

## **CATALOGUE OF COMPETENCIES**

In the Specialty "Dentist surgeon"  
POSTGRADUATE LEVEL

Directory of competencies (postgraduate level) in the specialty "Dentist surgeon" is developed by the working group consisting of Urgunaliyev B. K., Tazhibaeva A. Yu., Toktosunov A.

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#### Explanatory note

Currently, the Kyrgyz Republic is undergoing an active reform in the medical sector.

In connection with the ongoing reforms in the health care system and medical education, and to improve the quality of training of specialists corresponding to the changing needs of the population, a proposed new catalog of competencies of a dental surgeon has been developed.

The duration of postgraduate training in the specialty "medical surgeon" is 2 years, which corresponds to the new document, approved by the order Ministry of health of 18.05.2015 g. №248 "strategy for the development of postgraduate and continuous medical education in the Kyrgyz Republic for 2014-2020 years".

During the development of the document took into account the standards for the training of dentists in General practice in international educational institutions in particular in the Russian Federation and the Republic of Belarus.

## **General provision**

### **1.1. Definition of the concepts of surgical dentistry and "dentist surgeon".**

Surgical dentistry is a branch of dentistry that studies the etiology, pathogenesis, clinic, treatment and prevention of surgical diseases of the maxillofacial region.

The clinical residency in surgical dentistry aims to prepare a dental surgeon for independent work in an outpatient setting and in a hospital.

The dentist-surgeon should promptly identify and treat diseases of the maxillofacial region and oral cavity, carry out organizational measures to prevent them and provide medical assistance in case of emergency conditions.

### **1.2. Basic principles of medical practice**

The dentist surgeon in his work is guided by the following principles:

Open and unrestricted access to medical care, regardless of the age and other characteristics of the patients;

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 to the patient;

– The principle of economic efficiency and expediency of assistance;

Respect for the rights of the patient and take into account the views of her 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 "surgical dentistry".

Based on this Catalogue : The following are determined:

– The purpose and content of postgraduate training of a dentist surgeon;

– The level of professional competence, knowledge and practical skills of a dentist surgeon;

Developed by:

– Dental surgeon training programs;

– Criteria for evaluating the quality of training of a dentist or surgeon;

– Standard requirements for certification of a dentist surgeon;

- Standards of examination, treatment, rehabilitation and follow-up of patients;

Organized by:

- The educational process of training a dentist surgeon;
- The professional orientation of medical graduates;

Conducted by:

- Certification of a dentist surgeon.

#### **1.4. Users of the document**

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

- Ministry of Health of the Kyrgyz Republic
- Educational organizations
- Health organizations
- Professional associations
- Medical practitioners
- Residents
- Other stakeholders

### **Chapter 2.**

#### **General tasks**

##### **2.1. Dentist surgeon, as a medical specialist/expert**

A dentist surgeon is a doctor who has received special multidisciplinary training to provide specialized health care to the population, regardless of the age and other characteristics of the patients. As a specialist provides assistance to patients within the limits of his professional competence, observing the principles of deontology and medical ethics.

#### **General competence**

Action of the dentist surgeon:

- 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;
- perform the necessary diagnostic and therapeutic manipulations, taking into account the ratio of cost to reasonable utility, and guarantee the safety of patients, applying the principles of efficiency, expediency and cost-effectiveness;
- advise patients and their families on the formation of a healthy lifestyle, prevention of diseases of the dental and maxillofacial system;
- preparation of treatment plans in cooperation with representatives of other specialties, with due regard for their right to self-determination;
- care for patients with chronic and progressive diseases;
- conducting dispensary records and monitoring of patients
- 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**

For effective treatment of the patient and according to the situation, to have a relationship of trust with family members, contact persons and other specialists involved in the treatment. It is based its decision and communication of information on mutual understanding and confidence.

### **Competencies**

#### **Doctor Dentist surgeon:**

- 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 the patient 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 the consultation and transmit it within the required time frame.

## **2.3. Skills of working in cooperation (in a team)**

The dentist-surgeon cooperates in the interests of the health of patients, to have into active mutual cooperation with other participants in the treatment from a wide variety of professional groups, taking into account their opinions and conclusions.

### **Competencies**

#### **The doctor dentist surgeon must:**

- 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.

## **2.4. Management skills (manager)**

The dentist surgeon is a member of the health care system and contributes to the optimization of the organization in which he works. It carries out its management tasks within the framework of its inherent functions.

### **Competencies**

As a manager, the dental surgeon is able to:

- effectively use health care resources, taking into account the adequacy and cost-effectiveness in the interests of patients;
- provide and improve the quality of medical care.
- manage their professional activities and take on management tasks that correspond to their professional position;

## **2.5. Health promotion and healthy lifestyle promotion skills**

The dentist-surgeon should constantly conduct active promotion of a healthy lifestyle among the population.

### **Competencies**

Doctor's action dentist surgeon:

- to identify problems that have a negative impact on people's health and take the necessary measures to eliminate them together with representatives of government authorities and other people who actively care about their health and support them;
- to reveal the factors of the locality that favorably affect a person and use them in practice to restore and strengthen the health of the population;

## 2.6. Research Scientist

The dentist is a surgeon in the course of his professional activity, analyzes the features of the course of diseases, systematizes the results obtained, identifies patterns, highlights and actively participates in public discussions.

### Competencies

A dentist or surgeon is able

- to critically understand specialized medical information and its sources and take it into account when making decisions;
- to promote the development, dissemination and introduction of new knowledge and methods of diagnosis, treatment and prevention.
- to constantly undergo further training in the field of professional development;

## 2.7. Knowledge in the field of professional ethics

The dentist-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, a dental surgeon must:

- carry out profession in according to the high quality standard, demonstrate the responsibility and careful attitude;
- practice ethically and responsibly, while respecting the legal aspects of the activities of medical professionals.

## Chapter 3.

### Special tasks

Types of activities of a dentist surgeon

The dentist-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, in accordance with the regulatory legal documents of the Kyrgyz Republic:

- diagnosis, treatment, prevention and rehabilitation of the most common diseases;
- turn out of emergency medical care;
- organizing work

According to the types of activity of a dentist, 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 Medical manipulations (List 3)

3.4 Emergency conditions (List 4)

3.1. List 1 - the most common symptoms and syndromes in the practice of a dentist surgeon

The symptom/The syndrome
High temperature
Headache
Vertigo
Edema of the soft tissues of the face

Toothache from various irritants
Difficult and limited opening of the mouth
Enlarged lymph nodes
Crunch when moving in the TMJ
Tumors and neoplasms
Defects and deformities of the organs of CHLO
Malocclusion
Facial pain from various stimuli
Tooth hard tissue defect
Changing the color of teeth
Bleeding gums
Aphthous lesion of the SOPR
Ulcers of the SOPR
Tooth mobility
Pathological dentoalveolar pockets
Dryness, burning of the oral mucosa
Metallic taste in the mouth
Diastema and trema of the teeth
Convergence and divergence of teeth
Exposing the necks of the teeth
Quincke syndrome.
Xerostomia syndrome.
Macroglossia syndrome.
Paresthesia of the nerve innervation zone
Vincent's Symptom
"Step" symptom "indirect load" symptom»
The "nasal-air test" symptom»

3.2. List 2 – The most common diseases and conditions in the practice of a dental surgeon  
The following gradation is used to indicate the level of competence:

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 treatment. The resident is able to assess the patient's condition and begin to provide emergency care and organize urgent hospitalization.

List 2

Diseases and pathological conditions	Level	H
Gingivitis	1	
Periodontitis:		
- focal	1	
-generalized	2	
Periodontal disease	1	
Periodontitis:		
- acute	1	
- chronic	1	

Tooth retention	1	
Tooth dystopia	1	
Alveolites and alveoloneuritis		
Lunular osteomyelitis	1	
Lunular bleeding	1	
Maxillary sinus perforation	1	
TMJ diseases		
- arthritis	1	
-- arthrosis, arthroso arthritis	2	
-habitual dislocation	2	
-dysfunction syndrome	2	
- mechanical injury of teeth, jaws and bones faces	1	
- gunshot injuries to the jaws and bones of the face	2	
Burns		
-electrochemical		
- chemical	2	
- thermal	2	
Frostbite	2	
- glossalgia	2	
- glossitis	1	
Traumatic lesions	1	
Inflammatory diseases	1	
Lesions in venereal diseases	2	
lesions in HIV/AIDS	2	
Hailites	2	
TMJ dislocations	1	
TMJ arthritis	1	
TMJ arthrosis	2	
Sialadenites	2	
Calculous sialoadenitis	1	
Calculous sialoadenitis	2	
Sialoses	2	
Neuritis of the facial and trigeminal nerves	1	
Trigeminal neuralgia	2	
Odontogenic sinusitis	1	
Odontogenic abscesses and phlegmons	1	
Osteomyelitis of the jaw and facial bones of various etiologies	2	
Lymphadenitis and adenophlegmon	1	
Phlegmons of the deep cellular spaces of the neck		
Sepsis		
Mediastinit		
Brain abscess		

Cavernous sinus thrombosis		
Retention cysts of the small salivary glands	1	
Odontogenic cysts of the jaw	1	
Odontogenic tumors	2	
Neodontogenic tumors	2	
Tumor-like formations of MFS	2	
Congenital and acquired defects and deformities of the organs of MFS	2	

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

### 3.3 PRACTICAL SKILLS (List 3)

Practical activity of a dentist surgeon General manipulations:

Injections (i / m, i / v, n / a).

- Determination of blood type, Rh factor
- Be able to interpret the results of the conclusions of instrumental studies (X-ray, ultrasound, echocardiography).
- Stop external bleeding.
- Aerosol inhalation technique using spacers, nebulizers.
- Taking smears for cytological, bacteriological examination.
- Gastric lavage.
- Elimination of coprostasis (finger and enema).
- Collection of material for microscopic, bacteriological studies (from the throat, nose, wounds, rectum, etc
- Use personal protective equipment (anti-plague suit type 1)

Evaluate: the morphological and biochemical parameters of blood tests, urine, etc.;

- the parameters of the anthropobiometric study of diagnostic models of the jaws
- radiation research methods: sighting and survey radiography of teeth and jaws, visiography, orthopantomography, telorentgenography, multispiral computed tomography, TMJ radiography; sialography;
- MFS muscle functions with evaluation of electromyography, myotonometry, and mastication data;
- indicators of TMJ function with evaluation of arthrography, orthopantomography
- study full face and profile photo
- results of biometric studies of plaster, stereometric, and virtual models of jaws;
- functional and clinical samples.

Special manipulations:

- Carrying out all types of local anesthesia with intra-and extra-oral accesses;
- Carrying out stem anesthesia with extra-oral access
- Removal of milk teeth and permanent bite
- Removal of retinated and dystopian teeth
- Performing complex and atypical tooth extraction
- Periostotomy ;
- Pericoronorotomy
- Plastic perforation of the maxillary sinus
- Reduction of TMJ dislocation

- Ligature binding of the jaws according to Ivy;
- Application of dental splints of various modifications for injuries of teeth and jaws;
- Use of transport tires for jaw fractures;
- Carrying out buzhirovaniya salivary ducts, washing and the introduction of therapeutic and diagnostic solutions in the salivary glands.
- Removal of stones from the ducts of the salivary glands
- Carrying out nerve blockage and alcoholization
- Dissection of boils, carbuncles and their complications
- Opening of superficial odontogenic abscesses and phlegmon;
- Removal of foreign bodies, in case of gunshot and non-gunshot wounds of the soft tissues of the face
- collection of material for cytological and histological examination by the method of "prints"
- Taking a biopsy by injection and incision biopsy
- Removal of giant cell epulis
- Removal of dermoid cysts
- Cystectomy for retention cysts of the small salivary glands
- Performing tooth-preserving operations
  
- Performing cystotomy and cystectomy of odontogenic cysts of the jaws
- Surgical preparation of the oral cavity for prosthetics with removable and non-removable prostheses

### **3.5 PROVISION OF EMERGENCY (EMERGENCY) MEDICAL ASSISTANCE.**

The dentist-surgeon should be able to independently diagnose and provide emergency (emergency) care at the pre-hospital stage, as well as determine the tactics of providing further medical care in the following emergency conditions:

1. Fainting.
2. Collapse.
3. Shock (anaphylactic, toxic, traumatic, hemorrhagic, cardiogenic, hypovolemic, septic, etc.).
4. Coma (anemic, hypoglycemic, diabetic, brain, liver, unknown etiology, etc.).
5. Asphyxia (dislocation, obturation, stenotic, valvular, aspiration)
6. Edema and stenosis of the larynx.
7. Quincke's edema.
8. Hypertensive crisis.
9. Myocardial infarction. 10. External bleeding. 11. Acute urinary retention.
12. Concussions, bruises, compression of the brain.
13. Pulmonary edema.
14. Convulsive states, epileptic status.
15. Psychomotor agitation (panic attack, reaction to stress).
16. Chemical and thermal burns
17. Frostbite.
18. Electric shock, lightning, heat and sunstroke.
19. Poisoning. 20. Drowning, suffocation. 21. Bites and stings.
22. Traumatic eye injuries, including foreign bodies.
23. Clinical death.
- 24.

Manipulations for emergency care:

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

- pressure bandage
  - applying a tourniquet
  - ligation of the bleeding vessel
- Cardiopulmonary resuscitation:
- indirect heart massage
  - mouth-to-mouth, mouth-to-nose breathing
  - restoration of airway patency
  - use of Ambu bag.

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