

CATALOGUE OF COMPETENCIES

In the specialty "Maxillofacial surgeon" POSTGRADUATE LEVEL

Directory of competencies (postgraduate level) in the specialty "Maxillofacial surgeon" is developed by a working group consisting of: Toktosunova A. T., Urgunaliyeva B. K., Tazhibayeva A. Yu.

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Explanatory note

Currently, the Kyrgyz Republic is actively implementing health sector reforms. The system of medical education is undergoing significant changes, as one of the fundamental systems that provide practical healthcare with highly professional personnel.

An urgent task of educational organizations within the framework of the reforms is to improve the quality of training of medical personnel. In this regard, a new catalog of competencies of the maxillofacial surgeon has been revised and developed.

Training of a maxillofacial surgeon, in accordance with the approved order of the Ministry of Health of the Kyrgyz Republic dated 18.05.2015

No. 248 "Strategy for the development of postgraduate and continuing medical education in the Kyrgyz Republic for 2014-2020", is 2 years for graduates of the Faculty of Dentistry and 3 years for graduates of the medical and Pediatric faculties.

When developing the document, the standards of training of general practice dentists in international educational institutions, in particular in the Russian Federation and the Republic of Belarus, were also taken into account.

Chapter 1. General provisions

1.1. Definition of the concepts of maxillofacial surgery and "maxillofacial surgeon".

Maxillofacial surgery is an academic and scientific discipline that has its own subject of study, teaching, research within the framework of evidence-based medicine, clinical activities; in addition, it is a clinical specialty focused on the provision of specialized medical care.

Clinical residency in maxillofacial surgery aims to prepare a doctor of maxillofacial surgery for independent work in specialized departments of hospitals and perform the duties of a doctor of maxillofacial surgery in a hospital. The doctor of the maxillofacial surgeon should timely identify the pathological processes of the maxillofacial region and neck, be able to diagnose diseases with high quality, conduct dynamic monitoring of the course of diseases and rehabilitation of patients. Carry out organizational measures to prevent diseases of the throat and neck. Timely refer patients to auxiliary and laboratory diagnostic methods, as well as provide emergency medical care for combined pathological conditions.

1.2. Basic principles of medical practice of a maxillofacial surgeon

The maxillofacial surgeon uses the following principles in his work:

Open and unrestricted access to medical care, regardless of age, gender and other characteristics of patients with maxillofacial pathology (MFS);

-Simultaneous treatment of both acute and chronic diseases;

- Preventive focus of care;
- Duration and continuity of care based on the needs of each patient;
- Coordination of medical care for patients;
- The principle of economic efficiency and expediency of assistance;
- Holistic approach and assistance in the context of the family and society;
- Respect for the patients ' right to self-determination and take into account the views of their family members.

1.3. Purpose of the document

This List of competencies should become part of the regulations for postgraduate training and, therefore, valid for all postgraduate training programs in the specialty "maxillofacial surgeon".

Based on this Catalogue:

The purpose and content of postgraduate training of a maxillofacial surgeon are determined::

- The level of professional competence, knowledge and practical skills of a maxillofacial surgeon;

Developed by:

- Maxillofacial surgeon training programs;
- criteria for assessing the quality of training of a maxillofacial surgeon;
- standard requirements for certification of a maxillofacial surgeon;
- standards of examination, treatment, rehabilitation and follow-up of patients.

Organized by:

- learning process;
- professional orientation of medical graduates;

Conducted by:

- certifications of maxillofacial surgeons.

1.4. Users of the document

According to the purpose of the document, the users are:

- Ministry of Health
- Educational organizations

- Health organizations
- Professional associations
- Medical practitioners
- Residents
- Other stakeholders

Chapter 2. General tasks

2.1. Maxillofacial surgeon, as a medical specialist/expert

A maxillofacial surgeon is a doctor who has received special multidisciplinary training to provide specialized health care to the population, regardless of the age, gender and other characteristics of the patients. As a specialist, he provides assistance to patients within the limits of his professional competence, following the principles of maxillofacial surgery. The professional competencies of a maxillofacial surgeon are described in a special part of the document.

General competencies

As a specialist, the maxillofacial surgeon is able to:

- conduct a clinical examination of patients;
- interpret the information obtained during the collection of anamnesis and clinical examination, establish a preliminary and differential diagnosis and develop a patient management plan using the results of an objective examination;
- assign appropriate diagnostic and therapeutic measures, explain their essence to patients and interpret the results;
- take proper and long-term care of patients with chronic, incurable, progressive diseases;
- advise patients and their families on the formation of a healthy lifestyle, prevention of diseases;
- perform the necessary diagnostic and therapeutic measures, taking into account the cost/reasonable utility ratio, and guarantee the safety of patients, applying the principles of efficiency, expediency and cost-effectiveness;
- store and protect medical information properly;
- acquire, maintain and expand your professional competence.
- comply with infection control requirements aimed at reducing the risk of infections associated with the provision of medical care, both in patients and medical personnel;
- be able to conduct pre-test and post-test counseling on planned treatment methods, including informed consent of the patient

2.2. Communication skills

The maxillofacial surgeon manages the relationships with patients, families, contact persons, and other specialists involved in the treatment effectively and in accordance with the situation. He bases his decisions and communication of information on mutual understanding and trust.

Competencies

The maxillofacial surgeon is able to:

- build trusting relationships with patients, their families, and other close relatives;
- get important information from patients and their environment, discuss it, and share elements of the knowledge gained, taking into account the patient's situation;
- communicate the risks and benefits of diagnostic and therapeutic measures in a form that is understandable to patients and obtain informed consent;
- make a decision about diagnostic and therapeutic procedures for disabled and underage patients by discussing these procedures with the appropriate representatives of these patient groups;
- document the information received during consultations / home visits and pass it on as soon as necessary;
- empathize by reporting bad news and responsibly report complications and mistakes.

2.3. Teamwork skills

The maxillofacial surgeon collaborates with patients, their families, contact persons and other treatment participants from a wide variety of professional groups, taking into account their experience and opinions.

Competencies

The maxillofacial surgeon is able to:

- cooperate with other specialists and experts from other professional groups, with nurses, especially in providing long-term care to patients with various diseases;
- recognize differences of interest, accept other opinions, and avoid conflicts and resolve them through cooperation;
- cooperate with the experts of the committee for the quality of medical services to improve the clinical effectiveness and infectious safety of medical practice.

2.4. Management skills (manager)

The maxillofacial surgeon becomes a member of the healthcare system and contributes to the optimization of the work of the healthcare organization in which he works. It carries out its management tasks within the framework of its inherent functions. It sets priorities and consciously decides how to use limited health resources.

Competencies

As a manager, the maxillofacial surgeon is able

- successfully manage his professional activities and take on management tasks that correspond to his professional position;

- find a balance between your professional and private activities;
- effectively use limited health care resources for the benefit of the patient, taking into account efficiency, adequacy and cost-effectiveness;
- evaluate and use relevant information for patient care;
- provide and improve the quality of medical care and patient safety.

2.5. Health promotion and healthy lifestyle promotion skills

The maxillofacial surgeon should promote a healthy lifestyle among patients and the public. It can help patients navigate the healthcare system and get appropriate care in a timely manner.

Competencies

The maxillofacial surgeon is able to: описать

- describe the factors that affect the health of a person and society and contribute to the preservation and promotion of health;
- identify problems that affect the health of patients and take the necessary measures.

2.6. Research Scientist

The doctor of maxillofacial surgery during his professional activity, analyzes the features of the course of diseases, systematizes the results obtained, identifies their features and patterns, covers and actively participates in public discussions.

Competencies

As a research scientist, a maxillofacial surgeon is able to:

- constantly improve the skills aimed at his professional activity;
- critically comprehend specialized medical information and its sources and take it into account when making decisions;
- inform patients, medical students, other doctors, government officials, and other people who actively care about their health, and support them in their actions to learn;
- promote the development, dissemination and implementation of new knowledge and methods.

2.7. Knowledge in the field of professional ethics

The maxillofacial surgeon carries out his practical activities in accordance with ethical norms and principles, quality standards of medical care and regulatory legal acts in the field of healthcare.

Competencies

As a professional, the maxillofacial surgeon is able

to: carry out his profession in accordance with high quality standards, demonstrating a responsible and careful attitude;

practice ethically and responsibly, while respecting the legal aspects of the activities of medical professionals.

Chapter 3. Special tasks (professional competencies) Types of activity of the maxillofacial surgeon

The maxillofacial surgeon is obliged to master the following types of activities and their corresponding personal tasks to provide specialized health care to the population, regardless of age and gender, in accordance with the regulatory legal documents of the Kyrgyz Republic:

- diagnosis, treatment, prevention and rehabilitation of the most common diseases;
- Palliative care activities;
- compliance with infection safety measures when providing medical care and performing medical manipulations;
- provision of emergency and emergency medical care;
- performing medical manipulations;
- organizational and managerial activities.

Accordance to the activities of the maxillofacial surgeon, professional competencies are organized into the following categories::

3.1 Common Symptoms and syndromes (List 1)

3.2 Common Diseases and Conditions (List 2)

3.3 General Patient Problems (List 3)

3.4 Medical Manipulations (List 4)

3.5 Emergency Conditions (List 5)

LIST 1. COMMON SYMPTOMS AND SYNDROMES.

Symptom/The syndrome
Ear pain
Neck pain
Pain and changes in the area of the temporomandibular joint
Headache
Vertigo
Toothache from various stimuli, spontaneous pain
Difficult and limited opening of the mouth
Changes in the skin (rash, age spots, acne, nevi)
Fever, hyperthermia
Chills
Fainting, collapse
Edema of the soft tissues of the face
Loss of appetite, weight loss
Heartbeat
Weakness
Nausea and vomiting
Congenital and acquired defects and deformities of MFS

Malocclusion
Tooth hard tissue defect
Bleeding gums
Aphthous lesion of the MMM
Ulcers of the MMM
Tooth mobility
Pathological dentoalveolar pockets
Bad breath
Dryness, burning of the oral mucosa
Convergence and divergence of teeth
Kaposi syndrome.
Quincke syndrome.
Xerostomia syndrome.
Macroglossia syndrome.
Manganotti syndrome.
Marginal periodontal syndrome.
Pain syndrome in periodontal pathology of the tooth and jaw
Pain syndrome in inflammatory processes of soft tissues MFS
Pain syndrome in inflammatory processes of bone tissues MFS
Pain syndrome in the MFS after traumatic injuries
Pain syndrome in the area of the large salivary glands
TMJ pain syndrome
Tumours, tumour-like formations and malignant tumours
Vincent's Symptom
Albright Syndrome
Franceschetti (Treacher-Collins) syndrome)
Costen's Syndrome
Enlarged lymph nodes

To indicate the level of competence that must be achieved by the end of training in this discipline, the following gradation is used:

Level 1-indicates that the resident can independently diagnose and treat the majority of patients with this disease or condition accordingly; if necessary, determine the indications for hospitalization.

Level 2-indicates that the resident is guided in this clinical situation, makes a preliminary diagnosis and redirects the patient to the secondary or tertiary level for final verification of the diagnosis and selection of therapy; subsequently, controls the prescribed therapy (medical examination).

The letter " H " - means that the condition or disease is urgent and indicates the need for emergency diagnosis and /or treatment. The resident is able to assess the patient's condition and begin to provide emergency care and organize urgent hospitalization.

LIST 2. COMMON DISEASES AND CONDITIONS

MAXILLOFACIAL SURGERY

Condition / Disease Level H	Level	H
1.1. Analgesia in maxillofacial surgery		
Infiltration anesthesia		

a) Intramarginal anesthesia	1	
b) Intraseptal	1	
c) Subcostal	1	
d) Intraosseous	1	
e) Creeping infiltration by Vishnevsky	1	
Wire connections	1	
Stem cells	1	
1.2. Operation of removal of separate groups of teeth	1	
1.3. Complex and atypical tooth extraction	1	
1.4. Tooth-preserving operations	1	
II. Inflammatory processes of the throat and neck MFS		
2.1. Periodontitis, periostitis and osteomyelitis of the jaw	1	
2.2. Difficult teething, pericoronaritis	1	
2.3. Abscesses and phlegmons of the throat and neck	1	
2.4. Boils and carbuncles of the face	1	
2.5. Odontogenic maxillary sinusitis	1	
2.6. Inflammatory and dystrophic processes of the salivary glands	1	
2.7. Inflammatory and dystrophic processes of the temporomandibular joint (arthritis, arthrosis, ankylosis)	1	
2.8. MFS lymphadenitis	1	
III. Traumatic injuries of soft tissues and bones MFS		
3.1. Abrasions, bruises and hematoma of the soft tissues of the CHLO	1	
3.2. Damage to the soft tissues of the MFS	1	
3.3. Fractures of the bones of the facial skeleton (fractures of the bones of the nose, zygomatic bone, alveolar process, upper and lower jaw)	1	
3.4. Asphyxia (dislocation, obturation, stenotic, valvular, aspiration)	1	H
3.5. Post-traumatic defects and deformities of soft and bone tissues of the MFS		
IV. Tumors and tumour-like formations MFS		
4.1. Odontogenic cysts of the jaw	1	
4.2. Congenital cysts of the throat and neck	1	
4.3. Tumour-like formations of soft and bone tissues of MFS	2	
4.4. Benign odontogenic tumors of the jaw	1	
4.5. Benign soft tissue tumors of MFS	1	
4.6. Benign tumors of the bone tissues of MFS	2	
4.7. Precancerous diseases of the skin of the face, oral mucous and tongue	2	
4.8. Benign and malignant tumors of the salivary glands	2	
4.9. Malignant tumors of MFS	2	
Y. Congenital anomalies of soft and bone tissues MFS		
5.1. Congenital deformities of the upper jaw	2	
5.2. Congenital deformities of the lower jaw	2	
5.3. Congenital deformities of the bones of the facial and cerebral skeleton	2	

YI. Restorative and reconstructive operations in maxillofacial surgery and implantology		
6.1. Dental implantation	1	
6.2. Local plastic surgery of MFS tissues	2	
6.3. Plastic of defects in the tissues of the MFS with flaps on the leg	2	
6.4. Plastic with stalk flaps	2	
6.5. Free tissue grafting	2	
6.6. Reconstructive operations in maxillofacial surgery with the use of vascularized tissues	2	
6.7. Aesthetic facial surgery	2	

The list of listed diseases and conditions is not exhaustive. Tasks are classified according to the competencies that must be achieved by the end of training in this discipline.

INTERNAL DISEASES

Diseases of the joints and connective tissue	LEVEL	H
Rheumatoid arthritis	2	
Rheumatism, rheumatic fever	2	
Systemic lupus erythematosus (SLE)	2	
Systemic vasculitis	2	
Diseases of the endocrine system	LEVEL	H
Diabetes mellitus	2	

DISEASES OF THE NERVOUS SYSTEM

Condition/disease	LEVEL	H
Epilepsy (epileptic status)	2	H
Neuritis (trigeminal neuralgia , facial nerve paralysis, Parkinson's disease)	2	

SKIN AND VENEREAL DISEASES

Condition/disease	Level	H
Bacterial infections of the skin of the face (boils, carbuncles)		
Diseases of the facial skin appendages (acne, hypertrichosis)	2	
Urticaria and angioedema	2	H
Pigmented and non-pigmented lesions of the facial skin (nevus, pigmentation disorders: vitiligo)	2	

PHTHISIOLOGY

Condition/disease	Level	H
Tuberculous lesions of the oral mucosa	2	
Tuberculous lymphadenitis of the MFS and neck	2	

DISEASES OF THE EAR, THROAT, NOSE

Condition/disease	Level	H
Sinusitis of the maxillary sinus	1	
Nosebleeds (anterior and posterior tamponade) with combined injuries of the MFS	1	H
Paratonsillar abscess, phlegmon of the neck	2	

LIST 3. GENERAL PATIENT PROBLEMS

	Level
Difficult patient/Aggressive patient	2
Disability/disability	2
Crisis (loss of loved ones, divorce, job loss, life changes, stressful situations)	2

LIST 4. MEDICAL MANIPULATIONS/SKILLS

The maxillofacial surgeon should be able to perform the following manipulations independently:

Manipulations	Level	H
General manipulations:		
- Injections (i / m, I / v, n / a).	2	
<input type="checkbox"/> Determination of blood type, Rh factor	2	
Be able to interpret the results of instrumental examinations (radiographs of the jaw, dental P-gram, orthopantomograms, MRI, CT and ultrasound of the maxillofacial region and neck)	2	
Stopping external bleeding	2	H
The technique of aerosol instillation of the oral cavity with the help of spencers	2	
Taking smears for bacteriological, cytological and histological examination	2	
Measurement of blood pressure.	2	
Manipulations for emergency care:		
Cardiopulmonary resuscitation: indirect heart massage	2	H
Mouth-to-mouth, mouth-to-nose breathing»	2	H
Restoration of patency of the upper respiratory tract	2	H
Tongue fixation and air duct insertion	2	H
Stopping external bleeding	2	H
Heimlich's Reception	2	H
Manipulations used in maxillofacial surgery		
Examination of the throat, neck, oral cavity and oropharynx		
Two-handed (bimanual) examination of the maxillofacial region and neck	2	
nterpretation of X-ray methods for the study of the MFS and neck, in inflammatory, dystrophic, tumor diseases and traumatic injuries, congenital anomalies, acquired deformities of the MFS	2	

Technique of taking smears-prints, scraping-prints for cytological examination	2-1	
Technique of taking incisional and excisional biopsies	2	
Technique of puncture diagnostics for cytological and histological examination	2	
Examination of the salivary glands	2	
Examination of the lymph nodes of the throat and neck BH TMJ examination	2	
Examination of the maxillary sinus	2	
Applying sling bandages	2	H
Primary surgical treatment of wounds	2	H
Tooth-preserving operations: root apical resection; hemisection; root amputation; tooth replantation	2	
Excision of the hood in case of difficult teething	2	
Drainage of purulent foci in inflammatory diseases of the MFS	1	H
Reduction of dislocation of the lower jaw	2	H
Application of vacuum drains after operations in the throat and neck	2	
Temporary methods of stopping bleeding	2	H
Ligation of the facial and external carotid artery	1	H
Immobilization of teeth in case of dislocation of the tooth with a ligature bandage or mouthguards	2	
Temporary immobilization of the jaws (Ivy bandage, Kurland bandage)	2	
Permanent jaw immobilization (with individual and standard splints);	2	
Osteosynthesis of the jaw	2	
Buzhirovanie ducts of the salivary glands. Introduction of drugs and contrast agents into the ducts of the salivary glands, for sialography;	2	
Maxillary sinusitis;	2	
Flap operations for periodontal diseases	1	
Excision of the lateral and median cysts of the neck	1	
Fundamentals of dental implantation	1	
The basics of plastic surgery with local fabrics, plastic surgery with flaps on the stem, stalk flaps	1	
Fundamentals of autotransplantation with free soft and bone tissues	1	
Fundamentals of bone plastic surgery for anomalies and deformities of the jaw (orthognathic surgery).	1	
Feeding patients with MFS injuries;	2	
Hygienic treatment of the oral cavity b-x with MFS injuries	2	

Surgical procedures:

- Conducting infiltration anesthesia;
- Conducting conductor anesthesia;
- Primary surgical treatment of wounds, removal and suturing;

- Burn surface treatment.
- Applying bandages;
- Transport immobilization in jaw fractures;
- Removal of superficially located foreign bodies.

Manipulations used to identify neurological symptoms:

- studies of motor qualities (contracture of chewing and facial muscles);
- determination of sensitivity;
- study of the function of cranial nerves;
- examination of pain points and tension symptoms

Otolaryngological manipulations:

- instillation of nasal drops and application of nasal ointments;
- anterior rhinoscopy, pharyngoscopy;
- stopping nosebleeds (anterior nasal tamponade);
- washing of the palatine tonsils;
- conicotomy, tracheostomy

LIST 5. URGENT (EMERGENCY) STATES

The maxillofacial surgeon should be able to independently diagnose and provide emergency (emergency) care of the pre-hospital stage, as well as determine the tactics of providing further medical care in the following urgent conditions - timely hospitalization and referral to a specialist for consultation

1. Fainting. Collapse.
2. Shock (anaphylactic, toxic, traumatic, hemorrhagic, hypovolemic, septic, etc.).
3. Acute respiratory failure, apnea.
4. Edema and stenosis of the larynx.
5. Quincke's edema.
6. Acute heart failure.
7. External bleeding.
8. Concussions, bruises of the brain.
9. Chemical and thermal burns, frostbite.
10. Injuries, fractures, dislocations, subluxations (including dental injuries, jaw fractures, lower jaw dislocation).
11. Traumatic injuries of the oropharynx, including foreign bodies.

Manipulations for emergency care:

- Injections (i / m, I / v, n / a).
- Gastric lavage.

- Stopping external bleeding
 - pressure bandage
 - applying a tourniquet
 - ligature of the bleeding vessel

Cardiopulmonary resuscitation:

- indirect heart massage
- mouth-to-mouth, mouth-to-nose breathing
- restoration of airway patency
- using the Ambu bag
- tongue fixation and air duct insertion.

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