43) Intracranial complications in orbital fractures;
- 44) methods of treating fractures of the bones of the craniofacial region, in particular:
 - a) Stable osteosynthesis, biology of fracture healing,
 - b) surgical treatment of fractures of the jaws and bones of the facial part of the skull,
 - c) Surgical treatment of zygomatic-maxillary-orbital fractures,
 - d) Orbital reconstruction with grafts or implants;
- 45) treatment: ZJO (zygomatic-orbital fracture), ZJSO (zygomatic-jaw-orbital fracture), ZIDO (isolated orbital floor fracture);
- 46) treatment: DON (orbital-nasal dislocation), PGMT (displacement of the upper facial massif), ZCON (frontal-orbital-nasal fracture), ZCO (cranioorbital fracture);
- 47) Mandibular surgical anatomy;
- 48) Epidemiology of mandibular condylar process fractures, fracture classifications, clinical presentation, complications;

- Diagnosis and radiological assessment of mandibular condylar process fractures;
- 50) conservative orthopaedic treatment and surgical treatment of mandibular condylar process fractures;
- 51) Epidemiology, aetiological factors, division and diagnosis and differentiation of head and neck cancers;
- 52) Potentially malignant disorders of the skin and mucous membranes predisposing factors for oral and craniofacial cancers, types of potentially malignant disorders, diagnosis, clinical management;
- 53) Division of benign tumours and their morphological and clinical features;
- 54) Division of malignant tumours, TNM classification;
- 55) morphological and clinical features of malignant tumours;
- 56) Alveolar neoplasms clinical and morphological characteristics;
- 57) diagnosis and treatment of benign and malignant skin tumours;
- 58) principles of diagnosis of tumours of the oral cavity, jawbone, face and neck:
 - a) biopsy, fine-needle aspiration biopsy (BAC),
 - b) X-ray, CT, MRI, ultrasound diagnostics;
- 59) treatment methods for benign tumours and tumour-like tumours of the craniofacial region and neck;
- 60) Surgical management of malignant tumours of the oral cavity and craniofacial region and neck;
- Team treatment of malignant tumours of the craniofacial region and neck (surgery, radiotherapy, brachytherapy, chemotherapy, immunotherapy) - indications, contraindications, complications;
- 62) principles of pain management in oncology patients;
- 63) management of patients after surgery early and late prosthetic rehabilitation, outpatient follow-up;
- 64) the role of the GP and dentist in early diagnosis and prevention of cancer;
- 65) basics of head and neck embryology;
- 66) Aetiopathogenesis of facial and oral malformations, their division and diagnosis;

- 67) clefts of the face and mouth;
- 68) complex craniofacial malformations (e.g. Crouzon syndrome, Apert syndrome, Pierre Robin, Mobius, Caffey and Silverman, Parry and Romberg);
- 69) developmental defects of the bones of the facial part of the skull (micro- and retrognathia, macro- and microgenia, laterogenia, etc.);
- principles of diagnosis and planning of surgical treatment of congenital and acquired craniomaxillofacial defects;
- 71) Management of congenital or acquired deformities of the facial skull bone with distractors;
- 72) methods for the reconstruction of craniofacial defects;
- 73) The surgical anatomy of the temporomandibular joint;
- 74) Aetiopathogenesis, epidemiology and clinico-ethiopathological classification of temporomandibular joint diseases;
- 75) clinical examination of patients with temporomandibular joint pathology;
- 76) Imaging diagnosis of the temporomandibular joints, usefulness of RM examinations in the diagnosis of temporomandibular joint diseases;
- 77) Psychological conditions in temporomandibular joint pathology;
- 78) Conservative and surgical treatment of temporomandibular joint disorders;
- 79) Classification of craniofacial and neck cysts;
- 80) types of jaw cysts and soft tissues of the oral cavity, face and neck;
- 81) Dento- and non-dento-derived bone cysts of the craniofacial region;
- 82) Features of dentigerous and non-dentigerous cysts diagnosis and treatment;
- 83) differentiating cysts from other disease entities in the oral cavity, face and neck;
- 84) Treatment methods, surgical management of soft tissue cysts of the craniofacial region and neck;
- 85) Surgical anatomy of the salivary glands;
- 86) Salivary gland diseases clinical presentation, diagnosis, diagnosis, differentiation:
 - a) lithiasis and salivary gland inflammation (specific: radiculosis, tuberculosis, syphilis and non-specific: acute, acute secondary, chronic),
 - b) sialopathies diseases with an autoimmune basis (Sjögren's, Mikulicz's, Heerfordt's syndrome);
- 87) salivary gland tumours:

- a) Benign tumours: adenoma, oncocytoma, Warthin tumour, others,
- b) semi/malignant/ locally malignant tumours adenocarcinoma multiforme (mixed tumour),
- c) Malignant tumours: adenocarcinoma, squamous cell carcinoma, anaplastic carcinoma, adenocarcinoma (obloma), mucinous-epidermal carcinoma (Stewart's tumour), sarcoma,
- d) clinical examination, radiological examinations, RM,
- e) Treatment of salivary gland tumours, tactics of surgical management;
- 88) Aetiopathogenesis, diagnosis and differentiation of specific and non-specific inflammation of the soft and hard tissues of the craniofacial region and additional examinations;
- 89) directions of spread and surgical treatment of craniofacial and neck abscesses and abscesses;
- 90) Febrile conditions, aetiology, diagnosis, treatment;
- 91) principles of prophylactic and curative antibiotic therapy;
- 92) diabetes in surgical diseases;
- 93) HBV (Hepatitis B Virus) and HCV (Hepatitis C Virus) infections and HIV (Human Immunodeficiency Virus) - prevention, treatment, post-exposure management;
- 94) principles of medical practice based on evidence-based medicine (EBM);
- 95) fundamentals of pharmacoeconomics;
- 96) historical outline of maxillofacial surgery as a branch of general surgery.
- 97) principles of prevention and control of nosocomial infections and rational antibiotic therapy.

III. PRACTICAL SKILLS REQUIRED

It is expected that on completion of specialty training in surgery

The maxillo-facial practitioner demonstrates skill:

- 1) the management of sudden cardiac arrest, the performance of defibrillation;
- 2) management of acute upper airway obstruction (oro-tracheal intubation, nasotracheal intubation, tracheotomy, conicopuncture, conicotomy);
- performing chest compressions and mechanical ventilation in CPR (cardiopulmonary resuscitation);

- 4) conducting oxygen therapy;
- 5) shock management;
- 6) management of acute post-traumatic upper respiratory tract bleeding;
- 7) management of fractures with intrusion of cranial vault bones;
- 8) management of intracranial haematomas;
- 9) management of thoracic injuries, rib fracture;
- 10) pleural puncture, drainage;
- 11) to perform superficial, intrathecal, regional and lower lumbar anaesthesia;
- 12) incision and drainage of extraoral and intraoral abscesses;
- 13) conservative orthopaedic treatment of jaw fractures;
- 14) performing stable osteosynthesis in the treatment of jaw fractures;
- 15) surgical treatment of skeletal fractures of the craniofacial region;
- 16) conservative and surgical treatment of mandibular condylar process fractures;
- 17) orbital reconstruction with grafts or implants;
- 18) surgical treatment of lip cancer with reconstruction;
- 19) maxillary resections due to tumours and other pathologies;
- 20) mandibular resection;
- 21) performing elective surgery on the lymphatic system of the neck;
- 22) Removal of cervical lymph nodes in the treatment of malignant tumours Complex neck lymph node surgery, including Jawdinski and Crile;
- 23) surgical treatment of salivary gland tumours;
- 24) surgical treatment of craniomaxillofacial morphological malformations;
- 25) to carry out reconstructive procedures for post-splint defects;
- 26) surgical treatment of temporomandibular joint ankylosis;
- 27) treatment of temporomandibular joint dysfunction;
- 28) surgical treatment of jaw and oral cysts;
- 29) surgical treatment of cysts and fistulas of the neck;
- 30) Mandibular reconstruction using autogenous grafts or implants;
- Reconstruction of oral and facial soft tissues by means of local plasty, skin grafts and dermal, dermal-muscular and complex flaps carried on microvascular anastomoses;

- 32) surgical treatment of diseases of the maxillary sinuses;
- 33) surgical treatment of abscesses and abscesses;
- performing surgical and reconstructive procedures in preparation of the oral cavity for prosthetics;
- 35) surgical treatment of periodontal disease;
- 36) implant placement;
- 37) diagnosis and treatment of true trigeminal neuralgia;
- The use of surgical laser, cryosurgery and piezosurgery in maxillofacial surgery;
- perform a compatibility test prior to transfusion of blood and blood components and interpret it;
- 40) transfusion of blood and blood components and blood products;
- 41) tests of visual acuity, visual field, double vision and their assessment;
- 42) recognition of types of pain, clinical assessment of pain severity and the principles of its treatment.

IV. FORMS AND METHODS OF TRAINING

A - Specialisation courses

Note: The doctor will only receive credit for those courses included in the list of specialty courses maintained by the CMKP and published annually on the CMKP website: www.cmkp.edu.pl.

The duration of the courses is specified in teaching days and teaching hours, with one teaching hour = 45 minutes. The total duration of individual teaching activities during one course day must not exceed 8 teaching hours.

Selected specialisation courses may be delivered via e-learning. Specialisation courses included in the specialisation programme are delivered on working days.

1. Introductory course: "Introduction to specialization in maxillofacial surgery".

Course objective:

Gain knowledge of the basic areas of action in maxillofacial surgery and the basis of diagnosis and treatment of patients with conditions of the maxillofacial area and adjacent areas, taking into account the most common surgical techniques used in maxillofacial surgery. *Scope of knowledge:*

- introduction to the problems, objectives and field of action in maxillo-facial surgery;
- 2) Tasks, competences and expected results of the training of an oral-facial surgery specialist;
- the fundamentals of good medical practice, including the principles of practice based on evidence-based medicine (EBM);
- 4) Formal and legal bases for the continuing professional development of doctors;
- 5) fundamentals of oncology;
- 6) safety issues in healthcare concerning patient and doctor safety;
- 7) Maxillofacial surgery as a branch of general surgery a historical overview;
- 8) Surgical suturing, types of sutures, soft tissue healing;
- 9) Stable osteosynthesis of bone fragments, biology of fracture healing;
- 10) surgical approaches used in maxillofacial surgery;
- diagnostic and treatment options and the fundamentals of surgical techniques used in maxillofacial surgery;
- 12) introduction to the subjects covered in the specialisation programme in maxillo-facial surgery;
- 13) fundamentals of pharmacoeconomics.

Course duration: 3 days (24 didactic hours) in the first year of specialty training. *Form of course delivery:* using distance learning methods and techniques or stationary.

Form of course credit: Confirmation of attendance and passing of a test on the knowledge covered in the course programme.

2. Course: 'Recognition, differentiation and treatment of specific and non-specific inflammations of soft and hard tissues of the craniofacial region and neck, spreading directions and principles of treatment of craniofacial abscesses and abscesses'.

Course objective:

to acquire a detailed knowledge of the epidemiology, aetiopathogenesis, diagnosis, differentiation, complications and treatment of inflammation of the maxillo-facial region and adjacent areas with particular reference to dental causes.

Scope of knowledge:

- Aetiopathogenesis of specific and non-specific inflammation of the soft and hard tissues of the craniofacial region;
- 2) directions and pathways for the spread of inflammation;
- diagnosis and differentiation of specific and non-specific inflammations, additional tests;
- 4) surgical treatment with particular reference to abscesses and abscesses of the craniofacial region.
- 5) pharmacological treatment of specific and non-specific soft tissue inflammations and hard parts of the craniofacial region;
- 6) Local and systemic complications of inflammatory conditions of the maxillofacial area with particular emphasis on dental causes.

Course duration: 3 days (24 teaching hours).

Form of course delivery: using distance learning methods and techniques or stationary.

Form of course credit: Confirmation of attendance and passing of a test on the knowledge covered in the course programme.

3. Course: 'Maxillary sinus diseases - their diagnosis, differentiation and treatment'.

Course objective:

to acquire detailed expertise in the epidemiology, aetiopathogenesis, diagnosis, differentiation, complications and treatment of maxillary sinus disorders.

Scope of knowledge:

- 1) Surgical anatomy, function and physiology of the paranasal sinuses;
- Epidemiology, divisions, aetiopathogenesis and complications of maxillary sinusitis;
- 3) Dentoalveolar sinusitis causes, complications, treatment;
- Oropharyngeal fusion and fistula definition, epidemiology, aetiology, diagnosis and treatment;
- 5) Tumours of the maxillary sinuses epidemiology, division, diagnosis, treatment, prognosis;
- 6) The usefulness of imaging studies in the diagnosis of maxillary sinus disease;
- types of surgical procedures and techniques used to treat patients with sinus conditions.

Course duration: 3 days (24 teaching hours).

Form of course delivery: using distance learning methods and techniques or stationary.

Form of course credit: Confirmation of attendance and passing of a test on the knowledge covered in the course programme.

4. Course: 'Cysts of the maxillofacial region and neck.

Etiopathogenesis, diagnosis, differentiation, treatment".

Course objective:

to acquire detailed expertise in the epidemiology, aetiopathogenesis, diagnosis and treatment and recurrence of specific types of bone and soft tissue cysts of the maxillofacial and neck area.

Scope of knowledge:

- Introduction, definitions of cyst, true cyst, pseudocyst, aetiopathogenesis of cyst;
- 2) Classifications of cysts of the maxillofacial area and neck;
- Maxillary bone cysts types, aetiopathogenesis, localisation, clinical picture, imaging diagnosis, treatment, recurrence;
- 4) Maxillary sinus cysts types, aetiopathogenesis, location, clinical picture, imaging diagnosis, treatment, recurrence;
- Soft tissue cysts of the craniofacial region and neck types, diagnosis, treatment methods, surgical management;
- 6) differentiating cysts from other disease entities in the oral cavity, face and neck.

Course duration: 2 days (16 teaching hours).

Form of course delivery: using distance learning methods and techniques or stationary.

Form of course credit: Confirmation of attendance and passing of a test on the knowledge covered in the course programme.

5. Course: 'Etiopathogenesis, diagnosis and treatment of temporomandibular joint disorders'.

Course objective:

to acquire detailed expertise in the epidemiology, aetiopathogenesis, diagnosis and treatment of patients with temporomandibular joint disorders.

- 1) Introduction, surgical anatomy of the temporomandibular joint;
- 2) Aetiopathogenesis, epidemiology of temporomandibular joint diseases;
- 3) Imaging diagnosis of the temporomandibular joints;
- 4) clinical examination of patients with temporomandibular joint pathology;
- 5) patient consultations;
- Clinico-ethiopathological classification of temporomandibular joint disease;
- 7) Psychological conditions in temporomandibular joint pathology;

- 8) conservative treatment of temporomandibular joint disorders;
- 9) Temporomandibular joint arthroscopy;
- 10) surgical treatment of temporomandibular joint disorders.

Course duration: 3 days (24 teaching hours).

Form of course delivery: using distance learning methods and techniques or stationary.

Form of course credit: Confirmation of attendance and passing of a test on the knowledge covered in the course programme.

6. Course: 'Potentially malignant disorders, features of benign and malignant tumours of the oral cavity and craniofacial region - their diagnosis and treatment'.

Course objective:

to acquire detailed expertise in the epidemiology, aetiopathogenesis, diagnosis and treatment of potentially malignant disorders of the facial skin and oral mucosa and benign and malignant tumours of the face, oral cavity, jawbone and neck.

- Potentially malignant disorders of the skin and mucous membranes predisposing factors for oral and craniofacial cancers, types of potentially malignant disorders, diagnosis, clinical management;
- 2) the role of the GP and dentist in the early diagnosis and prevention of cancer;
- 3) division of benign and malignant tumours and their morphological and clinical features;
- 4) treatment of benign tumours of the face, mouth and neck;
- Dentigerous neoplasms and tumour-like lesions of the maxillary bones aetiopathogenesis, epidemiology, classification, clinical and morphological characteristics, diagnosis and treatment, recurrence;
- 6) diagnosis and treatment of benign and malignant skin tumours;
- Surgical management of malignant tumours of the oral cavity and craniofacial region;

- Combined treatment of head and neck cancer modalities, indications, contraindications, complications;
- 9) management of patients after surgery early and late prosthetic rehabilitation, outpatient follow-up.

Course duration: 2 days (16 teaching hours).

Form of course delivery: using distance learning methods and techniques or stationary.

Form of course credit: Confirmation of attendance and passing of a test on the knowledge covered in the course programme.

7. Course: 'Epidemiology, diagnosis and surgical and combined treatment of malignant tumours of the face, oral cavity, craniofacial region and neck'.

Course objective:

to acquire detailed expertise in the epidemiology, aetiopathogenesis, diagnosis and treatment of patients with malignant tumours of the face, oral cavity, craniofacial part and neck.

- epidemiology, aetiological factors, distribution and diagnosis and differentiation of head and neck cancers;
- 2) the role of the GP and dentist in the early diagnosis and prevention of cancer;
- 3) TNM classification;
- 4) morphological and clinical features of malignant tumours;
- 5) diagnosis and treatment of benign and malignant skin tumours;
- 6) Diagnostic imaging in the diagnosis of oral and craniofacial cancers;
- Surgical management of malignant tumours of the oral cavity and craniofacial region, nodal surgery;
- Basics of reconstructive treatment in oncology patients, grafts, flaps, including those carried on microvascular anastomoses;
- Combined treatment of head and neck cancer modalities, indications, contraindications, complications;

10) management of patients after surgery - early and late prosthetic rehabilitation and outpatient follow-up.

Course duration: 3 days (24 teaching hours).

Form of course delivery: using distance learning methods and techniques or stationary.

Form of course credit: Confirmation of attendance and passing of a test on the knowledge covered in the course programme.

8. Course: 'Fractures of the craniofacial skeleton - their diagnosis, classification and treatment"

Course objective:

To acquire detailed expertise in the epidemiology, aetiology and subdivisions of craniofacial fractures and their diagnosis and treatment. *Scope of knowledge:*

- 1) Surgical anatomy of the craniofacial skeleton;
- 2) Epidemiology and aetiology of craniofacial skeletal fractures;
- 3) Organisational, diagnostic and treatment problems in traumatology;
- 4) Complications and intracranial injuries after craniofacial skeletal trauma;
- 5) Imaging diagnosis of craniofacial skeletal fractures, standard examinations, CT, MRI, ultrasound;
- 6) Post-traumatic visual system damage in craniofacial skeletal fractures diagnosis, differentiation, treatment, prognosis;
- subdivisions of fractures of the craniofacial bones in conventional terms: fractures of the nose, orbit, zygomatic bone, maxillae, mandible, frontal sinuses;
- 8) Clinico-anatomopathological classification of craniofacial fractures;
- 9) surgical treatment of craniofacial skeletal fractures;
- 10) Peculiarities of craniofacial skeletal fractures in children with diagnostic and therapeutic implications.

Course duration: 3 days (24 teaching hours).

Form of course delivery: using distance learning methods and techniques or stationary.

Form of course credit: Confirmation of attendance and passing of a test on the knowledge covered in the course programme.

9. Course: 'Orbital fractures - diagnosis, differentiation and treatment'.

Course objective:

to acquire detailed expertise in the epidemiology, aetiology, diagnosis and treatment of orbital fractures.

Scope of knowledge:

- 1) Introduction, diagnostic and treatment problems in orbital fractures.
- 2) Epidemiology of orbital fractures;
- Surgical anatomy of the craniofacial skeleton with particular reference to the orbit;
- Divisions of orbital fractures including clinico-anatomical classification of orbital fractures;
- 5) Ophthalmic examination and specialised assessment of damage to the visual system, orbital chart, classification of diplopia according to Krzystek;
- 6) Intracranial complications in orbital fractures;
- 7) Imaging diagnosis of orbital fractures;
- 8) treatment: ZJO, ZJSO, ZIDO;
- 9) treatment: DON, PGMT, ZCON, ZCO.

Course duration: 3 days (24 teaching hours).

Form of course delivery: using distance learning methods and techniques or stationary.

Form of course credit: Confirmation of attendance and passing of a test on the knowledge covered in the course programme.

10. Course: 'Conservative and surgical treatment of mandibular condylar process fractures'.

Course objective:

to acquire detailed expertise in the epidemiology, aetiology, diagnosis and contemporary treatment of mandibular condylar process fractures.

Scope of knowledge:

- 1) Introduction, epidemiology of mandibular condylar process fractures;
- 2) Mandibular surgical anatomy;
- 3) Fracture classifications, clinical presentation and complications;
- Diagnosis and radiological assessment of mandibular condylar process fractures;
- 5) conservative orthopaedic treatment of mandibular condylar process fractures;
- 6) surgical treatment of mandibular condylar processes.

Course duration: 2 days (16 teaching hours).

Form of course delivery: using distance learning methods and techniques or stationary.

Form of course credit: Confirmation of attendance and passing of a test on the knowledge covered in the course programme.

11. Course: 'Etiopathogenesis, morphology, diagnosis, differentiation and surgical treatment of congenital and acquired maxillofacial malformations'.

Course objective:

to acquire detailed expertise in the epidemiology, aetiopathogenesis, diagnosis and syndromic treatment of patients with maxillofacial malformations.

Scope of knowledge:

- 1) basics of head and neck embryology;
- 2) Aetiopathogenesis of facial and oral malformations, their division, diagnosis;
- 3) clefts of the face and mouth;
- Complex craniofacial malformations (e.g. Crouzon, Apert, Pierre Robin, Mobius, Caffey-Silverman, Parry-Romberg syndrome);
- developmental defects of the facial bones (micro- and retrognathia, macro- and microgenia, retrogenia, laterogenia, open skeletal bite, etc.);
- 6) principles of team treatment of malformations and orthodonticsurgical cooperation;
- 7) basic surgical techniques in orthognathic surgery.

Course duration: 3 days (24 teaching hours).

Form of course delivery: using distance learning methods and techniques or stationary.

Form of course credit: Confirmation of attendance and passing of a test on the knowledge covered in the course programme.

12. Course: 'Diseases of the salivary glands - diagnosis, differentiation, treatment'.

Course objective:

to acquire detailed expertise in the epidemiology, aetiopathogenesis, diagnosis, differentiation and treatment of disorders of the salivary glands.

Scope of knowledge:

- 1) Surgical anatomy of the salivary glands;
- 2) diagnosis of salivary gland diseases;
- 3) Salivary gland diseases, clinical picture, diagnosis, differentiation:
 - a) lithiasis and salivary gland inflammations (specific: radiculosis, tuberculosis, syphilis and non-specific: acute, acute secondary, chronic),
 - b) sialopathies autoimmune diseases (Sjögren's syndrome, Mikulicz syndrome, Heerfordt syndrome, IgG4-dependent disease),
 - c) salivary gland tumours:
 - benign tumours: adenoma, oncocytoma, Warthin's tumour, others,
 - semi-malignant/ locally malignant tumours adenocarcinoma multiforme (mixed tumour),
 - malignant tumours: adenocarcinoma, squamous cell carcinoma, anaplastic carcinoma, adenocarcinoma (obloma), mucinous epithelial carcinoma (Stewart's tumour), sarcoma,
 - treatment of salivary gland tumours tactics of surgical management;
- 4) Diagnostic imaging in salivary gland disorders;
- 5) surgical treatment of benign and malignant tumours, large and small salivary glands.

Course duration: 3 days (24 teaching hours)

Form of course delivery: using distance learning methods and techniques or stationary.

Form of course credit: Confirmation of attendance and passing of a test on the knowledge covered in the course programme.

13. Course: 'Transfusion of blood and blood components'.

Course objective:

Acquisition of knowledge and practical skills in the basics of transfusionology, including principles of blood service and blood bank organisation, blood collection and transfusion of blood and blood components. An introduction to rational blood and blood component therapy. Familiarisation with post-transfusion complications and adverse events and reactions.

Scope of theoretical knowledge:

- 1) principles of blood service organisation:
 - a) the organisational structure of the blood service in Poland,
 - b) the legal basis for the operation of public blood units, hospital blood banks, transfusion immunology laboratories,
 - c) the organisation of blood supply in health care providers, principles of cooperation with public blood units;
- 2) Tasks of the hospital blood bank and blood management in the hospital ward:
 - a) principles of the hospital blood bank,
 - b) the role and tasks of the doctor in charge of blood management,
 - c) role and tasks of the transfusion committee,
 - d) placing orders for blood and blood components,
 - e) hospital blood bank records,
 - f) documentation of blood donation in wards,
 - g) standard operating procedures;
- principles for blood collection, separation of blood components, testing and distribution:
 - a) types of blood components,
 - b) methods of obtaining them,
 - c) quality control parameters,
 - d) specialised blood components: low-oleucocyte, irradiated, inactivated,

- e) conditions and method of storage and transport of blood, with particular attention to ensuring appropriate safety;
- 4) rational treatment with blood and its components:
 - a) Transfusion-related aspects of anaemia treatment,
 - b) clinical indications for platelet cell concentrate transfusion,
 - c) clinical use of granulocyte concentrate,
 - d) indications for the use of fresh frozen plasma and cryoprecipitate,
 - e) indications for blood products: albumin, immunoglobulins, clotting factor concentrates;
- 5) therapeutic treatments:
 - a) autotransfusion,
 - b) haemodilution,
 - c) discounts,
 - d) therapeutic apheresis;
- 6) Transfusion immunology:
 - a) clinically important red cell group systems,
 - b) the concept of immune antibodies,
 - c) serological compatibility test,
 - d) documentation of research results,
 - e) scope of studies of the transfusion immunology laboratory,
 - f) principles for permanent documentation of blood group tests,
 - g) maternal-fetal conflict,
 - h) HLA and HPA;
- 7) safety of blood and its components:
 - a) methods to prevent the transmission of pathogens by blood and blood components and blood products,
 - b) principles for the safe use of blood and blood components,
 - c) management prior to blood transfusion,
 - d) method of sampling for testing,
 - e) how to control blood intended for transfusion,
 - f) identification of the recipient,
 - g) performing a transfusion procedure,
 - h) observation of the patient during and after the transfusion,

- i) documentation related to the transfusion procedure;
- 8) adverse events and reactions:
 - a) serious adverse events and reactions,
 - b) types of post-transfusion complications: non-haemolytic posttransfusion reactions, haemolytic post-transfusion reactions,
 - c) how to deal with complications,
 - d) how to report reactions and adverse events and events that were detected before transfusion (*near-miss events*).

Scope of practical skills:

- basic immunohaematology tests performed prior to blood transfusion:
 - a) blood group determination,
 - b) performing a serological compatibility test,
 - c) research documentation;
- 2) performing a blood transfusion procedure:
 - a) collection of blood samples for pre-transfusion testing,
 - b) handling containers containing blood and blood components,
 - c) identification of the recipient and control of the documentation,
 - d) performing a transfusion procedure,
 - e) observation of the patient during and after the transfusion;
- 3) post-transfusion management:
 - a) handling of post-transfusion residues,
 - b) taking samples for testing in case of post-transfusion complications,
 - c) reporting of adverse events and reactions.

Course duration: 2 days (16 teaching hours).

Form of course delivery: using distance learning methods and techniques and stationary.

Form of course credit: confirmation of attendance and passing a test on the knowledge and practical skills covered in the course syllabus.

14. Course: 'Medical Jurisprudence'.

Course objective:

the acquisition by doctors of theoretical and practical knowledge on how to properly formulate an opinion or judgment assessing a patient's state of health.

Scope of knowledge:

- the basic principles of the health care system in Poland, including regulations for the medical profession;
- the social security system for sickness and its consequences implemented through: universal social insurance for employees, self-employed and farmers; social security provision; social assistance; and the disability and employer support system;
- the principles of medical certification, the principles for drawing up certificates, and the basic principles and objectives of health assessment for certification purposes;
- 4) the specifics of the mutual relationship between the person examined and the medical examiner;
 - 5) principles of good medical record keeping

and responsibility for running it illegally;

- 6) Principles of medical legal liability (civil, criminal and professional), ability to compare, types of medical insurance;
- The responsibilities of doctors and healthcare providers. Fundamentals of labour law;
- the concept of medical error, the most common causes of medical errors and opinion rules in such cases;
- 9) The nature, division and principles of forensic medical opinion on: fitness to participate in legal proceedings, impairment of health;
- 10) The most important fields in which medical opinion is necessary and indispensable. Distinctions of opinion for, inter alia, psychiatry, labour law, commercial insurers;
- 11) The importance and principles of therapeutic rehabilitation as part of disability prevention.

Course duration: 3 days (24 teaching hours).

Form of course delivery: using learning methods and techniques on distance or stationary.

Form of course credit: Confirmation of attendance and passing of a test on the knowledge covered in the course programme.

15. Course: 'Prevention and health promotion'.

Overall objectives:

Acquisition by doctors of theoretical and practical knowledge of the current rules for the prevention of diseases/health problems and health promotion - both for individuals (patients) and for the community, including the professional community. The course also aims to shape social competencies, including promoting selfreflection and critical thinking and developing collaboration for health. In addition, the course seeks to shape ethical attitudes, promote a 'pro-preventive' work culture in the health sector, as well as ongoing self-education for doctors to broaden and deepen their knowledge and skills related to the with prevention and health promotion.

Scope of knowledge:

Part I: Scientific and ethical foundations of prevention and health promotion:

- models of health, determinants of health and their modern quantification, health impact pyramid (according to Freiden 2015);
- population health gradient, causes and so-called causes of causes, including public policies, approaches to address health inequalities/injustices, including so-called *group-gap-gradient*, proportional universalism;
- basic definitions and objectives of disease prevention and health promotion, including health promotion according to the Ottawa Charter (WHO 1986), similarities and differences;
- 4) interpretations, approaches and prevention strategies:
 - a) individual in medical care, including lifestyle medicine, populationbased in public health activities,
 - b) *primordial*, primary, secondary, tertiary, quaternary applications,
 - c) high-risk, population-based applications,
 - d) universal, selective, indicative applications,
 - e) other prevention approaches and strategies applications;

- 5) interpretations, approaches and strategies for health promotion:
 - a) WHO approach, including habitat, applications, e.g. health-promoting hospitals and medical facilities (including health promotion for health professionals), health-promoting schools, urban health,
 - b) other health promotion approaches and strategies used in healthcare providers:
 - four areas of physician activity in health promotion (according to Beattie 1991),
 - medical, behavioural, educational, client-centred/empowerment, social change approaches (according to Ewles, Simnett 2003),
 - participation of doctors in addressing health inequalities/injustices,
 - the role of the doctor's attitudes in shaping the patient's prohealth behaviour;
- activities in line with Evidence Based Practice principles (policy/public health/disease prevention/health promotion/health education), use of good practice databases;
- ethical principles in preventive activities and health promotion, adverse effects of preventive activities/health promotion;
- 8) Current and desirable: structure and organisation of prevention and health promotion activities, staff competencies, economic aspects.

Part II: General characteristics and effectiveness of selected methods of action in disease prevention and health promotion:

- life cycle of the vaccination programme, *hesitancy* towards vaccines (vaccine hesitancy), models of *hesitancy* determinants, including 3C, 4C, 5C, WHO's approach to counteracting *hesitancy* and increasing vaccination coverage (currently based on the COM-B model);
- Mass (organised) screening, differences from diagnostic tests, implementation criteria, adverse effects, balance of benefits and losses;
- Health education, patient education, counselling, *coaching*, similarities and differences, principles of practice;

- Health communication through old and new media, opportunities and limitations, characteristics of correct health information, infodemia, fifth-order prevention, risk communication in crisis situations;
- 5) working with the community, including community organisation/mobilisation, processes, principles, approaches, *social prescribing;*
- 6) *Health in All Policies*, approaches including health advocacy, Health *Impact Assessment*;
- 7) Health programmes as a tool for implementing population-based disease prevention and health promotion, health needs assessment, planning schemes, behaviour change theories, programme monitoring and evaluation;
- 8) leadership in the health sector;
- 9) other current and important approaches (e.g. non-pharmaceutical interventions in relation to COVID-19).

Part III: Applications of prevention and health promotion (including

recommendations, activities, methods, tools, materials, etc.) **for the practical control of diseases/health problems** (i.e. to reduce incidence, prevalence and mortality to a level that is, in the given context (time, place, conditions), acceptable using preventive and curative methods):

- 1) Dietary recommendations, improving nutrition, minimal intervention in obesity;
- 2) WHO physical activity level recommendations, increasing physical activity;
- 3) Mental health promotion, suicide prevention;
- 4) Tobacco prevention, including a minimum tobacco intervention strategy, harm reduction;
- countering psychoactive substance use, including harm reduction strategies, and behavioural addictions;
- 6) prevention of falls in older people;
- other current health-promoting recommendations in the context of disease risk factors or specific diseases/health problems (e.g. air pollution, climate change, the planetary diet model, *One Health*);

 principles for the management of communicable disease outbreaks, the organisation of

and functioning of health care, lessons from the COVID-19 pandemic.

Course duration: 2 days (16 teaching hours)

Form of course delivery: using distance learning methods and techniques or stationary.

Form of course credit: Confirmation of attendance and passing of a test on the knowledge covered in the course programme.

16. Attestation (summary) course: "Maxillofacial surgery".

Prior to the attestation course programme, the course organiser is required to conduct a colloquium to test the knowledge acquired

during specialisation training. The scope of knowledge includes specialisation courses and internships completed throughout the specialisation training.

Course objective:

A review and systematisation of specialist knowledge in the field of maxillo-facial traumatology; oncology of the head and neck area including cysts of the maxillo-facial area and tumour-like lesions of the maxillary bones; developmental defects of the face and oral cavity; inflammatory conditions of the face, neck and adjacent areas with particular emphasis on dental causes; diseases of the maxillary sinuses; diseases of the salivary glands and temporomandibular joint pathology.

- Maxillofacial traumatology: fractures of the mandible, maxillae, zygomatic-maxillary complex, orbit (epidemiology, classifications, diagnosis, diagnostic imaging, treatment, complications).
- 2) Head and neck oncology: potentially malignant disorders of the skin and mucous membranes, tumours of the face, mouth, jawbone and neck, cysts and dentigerous tumours (epidemiology, classifications, diagnosis, imaging diagnosis, treatment, prognosis, prevention).
- Developmental malformations of the face and oral cavity: facial and oral clefts, gnatic malformations (prognathia, retrognathia, retrogenia, laterogenia, open bite), malformation syndromes (epidemiology, diagnosis, classifications, diagnosis, syndromic treatment).

- 4) inflammatory conditions of the face and neck and adjacent areas: specific and non-specific inflammations, extra- and intraoral abscesses, abscesses, hidradenitis suppurativa, facial boils, lymphadenitis, mycoses (epidemiology, aetiology, diagnosis, microbiological diagnosis, treatment, local and systemic complications).
- 5) Maxillary sinus diseases: acute and chronic inflammation, abscess, sinus mycosis, oro-sinus fusion and fistula (epidemiology, aetiology, diagnosis, diagnosis, treatment, complications).
- salivary gland diseases: sialolithiasis, specific and non-specific inflammations, sialoses and sialopathies, salivary gland tumours (epidemiology, aetiology, diagnosis, diagnosis, treatment, prognosis, prevention).
- Temporomandibular joint diseases: epidemiology, aetiology, classifications, diagnosis, diagnosis, conservative, minimally invasive and surgical treatment.

Course duration: 5 days (40 didactic hours) in the last year of specialty training before taking the PES.

Form of course delivery: using distance learning methods and techniques and stationary.

Form of assessment: acknowledgement of attendance and a test on the knowledge covered in the attestation course.

B - Directional traineeships

The doctor is required to complete the internships listed below. The duration of the internship is given in weeks and working days at a working time of 7 hours 35 minutes per day. The internship must be extended by each day of absence, including public holidays for the year.

1. Basic training in maxillo-facial surgery

Internship objective:

acquisition of specialist knowledge and practical skills in the diagnosis and treatment, including surgical treatment, of patients: following craniofacial trauma; with oncological conditions of the face, oral cavity, maxillary bones

and neck; malformations of the face and oral cavity, with diseases of the salivary glands, with temporomandibular joint pathology; with specific inflammations of the face, mouth and neck and their complications; with diseases of the maxillary sinuses.

Scope of theoretical knowledge:

It is expected that the doctor will, during his/her internship, acquire knowledge of:

- 1) preparing the patient for surgical treatment and post-operative care;
- 2) modern diagnosis of brain and craniofacial injuries;
- 3) methods of treating fractures of the craniofacial bones, in particular:
 - a) stable osteosynthesis,
 - b) surgical treatment of jaw fractures,
 - c) surgical treatment of zygomatic-maxillary-orbital fractures,
 - d) orbital reconstruction with grafts or implants;
- treatment of benign tumours and tumour-like tumours of the craniofacial region and neck;
- 5) diagnosis of cancers of the mouth, jaws, face and neck:
 - a) excision, fine-needle aspiration biopsy (BAC fine-needle aspiration biopsy, BACC - targeted fine-needle aspiration biopsy), coarse-needle biopsy,,
 - b) diagnostic imaging: conventional diagnostic radiology, CT, RM, PET-CT, SPECT (single photon emission tomography), scintigraphy, ultrasound, angiography;
- team treatment of malignant tumours of the craniofacial region (surgery, radiotherapy, brachytherapy, chemotherapy, chemoradiotherapy, immunotherapy);
- diagnosis and planning of surgical treatment of congenital and acquired maxillofacial malformations;
- management of congenital or acquired deformities of the craniofacial skeleton by means of distractors;
- 9) treatment of stiffness and temporomandibular joint dysfunction;
- 10) reconstructions after extensive craniofacial defects with including flaps carried at microvascular junctions;
- 11) aetiopathogenesis and surgical treatment of cysts, fistulas and malformations of the craniofacial region and neck;

- 12) diagnosis and treatment of diseases of the salivary glands;
- 13) directions of spread and treatment of abscesses and abscesses of the facial part of the skull

and neck including their local and systemic complications.

Scope of practical skills:

it is expected that the doctor will acquire the practical skills for the basic

internship included in section C - Training of skills to perform medical

procedures and treatments in the table concerning the list and number of

medical procedures and treatments which the doctor has to **perform** during this internship.

Form of credit for internship (with the head of specialisation):

- 1) a colloquium on the theoretical knowledge covered in the internship programme;
- practical skills test confirmation by the head of specialty of the medical procedures or treatments performed by the doctor included in the training programme.

Duration of internship: 174 weeks (870 working days).

Place of internship: department of maxillo-facial surgery which is accredited to provide specialty training in maxillo-facial surgery.

Place of duty: maxillo-facial surgery department, which is the site of the basic internship.

2. General surgical internship

Internship objective:

Acquire specialist knowledge and practical skills in the diagnosis and treatment of: abnormalities in wound healing; septic and haemorrhagic shock; upper and lower gastrointestinal bleeding;

"acute abdomen", water-electrolyte disorders and assimilation of the principles of enteral nutrition with industrial diets and parenteral nutrition treatment.

Scope of theoretical knowledge:

It is expected that the doctor will have acquired knowledge of:

- 1) Pathophysiology, healing and treatment of clean and infected wounds;
- 2) management of purulent infections;

- pathology, diagnosis and treatment of traumatic, haemorrhagic, burn and septic shock;
- 4) interpretation of laboratory results;
- indications and contraindications for elective and emergency surgery, preparation of the patient for surgery and anaesthesia and assessment of surgical risks;
- postoperative management, prevention, recognition and treatment of postoperative complications;
- pathogenesis, diagnosis, differentiation, treatment and prognosis of acute and chronic abdominal surgical diseases;
- 8) recognition, management tactics in multiple injuries;
- disorders of the protein, carbohydrate and water-electrolyte balance and acid-base;
- 10) the pathogenesis, diagnosis, differentiation and treatment of haemorrhages and the determination of indications for surgical and conservative treatment in haemorrhages;
- 11) causes, recognition, diagnosis and management of bleeding disorders from the gastrointestinal tract;
- 12) extra- and enteral feeding;
- 13) pathogenesis, diagnosis, treatment and prognosis of burn disease;
- 14) pathogenesis, prevention and treatment of renal failure in surgery;
- 15) pathogenesis, diagnosis and treatment options for coagulation disorders;
- 16) prophylactic anticoagulant management;
- 17) diagnosis and treatment of thromboembolism.

Scope of practical skills:

it is expected that the doctor will acquire the practical skills for the above-

described training course in section C - Training in the skills of performing

medical procedures and treatments in the table of the list of

and the number of treatments and medical procedures which the doctor must undergo in the course of that placement

Form of credit for internship (with the internship supervisor):

 a colloquium on the theoretical knowledge covered in the internship programme;

 practical skills test - confirmation by the internship supervisor of the medical treatments or procedures performed by the doctor and included in the internship programme.

Duration of internship: 8 weeks (40 working days).

Place of internship: department of general surgery which is accredited to provide specialty training in general surgery or the above-mentioned internship.

Place where the on-call duty is performed: at the place where the basic or directed internship is carried out.

3. Vascular surgery internship

Internship objective:

Acquire specialist knowledge and practical skills in the diagnosis and treatment of: acute and chronic venous disease; arterial injury and blockages; and diabetic foot syndrome and phlebitis.

Scope of theoretical knowledge:

It is expected that the doctor will, during his/her internship, acquire knowledge in:

- 1) epidemiology and pathophysiology of acute and chronic vascular diseases;
- 2) invasive and non-invasive diagnosis of peripheral vascular disease;
- 3) diagnosis and treatment of arterial blockages;
- 4) diagnosis and treatment of arterial injuries;
- 5) diagnosis and treatment of diabetic foot syndrome;
- 6) diagnosis and treatment of lower limb varicose veins;
- 7) diagnosis and treatment of superficial phlebitis.

Scope of practical skills:

it is expected that the doctor will acquire the practical skills for the above-described

training course in section C - Training in the skills of performing medical

procedures and treatments in the table of the list of

and the number of treatments and medical procedures which the doctor must undergo in the course of that placement

Form of credit for internship (with the internship supervisor):

1) a colloquium on the theoretical knowledge covered in the internship programme;

 practical skills test - confirmation by the internship supervisor of the medical treatments or procedures performed by the doctor and included in the internship programme.

Duration of internship: 4 weeks (20 working days).

Place of internship: department of vascular surgery which is accredited to conduct specialty training in vascular surgery or the above internship.

Place where the on-call duty is performed: at the place where the basic or directed internship is carried out.

4. General internship in thoracic surgery

Internship objective:

Acquisition of specialist knowledge and practical skills in the diagnosis and treatment of: thoracic emergencies (emphysema); thoracic trauma and tracheal stenosis.

Scope of theoretical knowledge:

It is expected that the doctor will have acquired knowledge of:

- 1) topographical anatomy of the thoracic structure and the position of important organs in the thorax, including pathology:
 - a) the structure of the trachea, bronchi, lungs and pleura,
 - b) mediastinal anatomy with the position of organs, i.e. aorta, superior vena cava, oesophagus;
- basic assessment of radiological examinations, i.e. chest radiograph in A-P and lateral projection;
- 3) CT evaluation of the chest;
- 4) determination of pneumothorax and pleural fluid;
- 5) Primary bronchoscopy assessment of the bronchial tree with evaluation of emergencies, i.e. bronchial tree trauma;
- 6) gastroesophagoscopy (e.g. assessment of oesophageal perforation);
- sudden onset chest diseases, i.e. pneumothorax, pneumothorax, haemothorax, iatrogenic emphysema (diagnosis, treatment);
- 8) Thoracic injuries and their treatment (penetrating injuries, haematomas and haemorrhages into the pleural cavity, post-traumatic emphysema);

9) Pointubative tracheal stenosis (causes, diagnosis, treatment).

Scope of practical skills:

it is expected that the doctor will acquire the practical skills for the above-described

training course in section C - Training in the skills of performing medical

procedures and treatments in the table of the list of

and the number of treatments and medical procedures that apply to the doctor in the course of this internship.

Form of credit for internship (with the internship supervisor):

- 1) a colloquium on the theoretical knowledge covered in the internship programme;
- practical skills test confirmation by the internship supervisor of the medical treatments or procedures performed by the doctor and included in the internship programme.

Duration of internship: 4 weeks (20 working days).

Place of internship: department of thoracic surgery which is accredited to conduct specialty training in thoracic surgery or the above-mentioned internship.

Place where the on-call duty is performed: at the place where the basic or directed internship is carried out.

5. Internship in orthopaedics and traumatology of the musculoskeletal system

Internship objective:

to acquire specialist knowledge and practical skills in the diagnosis and treatment of traumatic injuries of the musculoskeletal system, including the spine, and their early and late complications.

Scope of theoretical knowledge:

It is expected that the doctor will, during his/her internship, acquire knowledge in:

- Fundamentals of physiology, physiopathology and biomechanics of the musculoskeletal system, physiology and disorders of bone fusion, physiology and pathology of articular cartilage, biomaterials;
- clinical examination of the musculoskeletal system and imaging methods in the diagnosis of diseases and post-traumatic lesions of the musculoskeletal system;
- basics of pathomechanics, diagnosis, differentiation, knowledge of complications, prognosis and modern treatment of traumatic injuries of the

musculoskeletal system;

- basics of diagnosis, prognosis, treatment in traumatic spinal injuries with spinal cord injuries;
- 5) recognising and treating complications in the healing of bone fractures and joint dislocations,
- 6) injury prevention issues.

Scope of practical skills:

it is expected that the doctor will acquire the practical skills for the above-described

training course in section C - Training in the skills of performing medical procedures and treatments in the table of the list of

and the number of treatments and medical procedures which the

doctor must undergo in the course of that placement

Form of credit for internship (with the internship supervisor):

- 1) a colloquium on the theoretical knowledge covered in the internship programme;
- practical skills test confirmation by the internship supervisor of the medical treatments or procedures performed by the doctor and included in the internship programme.

Duration of internship: 6 weeks (30 working days).

Place of internship: department of orthopaedics and traumatology of the musculoskeletal system, which is accredited to conduct specialised training in orthopaedics and traumatology of the musculoskeletal system or the above mentioned internship.

Place where the on-call duty is performed: at the place where the basic or directed internship is carried out.

6. Otorhinolaryngology internship

Internship objective:

Acquisition of specialist knowledge and practical skills in the diagnosis and treatment of: tumours of the pharynx and larynx, peri-tonsillar abscesses and inflammatory conditions of the paranasal sinuses.

Scope of theoretical knowledge:

It is expected that the doctor will, during his/her internship, acquire knowledge in:

- 1) Cancer of the larynx and pharynx diagnosis, differentiation, treatment;
- 2) diagnosis, differentiation and treatment of peri-tonsillar abscesses;
- 3) sinusitis the oropharyngeal complex.

Scope of practical skills:

it is expected that the doctor will acquire the practical skills for the above-described

training course in section C - Training in the skills of performing medical

procedures and treatments in the table of the list of

and the number of treatments and medical procedures which the doctor must undergo in the course of that placement

Form of credit for internship (with the internship supervisor):

- 1) a colloquium on the theoretical knowledge covered in the internship programme;
- practical skills test confirmation by the internship supervisor of the medical treatments or procedures performed by the doctor and included in the internship programme.

Duration of internship: 4 weeks (20 working days).

Place of internship: department of otorhinolaryngology which is accredited to conduct specialty training in otorhinolaryngology or the above internship.

Place where the on-call duty is performed: at the place where the basic or directed internship is carried out.

7. Internship in oral surgery

Internship objective:

Acquisition of specialist knowledge and practical skills in the extraction of teeth, including retained teeth; apical resection of the tooth root, incision of intraoral abscesses and the taking of extracts.

Scope of theoretical knowledge:

It is expected that the doctor will, during his/her internship, acquire knowledge of:

- 1) preparing the surgical field and the patient for surgical procedures;
- the basic area of dental surgery, in particular indications and surgical techniques for the alveolar process and methods of surgical correction of prosthetic base tissues aimed at improving the conditions for the functioning of dental prostheses (pre-prosthetic surgery);
- aetiology, diagnosis and surgical treatment of pathological tissue conditions and organs of the oral cavity and their differentiation;
- 4) diagnosis and treatment of inflammatory periapical conditions;

- 5) management of dental and alveolar trauma;
- oncological prophylaxis, indications and contraindications for general and local anaesthetics in dentistry, emergencies in the dental outpatient clinic.

Scope of practical skills:

it is expected that the doctor will acquire the practical skills for the above-described

training course in section C - Training in the skills of performing medical

procedures and treatments in the table of the list of

and the number of treatments and medical procedures which the doctor must undergo during the course of that internship

Form of credit for internship (with the internship supervisor):

- a colloquium on the theoretical knowledge covered in the internship programme;
- practical skills test confirmation by the internship supervisor of the medical treatments or procedures performed by the doctor and included in the internship programme.

Duration of internship: 4 weeks (20 working days).

Place of internship: unit which is accredited to provide specialised training in oral surgery or the above-mentioned internship.

Place of execution of the medical on-call duty: at the place of the basic internship.

8. Internship in orthodontics

Internship objective:

to acquire specialist knowledge and practical skills in the diagnosis and treatment of malocclusion and to acquire knowledge of the principles of team treatment of gnatic malocclusion.

Scope of theoretical knowledge:

It is expected that the doctor will, during his/her internship, acquire knowledge of:

- 1) diagnosis and treatment of malocclusion;
- 2) Orthodontic treatment of maxillofacial disorders.

Scope of practical skills:

it is expected that the doctor will acquire the practical skills in the field of the aforementioned **training** course under point **C** - **Training of skills**

the performance of medical procedures and treatments in the table

concerning the list and number of medical procedures and treatments which the doctor must undergo during the course of that placement

Form of credit for internship (with the internship supervisor):

- 1) a colloquium on the theoretical knowledge covered in the internship programme;
- practical skills test confirmation by the internship supervisor of the medical treatments or procedures performed by the doctor and included in the internship programme.

Duration of internship: 2 weeks (10 working days).

Place of internship: an orthodontic clinic that is accredited to provide specialty training in orthodontics or the above-mentioned internship.

Place of execution of the medical on-call duty: at the place of the basic internship.

9. Internship in conservative dentistry

Internship objective:

Acquisition of specialist knowledge and practical skills in dental examination and assimilation of contemporary standards in the conservative treatment of teeth, including root canal therapy.

Scope of theoretical knowledge:

It is expected that the doctor will, during his/her internship, acquire knowledge of:

- 1) treatment of carious cavities with modern methods and materials;
- 2) modern methods for the edodontic treatment of single- and multi-rooted canals.

Scope of practical skills:

the doctor is expected to acquire the practical skills for the abovementioned training period included in point **C** - **Training** in the **skills of performing medical procedures and treatments in the** table concerning the list and number of medical procedures and treatments which the doctor must undergo during the training period.

Form of credit for internship (with the internship supervisor):

1) a colloquium on the theoretical knowledge covered in the internship programme;

 practical skills test - confirmation by the internship supervisor of the medical treatments or procedures performed by the doctor and included in the internship programme.

Duration of internship: 2 weeks (10 working days).

Place of internship: outpatient clinic for conservative dentistry which is accredited to conduct specialised training in conservative dentistry with endodontics or the above-mentioned internship.

Place of execution of the medical on-call duty: at the place of the basic internship.

10. Internship in paediatric dentistry

Internship objective:

to acquire specialist knowledge and practical skills in the specifics of working with the child as a patient in the dental surgery and to acquire up-to-date knowledge on the prevention of caries disease in children.

Scope of theoretical knowledge:

It is expected that the doctor will, during his/her internship, acquire knowledge in:

- 1) the management of children as patients, the possibility of using psychological and pharmacological premedication before dental procedures;
- 2) Algorithm for the treatment of post-traumatic lesions in deciduous teeth

Scope of practical skills:

the doctor is expected to acquire the practical skills for the abovementioned training period included in point **C** - **Training** in the **skills of performing medical procedures and treatments in the** table concerning the list and number of medical procedures and treatments which the doctor must undergo during the training period.

Form of credit for internship (with the internship supervisor):

- 1) a colloquium on the theoretical knowledge covered in the internship programme;
- practical skills test confirmation by the internship supervisor of the medical treatments or procedures performed by the doctor and included in the internship programme.

Duration of internship: 2 weeks (10 working days).

Place of internship: unit which is accredited to provide specialised training in paediatric dentistry or the above-mentioned internship.

Place of execution of the medical on-call duty: at the place of the basic internship.

11. Internship in prosthodontics

Internship objective:

acquiring specialist knowledge and practical skills in the diagnosis of temporomandibular joint dysfunctions and acquiring knowledge of the basics of prosthetic treatment planning, including post-resectional prostheses and obturators and facial epithets.

Scope of theoretical knowledge:

The doctor must be familiar with the following during his/her internship:

- 1) Diagnosis and treatment of dysfunctions of the stomatognathic system;
- 2) basics of prosthetic treatment planning;
- 3) post-resection prostheses, obturators and facial epitheses.

Scope of practical skills:

it is expected that the doctor will acquire the practical skills for the above-

described training course in section C - Training in the skills of performing

medical procedures and treatments in the table of the list of

and the number of treatments and medical procedures which the doctor must undergo during the course of that internship

Form of credit for internship (with the internship supervisor):

- 1) a colloquium on the theoretical knowledge covered in the internship programme;
- practical skills test confirmation by the internship supervisor of the medical treatments or procedures performed by the doctor and included in the internship programme.

Duration of internship: 2 weeks (10 working days).

Place of internship: unit which is accredited to provide specialised training in dental prosthodontics or the above-mentioned internship.

Place of execution of the medical on-call duty: at the place of the basic internship.

12. Periodontal internship

Internship objective:

Acquisition of specialist knowledge and practical skills in modern diagnosis and treatment of oral mucosal and periodontal diseases and modern oral oncology prevention.

Scope of theoretical knowledge:

It is expected that the doctor will, during his/her internship, acquire knowledge in:

- 1) diagnosis and treatment of diseases of the oral mucosa;
- 2) diagnosis and treatment of periodontal disease;
- 3) methods of tooth immobilisation in parodontopathies;
- 4) qualification for surgical treatment of periodontal disease;
- 5) guided tissue regeneration in the treatment of periodontal disease.

Scope of practical skills:

it is expected that the doctor will acquire the practical skills for the above-described

training course in section C - Training in the skills of performing medical

procedures and treatments in the table of the list of

and the number of treatments and medical procedures which the doctor must undergo during the course of that internship

Form of credit for internship (with the internship supervisor):

- 1) a colloquium on the theoretical knowledge covered in the internship programme;
- practical skills test confirmation by the internship supervisor of the medical treatments or procedures performed by the doctor and included in the internship programme.

Duration of internship: 2 weeks (10 working days).

Place of internship: unit which is accredited to conduct specialised training in periodontology or the above-mentioned internship.

Place where the on-call duty is performed: at the place where the basic or directed internship is carried out.

13. Internship in anaesthesiology and intensive care

Internship objective:

Acquisition of specialist knowledge and practical skills in intubation, cardiopulmonary resuscitation, management of basic systemic health emergencies, shock and assimilation of contemporary standards in postoperative and cancer pain management.

Scope of theoretical knowledge:

It is expected that the doctor will acquire knowledge of:

- the management of respiratory and circulatory resuscitation at ILS (*Immediate Life Support*) level;
- 2) emergency management of systemic health emergencies;
- 3) emergency management of multiple organ injuries;
- 4) relief of post-operative and cancer pain;
- 5) shock management;
- 6) post-operative care.

Scope of practical skills:

it is expected that the doctor will acquire the practical skills for the above-described

training course in section C - Training in the skills of performing medical procedures and treatments in the table of the list of

and the number of treatments and medical procedures which the doctor must undergo in the course of that placement

Form of credit for internship (with the internship supervisor):

- 1) a colloquium on the theoretical knowledge covered in the internship programme;
- practical skills test confirmation by the internship supervisor of the medical treatments or procedures performed by the doctor and included in the internship programme.

Duration of internship: 8 weeks (40 working days).

Place of internship: department of anaesthesiology and intensive care which is accredited to conduct specialised training in anaesthesiology and intensive care or the above mentioned internship.

Place where the on-call duty is performed: at the place where the basic or directed internship is carried out.

14. Internship in dental radiology

Internship objective:

Acquisition of specialist knowledge and practical skills in the assessment of basic dental projections and volumetric cone tomography.

Scope of theoretical knowledge:

It is expected that the doctor will, during his/her internship, acquire knowledge of the applicability of appropriate radiological examination techniques in the diagnosis of craniofacial bone diseases.

Scope of practical skills:

it is expected that the doctor will acquire the practical skills for the abovedescribed **training** course in section **C** - **Training** in the **skills of performing medical procedures and treatments** in the table of the list of and the number of treatments and medical procedures which the doctor must undergo in the course of that placement

Form of credit for internship (with the internship supervisor):

- 1) a colloquium on the theoretical knowledge covered in the internship programme;
- practical skills test confirmation by the internship supervisor of the medical treatments or procedures performed by the doctor and included in the internship programme.

Duration of internship: 2 weeks (10 working days).

Place of internship: unit accredited to provide specialised training in radiology and diagnostic imaging or the above-mentioned internship. Place *of on-call duty:* at *the* place of training or basic training.

15. Internship in radiology and diagnostic imaging

Internship objective:

Acquisition of specialist knowledge and practical skills in the evaluation of conventional craniofacial radiographs, CT, RM and PET-CT in trauma, oncology, inflammatory patients and developmental defects of the face, mouth and neck.

Scope of theoretical knowledge:

The doctor is expected to acquire knowledge of:

- physical and technical basis of conventional radiology, CT, MRI, nuclear medicine including PET;
- 2) evaluation of conventional craniofacial radiographs, CT, MRI and PET-CT and ultrasound

in trauma patients, oncology patients, patients with inflammatory conditions and malformations of the face, mouth and neck.

Scope of practical skills:

it is expected that the doctor will acquire the practical skills for the above-described

training course in section C - Training in the skills of performing medical

procedures and treatments in the table of the list of

and the number of treatments and medical procedures which the doctor must undergo during the course of that internship

Form of credit for internship (with the internship supervisor):

- 1) a colloquium on the theoretical knowledge covered in the internship programme;
- practical skills test confirmation by the internship supervisor of the medical treatments or procedures performed by the doctor and included in the internship programme.

Duration of internship: 4 weeks (20 working days).

Place of internship: unit accredited to provide specialised training in radiology and diagnostic imaging or the above-mentioned internship. Place *of on-call duty:* at *the* place of training or basic training.

16. Plastic surgery internship

Internship objective:

to acquire specialist knowledge and practical skills in the diagnosis and treatment of pressure sores, burn disease, qualification principles and methods used today in reconstructive surgery and in cleft patients.

Scope of theoretical knowledge:

The doctor is expected to acquire knowledge of:

- anatomy and histology of the skin and subcutaneous tissue, indications, surgical technique and postoperative management in the use of full and intermediate thickness skin grafts;
- complex tissue grafts and grafts of fascia, tendons, cartilage, bone, mucosa and nerves;
- anatomy and preparation of the most commonly used skin, muscle and composite flaps;
- 5) conservative and surgical treatment of hypertrophic scars, scar contractures and keloids;
- 6) pathophysiology and treatment of pressure sores;
- epidemiology, classification, diagnosis and prevention of burns, medical assistance in burns;
- 8) symptoms and treatment of upper respiratory tract burns;
- procedures changing the shape of the cartilaginous part of the nose, principles of surgical correction of the humped and crooked nose;
- 10) corrective surgery of the nasal septum and typical nasal malformations;
- 11) The surgical anatomy of the palate and the aetiology and classification of clefts of the upper lip and palate, as well as defects and syndromes coexisting with clefts.

Scope of practical skills:

it is expected that the doctor will acquire the practical skills for the above-described **training** course in section **C** - **Training** in the **skills of performing medical procedures and treatments** in the table of the list of and the number of treatments and medical procedures which the doctor must undergo

in the course of that placement

Form of credit for internship (with the internship supervisor):

- 1) a colloquium on the theoretical knowledge covered in the internship programme;
- practical skills test confirmation by the internship supervisor of the medical treatments or procedures performed by the doctor and included in the internship programme.

Duration of internship: 8 weeks (40 working days).

Place of internship: department of plastic surgery which is accredited to provide specialty training in plastic surgery or the above internship.

Location of the on-call medical service: at the place of training or basic training.

17. Internship in ophthalmology

Internship objective:

Acquisition of specialist knowledge and practical skills in the diagnosis and treatment of post-traumatic damage to the eyeball and ocular protective apparatus,

exophthalmos and learning the indications and technique of eyeball enucleation surgery.

Scope of theoretical knowledge:

The doctor is expected to acquire knowledge of:

- Post-traumatic damage to the eyeball, eyelids, lacrimal ducts diagnostic tests, management;
- 2) causes of exophthalmos diagnosis, management;
- 3) Ocular enucleation indications, technique.

Scope of practical skills:

the doctor is expected to acquire the practical skills for the abovementioned training period included in point **C** - **Training** in the **skills of performing medical procedures and treatments in the** table concerning the list and number of medical procedures and treatments which the doctor must undergo during the training period.

Form of credit for internship (with the internship supervisor):

- a colloquium on the theoretical knowledge covered in the internship programme;
- practical skills test confirmation by the internship supervisor of the medical treatments or procedures performed by the doctor and included in the internship programme.

Duration of internship: 2 weeks (10 working days).

Place of internship: a department of ophthalmology which is accredited to provide specialty training in ophthalmology or the above-mentioned internship.

Place of performance of medical on-call duty: : at the place of training or basic training.

18. Internship in neurosurgery

Internship objective:

acquire specialist knowledge and practical skills in the diagnosis and treatment of patients following craniocerebral trauma, patients with intracranial haematoma, cerebral hemorrhage and intracranial compartment syndrome.

Scope of theoretical knowledge:

- 1) It is expected that the doctor will, during his/her internship, acquire knowledge of:
- 2) neurological examination, Glasgow Coma Scale;
- 3) pharmacological treatment of the patient after craniocerebral trauma;
- qualification for conservative or surgical treatment of the patient with intracranial haematoma;
- 5) postoperative pharmacological treatment, including the management of increased intracranial pressure syndrome;
- 6) recognition of nasal fluid.

Scope of practical skills:

it is expected that the doctor will acquire the practical skills for the above-described **training** course in section **C** - **Training** in the **skills of performing medical**

procedures and treatments in the table of the list of

and the number of treatments and medical procedures which the doctor must undergo in the course of that placement

Form of credit for internship (with the internship supervisor):

- 1) a colloquium on the theoretical knowledge covered in the internship programme;
- practical skills test confirmation by the internship supervisor of the medical treatments or procedures performed by the doctor and included in the internship programme.

Duration of internship: 8 weeks (40 working days).

Place of internship: department of neurosurgery which is accredited to conduct specialised training in neurosurgery or the above mentioned internship.

Location of the on-call medical service: at the place of training or basic training.

19. Clinical oncology internship

Internship objective:

Acquisition of specialist knowledge and practical skills in the diagnosis and treatment of cancers of the face, oral cavity and neck and the indications for neoadjuvant chemotherapy and chemoradiotherapy and their complications. *Scope*

of theoretical knowledge:

It is expected that the doctor will, during his/her internship, acquire knowledge of:

- basics and methods of diagnosing early forms of cancer in the oral cavity, face and neck;
- 2) modern methods of treatment of malignant tumours of the mouth, face and neck and particularly surgical, chemotherapeutic and radiotherapeutic methods;
- 3) qualifying patients for the appropriate therapeutic method and technique;
- 4) assessments of clinical stage (TNN) and tumour malignancy;
- 5) prediction of complications, metastases, prognosis;
- 6) malignant skin tumours of the face (basal cell carcinoma, melanoma).

Scope of practical skills:

it is expected that the doctor will acquire the practical skills for the above-described training course in section C - Training in the skills of performing medical procedures and treatments in the table of the list of

and the number of treatments and medical procedures which the doctor must undergo in the course of that placement

During the internship, the doctor is required to independently perform and participate (assist) in the performance of the following procedures and clinical examinations:

- 1) Clinical and radiological diagnosis of tumours in the oral cavity, facial bones and jaws;
- 2) taking sections for histopathological examination;
- 3) follow-up examinations of patients after oncological treatment.

Form of credit for internship (with the internship supervisor):

1) a colloquium on the theoretical knowledge covered in the internship programme;

 practical skills test - confirmation by the internship supervisor of the medical treatments or procedures performed by the doctor and included in the internship programme.

Duration of internship: 4 weeks (20 working days).

Place of internship: a department of clinical oncology which is accredited to

provide specialty training in clinical oncology or the above internship.

Location of on-call duty: at the place of training or basic training.

20. Internship in radiation oncology

Internship objective:

to acquire expertise in the indications, planning and qualification for radical and adjuvant treatment of cancer with radiotherapy and local and systemic complications.

Scope of theoretical knowledge:

The dentist is expected to acquire knowledge of:

- indications and contraindications for treatment with radical radiotherapy of tumours of the face, oral cavity, jawbone and neck, depending on the type of tumour, its location and stage;
- 2) indications and contraindications for complementary radiotherapy after surgical treatment of tumours of the face, mouth and neck;
- 3) indications for palliative radiotherapy;
- 4) irradiation methods and techniques, including IMRT (Intensity Modulated Radiation Therapy), VMAT (Volumetric Modulated Arc Therapy);
- 5) indications and contraindications for brachytherapy treatment in head and neck oncology;
- 6) diagnosis and treatment of radiation reactions;
- 7) Radiotherapy treatment planning (field, dose, hypo- and hyperfractionation, boost, protection of critical organs).

Scope of practical skills:

it is expected that the doctor will acquire the practical skills for the above-described **training** course in section **C** - **Training** in the **skills of performing medical procedures and treatments** in the table of the list of

and the number of treatments and medical procedures which the doctor must undergo in the course of that placement

During the internship, the dentist should independently perform and participate

(assist) in the performance of the following clinical procedures and examinations:

- 1) participating in the cancer diagnosis process;
- 2) taking sections for histopathological examination;
- 3) participating in the planning of radiotherapy treatment;
- 4) Participating in follow-up examinations of patients after oncological operations and irradiation.

Form of credit for internship (with the internship supervisor):

- 1) a colloquium on the theoretical knowledge covered in the internship programme;
- practical skills test confirmation by the internship supervisor of the medical treatments or procedures performed by the doctor and included in the internship programme.

Duration of internship: 4 weeks (20 working days).

Place of internship: department/facility that is accredited to provide specialty training in radiation oncology or the above internship.

Location of the on-call medical service: at the place of training or basic training.

D - Training of skills to perform treatments and procedures medical

1. Basic internship in maxillofacial surgery Procedure designation:

Code A - performing alone with assistance or under the supervision of the head of the specialty or a specialist designated by him/her (number);
Code
B - in which the doctor participates as first assistant (number).

List and number of treatments and medical procedures that apply to the doctor during the **basic internship**:

Medical treatments/procedures	Code A	B-code
1. stable osteosynthesis in mandibular fractures	20	20

Medical treatments/procedures	Code A	B-code
2. conservative treatment of condylar process fractures	10	10
3. surgical treatment of mandibular condylar process fractures	5	10
4. surgical treatment of jaw fractures	5	5
5. surgical treatment of fractures of the zygomatic complex jaw	5	5
6. surgical treatment of orbital fractures (e.g. <i>blow-out</i>)	5	5
7. orbital reconstruction with grafts or implants	5	5
8. surgical treatment of lower lip cancer with reconstruction	3	3
9. partial or total resection of the jaw due to cancers	2	5
10. partial mandibular resection	5	5
11. selective nodal operations	5	5
12. complex nodal surgery	1	5
13. surgical treatment of morphological maxillofacial malformations	1	5
orofacial-occlusal conditions, e.g. progenia, microgenia		
14. reconstructive treatment of post-split deformities	0	1
15. reconstructive procedures using flaps and grafts	25	25
16. surgical treatment of salivary gland tumours, including tumours of the	3	5
parotid 17. surgical treatment of cysts, fistulas and malformations neck	1	5
18. surgical treatment of diseases of the maxillary sinuses	15	10
19. surgical treatment of abscesses and abscesses	30	20
20. tracheotomy	5	10
Total	151	164

Directional placements

Procedure designation:

Code A - to be performed independently with assistance or under the supervision of the head of the specialty or a specialist designated by him/her (number);

Code B - in which the doctor participates as first assistant (number).

Procedures that are obligatory to be performed during the internship are not accounted for in the Electronic Specialty Card. The completion of the entire internship means the completion of the operations, treatments and medical procedures required by the internship programme.

List and number of treatments and medical procedures that are obligatory for the doctor during the course of his/her **internship**:

Medical treatments/procedures	Code A	B-code
General surgical internship		
1. administer local and regional anaesthesia	5	5
2. incision and drainage of an external abscess	5	5
3. 'acute abdomen', surgical treatment	0	5
4. gastrointestinal haemorrhage - treatment	0	2
5. treatment of vascular injuries - stopping external		
haemorrhage and management of limb ischaemia	0	2
lower		
6. acute appendicitis - treatment	0	2
surgical	0	2
Total	10	21
Vascular surgery internship		
1. suturing of a blood vessel	0	2
2. execution of a vascular anastomosis	0	2
3. bypass grafts in arterial disease	0	2
4. abdominal aortic aneurysms	0	2
5. lower limb varicose vein surgery	0	2
Total	0	10
General internship in thoracic surgery		
1. classic bronchoscopy	0	2
2. insertion of drainage in emphysema, haematoma, cavity abscess	0	1
pleurisy		
3. fine needle aspiration biopsy through the chest wall	0	3
chest		

Medical treatments/procedures	Code A	B-code
Total	0	6
Internship in orthopaedics and traumatology of the musc	uloskeletal	system
1. spinal stabilisation with implants	0	1
2. Placement of plaster dressing on femur, hip,	0	3
corset	U	5
3. conservative repositioning of a long bone fracture	0	3
4. fixation of bone fragments with screws, plate,	0	2
intramedullary, external stabiliser	U	2
5. hip endoprosthesis	0	2
6.arthroscopy of the knee joint	0	2
Total	0	13
Otorhinolaryngology internship		
1. cancer of the larynx and pharynx - treatment	0	2
2. tracheotomy, tracheostomy	3	0
3. treatment of peri-tonsillar abscesses	1	3
4. nasal bone fracture - treatment	2	2
5. curvature of the nasal septum - treatment	0	2
6. sinusitis - oropharyngeal conflict	0	3
wired	0	5
Total	6	12
Internship in oral surgery		1
1. performing routine tooth extractions	100	1
2. surgical treatment of dentigerous abscesses	20	2
3. surgical treatment of obstructed eruption of teeth	20	3
wisdom and retained teeth	20	5
4. performing an apical resection of the tooth root	10	4
5. taking a specimen for histopathological examination and	20	5
performing a biopsy	20	5
6. treatment of tooth and alveolar trauma	5	6
7. first aid for bone and jaw fractures	5	7

Medical treatments/procedures	Code A	B-code
Total	180	28
Internship in orthodontics	1	1
1. orthodontic examination with test interpretation	10	0
auxiliary		0
2 .examination of the patient and diagnosis of abnormalities	10	0
of the masticatory organ		0
3. taking impressions of the dental arches including the determination of the	5	0
their short circuits		
 evaluation of occlusal changes on the basis of plaster analysis 	5	0
maxillary and mandibular models Total		
TOLAT	30	0
Internship in conservative dentistry		
1. dental examination and completion of a medical record at the	5	3
patients admitted		
2. Reconstruction of hard dental tissue	0	5
3. endodontic treatment of uninfected and infected	0	5
root canals		
4. conservative treatment of acute, exacerbated	0	5
and chronic diseases of periapical tissues		
Total	5	18
Internship in paediatric dentistry	·	·
1. provision of trauma to deciduous teeth	0	5
2. provision of trauma to permanent teeth in children	0	5
Total	0	10
Internship in prosthodontics	1	
1. prosthetic patient examination, prognosis, design	0	2
proceedings		2
2. taking impressions and casting plaster models with	0	5
determination of their short circuit		

3. repair of a broken removable denture plate	0	2
Medical treatments/procedures	Code A	B-code
Total	0	9
Periodontal internship		1
1. collection of material for microbiological examination	1	5
2. collection of material for cytological examination	1	5
3. collection of material for histopathological examination	1	5
4. scaling	1	5
5. treatment of loose teeth	1	5
6. guided bone regeneration procedures	1	2
Total	6	27
Internship in anaesthesiology and intensive care		
1. carrying out respiratory and cardiovascular resuscitation in basic	0	5
2. ensuring and maintaining airway patency	10	0
by endotracheal intubation	10	0
3. perform external cardiac massage and ventilation	5	0
mechanical		
4. assessment of brainstem death	0	2
5. providing oxygen therapy	0	2
6. perform defibrillation	3	0
7. performance of lower lumbar anaesthesia	0	1
8. nasotracheal intubation	5	1
9. fibroscopy	1	1
Total	24	12
Dental radiology internship (the doctor should		
participate in the taking of intraoral radiographs)		
1. dental	0	5
2. occlusion	0	2
3. bite-bite	0	2
4. pantomographic	0	6
5. CBCT (cone beam computed tomography)	0	5
	1	

Total	0	20
Medical treatments/procedures	Code A	B-code
Internship in radiology and diagnostic imaging	1	1
1. interpretation of conventional radiographs in patients with		
inflammatory conditions, trauma, tumours and malformations	0	10
of the face, mouth and bones	0	10
jaws		
2. interpretation of CT examinations in patients with		
inflammatory conditions, trauma, tumours and malformations	0	20
of the face, cavity		
mouth and jawbone		
interpretation of RM studies in patients with inflammatory conditions,		
injuries, tumours and malformations of the face, mouth and	0	10
jawbone		
4. interpretation of ultrasound examinations in patients with		
inflammatory conditions, trauma, and tumours of the face, oral	0	20
cavity and bone		
jaws		
5. interpretation of PET studies in patients with facial tumours,	0	5
oral cavity and jawbone		
Total	0	65
Plastic surgery internship		
1. various types of local plastics, including 'z' plastics	3	2
2. intermediate and full-thickness skin grafts	3	2
3. various types of plasty with skin flaps, dermal and	0	3
fascial, dermo-muscular and muscular	0	3
4. plastic surgery of the cleft upper lip and palate	0	3
5. correction of congenital and post-traumatic deformities of the nose	0	3
6. arterialised flap plasty	0	2
Total	6	15
Internship in ophthalmology	1	

passed the relevant basic module		
1. treatments in post-traumatic damage to the eyeball, eyelids,	0	2
tear ducts		
2. visual acuity test	5	0
3. examination of the visual field, double vision and their evaluation	5	5
Medical treatments/procedures	Code A	B-code
4. enucleation of the eyeball	0	1
Total	10	8
Internship in neurosurgery		
1. cranial vault bone fracture, defects - diagnosis	0	2
and treatment	0	3
2. intracranial (cerebral) haematomas, trepanations	0	5
skulls	0	5
3.treatment of post-traumatic meningeal fistulas with leakage	0	4
cerebrospinal fluid through the nose	0	1
4. lumbar puncture - measurement of cerebro-fluid pressure	0	2
spinal cord, macroscopic and laboratory evaluation of the fluid	0	2
5. assessment of parietal haematoma and base fractures	0	5
anterior cranial fossa on CT scan	0	5
Total	0	16
Clinical oncology internship		
1. clinical and radiological diagnosis of cancer in	5	5
within the oral cavity, facial bones and jaws	5	5
2. taking biopsy specimens for histopathological examination	5	5
3. follow-up of patients after operations	10	20
oncology	10	20
Total	20	30
Internship in radiation oncology	1	
1. participating in the cancer diagnosis process	0	20
2. taking biopsy specimens for histopathological examination	5	10
3. participating in the planning of radiotherapy treatment	0	10
4. participating in follow-up examinations of patients after	0	20
oncological operations and irradiation		

	60
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C - Medical on-call duty

A doctor is on medical on-call duty for an average of 10 hours 5 minutes per week or performs shift work or equivalent working hours,

at the maximum working time permitted by the regulations on medical activity, i.e. an average of 48 hours per week, including medical on-call duty, during the adopted reference period. A doctor may perform accompanying or independent medical oncall duties. The head of the specialty, in consultation with the head of the entity or organisational unit of that entity, gives consent, by means of the SCM, for the doctor undergoing specialty training to perform independent medical on-call duties.

For on-call duty performed during a specialised training period, a doctor may choose where to perform on-call duty. A doctor may do on-call duty in the specialty training unit or in the unit conducting the training. The decision to do so shall be taken by the doctor in consultation with the specialty advisor.

The conduct and organisation of medical on-call duties is carried out in accordance with the provisions of the Act on the Profession of Physician and Dentist.

E - Self-study

The doctor is obliged to undergo continuous and active self-education in order to deepen his/her knowledge, to keep up to date with advances in the field of maxillofacial surgery, in particular to use recommended literature, to attend educational meetings of scientific societies, to write publications and to participate in other forms of self-education indicated by the head of the specialty.

1. Literature study

The doctor should make use of up-to-date textbooks and scientific journals in the field of maxillofacial surgery, as well as other sources of knowledge indicated by the head of the specialty.

2. Participation in educational activities

The doctor should actively participate in:

- 1) scientific and training sessions;
- national cranio-maxillofacial surgery congresses
 and dental and other educational events organised by health institutions
- 3) European cranio-maxillofacial surgery congresses;
- national and European congresses in related fields (oncology, plastic and reconstructive surgery, general surgery, neurosurgery, otorhinolaryngology, orthodontics),
- 5) and other educational events organised by health institutions.

3. Preparation of publications

The doctor is required to write a scientific paper published in a peerreviewed medical journal of which the doctor is an author or co-author, or a review paper - on a topic covered by the specialisation programme.

1. Additional days for self-study

A doctor undergoing specialisation training shall be entitled, as of 1 January 2019, to 6 days per year of self-study for attending conferences, scientific courses, in-service courses and other training directly related to the doctor's field of specialisation training, according to the doctor's choice and educational needs. Deadline and the way in which the doctor uses the additional days for self-training shall be determined in agreement with the doctor by the head of the specialty through an appropriate shortening of other compulsory elements of the specialty training. This shortening may not concern specialty courses, but only the basic internship or the guided internship, while all elements of the specialty training (internships) must be completed and passed. The specialty director shall first decide on an appropriate reduction in the duration of the core internship, and only

where this is not possible, shall shorten the duration of in-service training accordingly, but the duration of in-service training shall not be reduced by more than half of the duration provided for in the specialisation programme. Additional days for

self-study not used in a given year of specialisation does not carry over to subsequent years of specialisation training.

V. ASSESSMENT OF KNOWLEDGE AND PRACTICAL SKILLS

1. Tests and colloquia on theoretical knowledge

The doctor is obliged to:

- pass a test or colloquium at the end of each course on the knowledge covered by the course (with the course director);
- 2) taking a colloquium at the end of each internship on the knowledge covered in the internship programme (with the internship/specialisation director).

2. Ongoing assessment and practical skills tests

The head of the specialty or the internship supervisor carries out an ongoing assessment of the practical skills acquired by the doctor, during the individual internship.

The doctor is obliged to pass a test of practical skills (included in the training programme), i.e. the passing by the doctor of medical procedures and procedures performed independently with assistance or under the supervision of the head of specialisation or a specialist appointed by him/her (code A)

or medical treatments and procedures in which the doctor participates as first assistant (code B). The credit is recorded in the Electronic Specialty Card.

3. Evaluation of a scientific or review paper

The head of the specialty evaluates the theoretical papers prepared by the doctor that are included in the specialty programme: scientific or review papers.

VI. DURATION OF SPECIALISATION TRAINING

Duration of specialty training in maxillo-facial surgery for doctors who do not hold a relevant first- or second-degree specialization or a specialist title in a relevant field of medicine or have completed

and passed the relevant basic module is 6 years.

	Course of specialisation training			
Cou		Duration		
rse no.	Specialisation courses:	number weeks	number of days working	
1.	Introductory course: "Introduction to specialization in maxillofacial surgery". face"	0,6	3	
2.	Course: 'Recognition, differentiation and treatment of specific and non-specific inflammation of soft and hard tissues of the craniofacial region and neck, directions of spread and principles of treatment abscesses and abscesses of the craniofacial region"	0,6	3	
3.	Course: 'Maxillary sinus diseases - their diagnosis, differentiation and treatment"	0,6	3	
4.	Course: 'Cysts of the maxillofacial region and neck. Etiopathogenesis, diagnosis, differentiation, treatment"	0,4	2	
5.	Course: 'Etiopathogenesis, diagnosis and treatment of Temporomandibular joint disorders".	0,6	3	
6.	Course: 'Potentially malignant disorders, features of benign and malignant tumours of the oral cavity and craniofacial region - their recognition and treatment"	0,4	2	
7.	Course: 'Epidemiology, diagnosis and surgical and combined treatment of malignant neoplasms of the face, oral cavity, facial region skull and neck"	0,6	3	
8.	Course: 'Craniofacial skeletal fractures Their diagnosis, classification and treatment"	0,6	3	
9.	Course: 'Orbital fractures - diagnosis, differentiation and treatment"	0,6	3	

		1	1	
10.	Course: 'Conservative and surgical treatment of fractures	0,4	2	
	condylar processes of the mandible"			
	Course: 'Etiopathogenesis, morphology, diagnosis,			
11.	differentiation and surgical treatment of congenital	0,6	3	
	and acquired maxillofacial malformations'.			
	occlusion"			
12.	Course: 'Diseases of the salivary glands-	0,6	3	
12.	diagnosis, differentiation, treatment"	0,0	5	
13.	Course: 'Transfusion of blood and blood components'.	0,4	2	
14.	Course: 'Medical certification'.	0,6	3	
15.	Course: 'Prevention and health promotion'.	0,4	2	
16.	Attestation (summary) course: "Surgery	1	5	
10.	maxillofacial"		5	
Total d	Total duration of specialisation courses9 wks.45			
Inte		Duration		
	Directional placements:		number of	
rnchi	Directional placements.	number	number of	
rnshi n No	Directional placements.	number weeks	number of days	
rnshi p No.	·			
_	Basic training in maxillofacial surgery		days	
p No.	·	weeks	days working	
p No.	Basic training in maxillofacial surgery	weeks	days working	
p No. 1.	Basic training in maxillofacial surgery face	weeks	days working 870	
p No. 1. 2.	Basic training in maxillofacial surgery face General surgical internship	weeks 174 8	days working 870 40	
p No. 1. 2. 3. 4.	Basic training in maxillofacial surgery face General surgical internship Vascular surgery internship	weeks 174 8 4 4	days working 870 40 20 20	
p No. 1. 2. 3.	Basic training in maxillofacial surgery face General surgical internship Vascular surgery internship General internship in thoracic surgery	weeks 174 8 4	days working 870 40 20	
p No. 1. 2. 3. 4.	Basic training in maxillofacial surgery face General surgical internship Vascular surgery internship General internship in thoracic surgery Internship in orthopaedics and traumatology	weeks 174 8 4 4	days working 870 40 20 20	
 p No. 1. 2. 3. 4. 5. 6. 	Basic training in maxillofacial surgery face General surgical internship Vascular surgery internship General internship in thoracic surgery Internship in orthopaedics and traumatology of the musculoskeletal system	weeks 174 8 4 4 6 4 4	days working 870 40 20 20 30 20	
p No. 1. 2. 3. 4. 5.	Basic training in maxillofacial surgery face General surgical internship Vascular surgery internship General internship in thoracic surgery Internship in orthopaedics and traumatology of the musculoskeletal system Otorhinolaryngology internship	weeks 174 8 4 4 6	days working 870 40 20 20 30	
 p No. 1. 2. 3. 4. 5. 6. 	Basic training in maxillofacial surgery face General surgical internship Vascular surgery internship General internship in thoracic surgery Internship in orthopaedics and traumatology of the musculoskeletal system Otorhinolaryngology internship Surgical internship	weeks 174 8 4 4 6 4 4	days working 870 40 20 20 30 20	
p No. 1. 2. 3. 4. 5. 6. 7.	Basic training in maxillofacial surgery face General surgical internship Vascular surgery internship General internship in thoracic surgery Internship in orthopaedics and traumatology of the musculoskeletal system Otorhinolaryngology internship Surgical internship dental	weeks 174 8 4 4 6 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	days working 870 40 20 20 30 20 20 30 20 20	

10.	Internship in paediatric dentistry	2	10
44	Prosthodontic internship	2	10
11.	dental	2	10
12.	Periodontal internship	2	10
13.	The training course in anaesthesiology and	8	40
13.	intensive care		10
14.	Radiological internship	2	10
	dental		
15.	Internship in radiology and diagnostics	4	20
	imaging		
16.	Plastic surgery internship	8	40
17.	Internship in ophthalmology	2	10
18.	Internship in neurosurgery	8	40
19.	Clinical oncology internship	4	20
20.	Internship in radiotherapy	4	20
20.	oncology	4	20
Total	duration of directed placements	254 wks. 1270	
Self-s	udy	2,2 11	
Total	duration of specialisation training	265 wks.	1326
		and 1 day	
		Duration	
Holid	ays and public holidays:	number	number of
		weeks	days
		1 week	working
Traini	ng leave to prepare for and take the PES	and	6
Holidays		31 wks and	156
Public	holidays	15 wks. and	78
		3 days	

Total duration of specialty training	313 wks.	1566
Total duration of specialty training	and 1 day	
Additional days for self-training (6 days in each year of		
specialisation) to attend conferences, scientific and refresher		36
courses and other trainings		50
in a particular field of specialisation to be chosen by the doctor		

VII. STATE SPECIALISATION EXAMINATION

Specialisation training in maxillofacial surgery ends with the State Specialisation

Examination, consisting of a test examination

and oral examination:

- The test exam is a set of questions on the required knowledge set out in the specialisation programme, containing five answer options, of which only one is correct;
- 2) The oral examination shall include problem-based questions on the required knowledge set out in the specialisation programme.

Annex to the programme of specialisation in

maxillo-facial surgery for doctors

ACCREDITATION STANDARDS FOR TRAINING PROVIDERS

- conditions to be fulfilled by the unit in order to ensure the implementation of the specialisation programme in maxillo-facial surgery

The specialty training provider is required to meet the following accreditation standards:

- 1. With regard to the conduct of activities corresponding to the profile of the specialised training provided:
 - a) to have within its organisational structure a department of maxillo-facial surgery or another organisational unit with the status of an entity performing medical activity, confirmed in the Register Book by an appropriate code characterising the specialisation of the organisational unit of the medical establishment providing specialised health services in the field of maxillofacial surgery, to have beds intended for patients to whom health services are provided in the field of the specialisation which is the subject of the application. Accreditation is based on the performance of the treatments and procedures indicated in the basic internship.
- 2. Regarding the provision of organisational conditions to enable a certain number of doctors to follow the specialisation and self-training programme:
 - a) to have an appropriate teaching room, equipped with audiovisual equipment, Internet access and basic textbooks and scientific journals in the field covered by the specialisation programme.

3. In terms of ensuring that quality supervision of specialisation training is carried out:

 a) having a committee or appointing a person responsible for assessing the quality of training, organising regular meetings with doctors undergoing specialisation training, receiving and analysing comments made by doctors regarding problems in the implementation of the above training.

- 4. In terms of ensuring the monitoring of a doctor's specialty training records:
 - a) periodic control of the specialisation training cards and the indexes of performed medical procedures and treatments of doctors undergoing specialisation training, - verification of the timeliness of taking and passing specialisation courses, directional internships and performing medical procedures and treatments included in the specialisation programme, carried out by the commission or the person responsible for assessing the quality of education.
- 5. In terms of ensuring adequate staffing:
 - a) having a cadre of specialists who can act as heads of specialisation.
- 6. Regarding the provision of equipment and apparatus necessary for the specialisation programme:
 - a) to have the equipment and apparatus necessary for the provision of inpatient hospital treatment of the following profile: maxillo-facial surgery - at least first reference level, in accordance with the regulations governing the provision of in-patient hospital treatment.
- 7. With regard to the provision of health services enabling a certain number of doctors to follow the specialisation programme:
 - a) Providing specialist health services in the field of maxillofacial surgery,
 - b) providing specialised health services, performing treatments and procedures of an appropriate type, to the extent and in such numbers as to enable all doctors undergoing specialisation training, in a given unit, to follow the specialisation programme, including the performance of treatments and medical procedures as defined in the specialisation programme,
 - c) one training place for at least 100 maxillo-facial hospitalisations per year,

- d) Signing agreements with accredited units for the implementation of guided internships specified in the specialisation programme, which the unit does not provide within its organisational structure.
- 8. For the provision of round-the-clock health services to people who are hospitalised or do not require hospitalisation, in health and life-threatening emergencies and in other cases of urgency:
 - a) there is a 24-hour emergency room/SOR for maxillofacial surgery patients in the hospital where the department applying for accreditation is located,
 - b) there is access to OAiIT (Anaesthesia and Intensive Care Unit) or intensive care beds in the hospital where the maxillofacial surgery department is located,
 - c) there is a 24-hour doctor on call in the maxillo-facial surgery department.
- 9. Regarding the provision of medical on-call duties for doctors undergoing specialised training:
 - a) ensuring medical on-call duty at the rate specified
 in the specialisation programme or shift work
 or equivalent working hours up to the maximum working hours permitted by
 the legislation on medical activities.