Ministry of Health of the Russian Federation
Governmental Budget-Funded Educational Institution of Higher Professional Education
THE FIRST MOSCOW STATE MEDICAL UNIVERSITY NAMED AFTER SECHENOV

Seen and approved by
Rector _____ P.V. Glybochko

STEERING DOCUMENT OF PRACTICAL TRAINING
FOR STATE FINAL EXAMINATION
(name of the discipline)
major professional educational program of higher education - residency training program
31.00.00 Clinical medicine
code and name of the consolidated group of professions (training directions)
31.08.54 General medical practice (family medicine)
code and name of the training directions (profession)

Credit value 3 credit units

1. **The purpose of the State Final Attestation** is to assess the practical and theoretical preparedness of graduates to perform the professional tasks according to the Federal State Educational Standard of Higher Education for 31.08.54 General medical practice (family medicine) profession (the level of high qualification staff training).

2. The program of the State Final Attestation (SFA) in 31.08.54 General medical practice (family medicine) profession includes three phases:

Phase 1. Interdisciplinary testing

The testing is performed within the scope of knowledge, skills and experience stipulated according to the Federal State Educational Standard of Higher Education for 31.08.54 General medical practice (family medicine) profession (the level of high qualification staff training). The testing takes place on-line in the Center for Continuous Professional Education. The graduates are requested to give answers to 100 out of 3000 test questions within an academic hour. The testing results are summed up in the form of a protocol.

Assessment criteria for SFA phase 1:

"Excellent" - 90% and more correctly answered test questions;

"Good" - 80% to 89% correctly answered test questions;

"Fair" - 70% to 79% correctly answered test questions;

"Poor" less than 70% correctly answered test questions.

To qualify for passing the practical skills assessment, a resident must score at least 70%.

Phase 2. Practical skills assessment.

This is aimed at evaluating how the graduates have mastered their practical skills.

The set of practical skills for every student includes: a set of clinical, biological, instrumental, radiological, functional examinations within the scope of *General medical practice (family medicine)* profession and life-saving skills practiced on homunculi and models. The rating scales are used to evaluate the practical skills.

Assessment criteria:

"Excellent" - the student has demonstrated steady skills according to the standard, i.e. rating scale. Skill accomplishment has revealed a body of perceived knowledge concerning the manipulation performed, indications and contraindications to its performance. The conclusion has been formulated with the use of medical terminology, in formal language, demonstrating the resident's author's position.

"Good" - the student has demonstrated the skill. This has been performed with insignificant deviations from the standard , i.e. rating scale. The student has revealed crucially important knowledge concerning the manipulation performed, indications and contraindications to its performance. The drawbacks in manipulation performance have been corrected by the resident independently. The answer has been formulated with the use of medical terminology, in formal language.

"Fair" - the student has demonstrated the skill. This has been performed with deviations from the standard , i.e. rating scale, which have had no impact on the result. The student has revealed crucially important knowledge concerning the manipulation performed, indications and contraindications to its performance. The drawbacks in manipulation

performance have been corrected by the resident with the help of the teacher. The answer has been formulated with the use of medical terminology. The speech requires corrections.

"Poor" - the skill has not been demonstrated or the medical manipulation shown consists of isolated elements and does not achieve the specific goal. The commentary given is incomplete, amounting to isolated pieces of knowledge on the subject with fundamental mistakes. The narrative is fragmented, inconsistent. The resident does not realize the connection between the manipulation performed and theoretical knowledge. The speech is illiterate. The teacher's additional and elaborative questions do not bring the resident to correct the answer given.

To be admitted to the interview phase, the resident must demonstrate skill with "fair" as the minimum score. "Poor" score means that the attestation phase has not been passed.

Phase 3. Interview on case studies comprised of 3 questions.

Interview assessment criteria:

"Excellent" - a complete, informative answer to the question is given, showing the body of perceived knowledge when solving the task. The knowledge has been demonstrated against the background of interdisciplinary links, the diagnosis is convincing, adequate components of the patient's treatment strategy have been suggested. The answer has a clear structure, the definitions are given in a logical order. The answer has been formulated in formal language, with the use of medical terminology, is logical and convincing, demonstrating the resident's author's position. Slight shortcomings are allowed in giving definitions and solving the task, as they have been corrected by the resident in the process of giving the answer.

"Good" - a complete, informative answer to the question is given, showing the body of perceived knowledge when solving the situational task. The knowledge has been demonstrated against the background of interdisciplinary links, the answer has a clear structure, the definitions are given in a logical order. The narrative uses the formal language, scientific terms. The answer contained mistakes, which have been corrected by the resident with the help of the teacher's elaborative questions.

"Fair" - an incomplete answer is given, its logic and narrative consistence are strongly compromised. Major mistakes have been made when solving the situational task due to the resident's failure to grasp minor signs and connections. The answer's conclusions require correction due to major mistakes, which are eliminated by the resident only after the teacher's elaborative questions. No ability to expand on certain manifestations of generalized knowledge has been demonstrated. The speech requires corrections.

"Poor" - an incomplete answer is given, comprised of isolated pieces of knowledge on the subject with fundamental definition errors. The narrative is fragmented, inconsistent. The speech is illiterate. The teacher's additional and elaborative questions do not bring the resident to correct the answer given not only to the question raised, but also to other discipline-related questions.

3. The overall score for the professional examination comprises all the 3 phases and is placed on examination record. The results of the three-phase examination help to evaluate the quality of common and professional competences of the students in the following activity types:

preparedness for abstract thinking, analysis, synthesis (UC-1);

preparedness for group management, tolerable perception of social, ethic, confessional and cultural diversity (UC-2);

preparedness for taking part in teaching activity in programs of secondary and higher

medical education or secondary and higher pharmaceutical education, as well as supplemental professional programs for students with vocational or higher education in accordance with the procedure established by the federal executive body developing state policy and legislative regulation in health care (UC-3);

preventive activities:

preparedness for performing a set of actions aimed at preserving and promoting health and comprising formation of healthy lifestyle, prevention of disease contraction and/or mongering, early disease diagnostics, discovering the reasons and conditions for contraction and development of diseases, as well as aimed at eliminating harmful impact of human environment factors on people's health (PC-1);

preparedness for performing the preventive medical examinations, periodic health examination and health surveys for healthy people and chronic patients (PC-2);

preparedness for taking anti-epidemic measures, organizing civil protection in focal points of highly infectious diseases, in case of radiological environment aggravation, disasters and other emergency situations (PC-3).

preparedness to utilize social and hygienic methods for collection and medico-statistical analysis of information on health parameters of adults and adolescents (PC-4);

diagnostic activities:

preparedness for identifying patients' diseased conditions, symptoms, disease syndromes, nosological entities according to the International Statistical Classification of Diseases and Related Health Problems (PC-5);

curative activities:

preparedness for managing and treating patients which need medical care within the scope of general medical practice (family medicine) (PC-6);

preparedness for providing medical aid in case of emergency situations, including participation in medical evacuation (PC-7);

rehabilitation activities:

preparedness for utilizing natural therapeutic factors, drugs, drug-free modalities and other methods in treating patients requiring medical rehabilitation and sanatorium-resort therapy (PC-8);

psychological and pedagogical activities:

preparedness for building up motivation with people, patients and their relatives, aimed at preservation and promotion of their health and health of the neighborhood (PC-9);

administrative activities:

preparedness to use basic principles of organization and management in the sphere of civil health care, in medical organizations and their structural subdivisions (PC-10);

preparedness to take part in evaluating medical care provision quality using basic medico-statistical parameters (PC-11).

preparedness for managing medical aid in case of emergency situations, including medical evacuation (PC-12).

4. Examples of assessment methods

4.1 List of SFA case studies for the interview

STUDY THE SITUATION AND GIVE INFORMATIVE ANSWERS TO THE QUESTIONS
A general practitioner was called to visit Kolya M., 3 years 4 months old, complaining of vomiting, fever, stomach ache and loose stool. Medical history according to the mother revealed that the child had fallen sick in the previous morning when the body temperature increased up to 38°C, vomiting occurred twice, stomach ache emerged. 6 hours from the start of the disease, amidst pertaining fever and recurrent vomiting, loose, runny stool emerged, up to 7 times a day. On the second day body temperature rose up to 38.5°C, vomiting occurred twice. Low appetite, drinking eagerly. According to the mother, the child's stool is loose, runny, not heavy, yellow, with some mucus up to 8 times a day. *Past medical history:* the child was born of healthy parents, weighing 3,700 grams. Physical and neuro-psychic development according to age. Frequent ARVI (up to 6 times a year). No history of allergic reactions. Vaccinated according to age. Weight before falling ill - 15.5 kg *Epidemiological history:* visits childcare center where 3 children and a day-care assistant had fallen ill for the past 2 days. All the diseased have similar clinical symptoms. *Upon examination:* the boy is in moderately grave condition, body temperature 37.8°C, rejects food, hyposthenic, petulant, drinks eagerly, complains of stomach ache. Skin is pale, dryish, moderate peripheral cyanosis emerges when disturbed; skin elasticity and tissue tension reduced. The tongue is coated with a whitish debris; oral mucosa is dry. When examining oral pharynx, moderate hyperemia and granulosity of the pharynx's and arch's posterior wall are revealed. Lung auscultation reveals vesicular breathing, no rale. Heart tones are rhythmic, muffled, tachycardia up to 126 beats a minute. Sufficiently strong and tense pulse, proper rhythm. Soft belly, deep palpation is possible, slightly painful in epigastrium and around umbilical region, distended in upper abdomen, borborygmus is identified in all parts. Liver and lien can be palpated along the edge of costal arch, painless. Meningeal signs are negative. During examination a stool occurred - liquid, runny, undigested, with acute acid smell, with some glassy transparent mucus, accompanied by passage of flatus. Urination is normal, urinates more seldom than usual, in small portions. The last urination took place 30 minutes ago. The child's weight upon examination is 14.4 kg.
Assume the most probable diagnosis.
Acute enteric infection (rotavirus?), gastroenteritis, moderate severity. Complication: 2nd grade anhydration.

The diagnosis is correct.
The diagnosis is not complete: a part of nosology has been missed out, the disease severity level or anhydration level have been evaluated incorrectly.
The diagnosis is wrong.
Give grounds for your diagnosis.
Acute enteric diagnosis, possibly of rotavirus aetiology, gastroenteritis, moderate severity, 2nd grade anhydration has been made based on the data of the epidemiological anamnesis (several simultaneous cases in the children's daycare center), acute start of the disease and the following syndromes: intoxication, catarrhal, gastrointestinal (gastroenteritis), anhydration. Intoxication syndrome has been identified by low-grade fever, apathy, loss of appetite. Catarrhal syndrome has been identified by moderate hyperemia and granulosity of the pharynx's and arch's posterior wall when examined. Gastroenteritic variety of gastrointestinal syndrome has been identified by recurrent vomiting; pain in upper abdomen and by the umbilical area; borborygmus in all parts of the abdomen; loose, runny, undigested stool, with acute acid smell, with some glassy transparent mucus, accompanied by passage of flatus. 2nd grade anhydration syndrome has been identified by the patient's thirst, pallescence and dryness of skin and mucus, moderate peripheral cyanosis when disturbed, reduced skin elasticity and tissue tension, tachycardia up to 126 beats a minute, diuresis reduction and weight loss 1 kg (7.1%) from the start of the disease. Severity level has been defined taking into account the moderacy of intoxication, anhydration and gastroenteritis syndromes.
The diagnosis has been substantiated correctly.
The diagnosis has not been substantiated completely: the ground for one of the syndromes or severity level is absent; or the ground for one of the syndromes or severity level is incorrect.
The ground for two or more of the syndromes is incorrect or the diagnosis substantiation is completely incorrect.
Compose and substantiate the plan of additional patient's examination.
The following examination is recommended: bacteriological fecal coliform bacteria testing to discover the pathogens,

serological reactions (complement-fixation test and enzyme immunoassay) in order to discover the rotavirus-specific antibodies in the patient's blood, identification of rotavirus antigen in feces by enzyme immunoassay in order to perform aetiological verification of the diagnosis, coprological examination to define enteropathy localization, complete (clinical) blood count, clinical urine analysis, electrocardiogram recording to evaluate disease severity by the results of laboratory diagnostics.
The plan for additional examination has been composed entirely correctly.
The plan for additional examination has been composed correctly, but lacks substantiation or one or two additional examination methods have not been mentioned, or substantiation for one or two of the prescribed examination methods is not given correctly.
Three or more additional examination methods have not been mentioned, or substantiation for three or more of the prescribed examination methods is not given correctly, or The plan for additional examination has been composed entirely incorrectly.
What major drug groups should be prescribed for the patient. Give grounds for your choice.
The treatment should include the following major drug groups: oral fluid resuscitation (glucose-salt + salt-free solutions) to eliminate water and electrolyte imbalance, enterosorbents (1 dose of Neosmectin pulvis twice a day, divided) to bind the exogenic and endogenic toxins, pathogenic microorganisms and their waste products and eliminate them from the GI tract for treatment and prevention, anti-viral medications (arbidol 50 mg 4 times a day, or 1 dose of immunoglobuline complex (KIP) 2 times a day, orally) in order to perform causal treatment.
Correct drug groups have been selected, the choice has been substantiated correctly.
Correct drug groups have been selected, but the choice hasn't been substantiated. or Only one drug group has been selected, the substantiation for this group is correct.
Incorrect answer: any other drug groups which are used to treat acute intestinal infections have been chosen.

Specify the principles of oral fluid resuscitation and their essence in providing emergency primary medical help on an outpatient basis with 2nd grade anhydration.
Principles of oral fluid resuscitation and their essence for the 2nd grade anhydration: - performance phases – primary fluid resuscitation (Phase I) is being performed in the course of 6 hours in order to eliminate water-salt deficiency occurring before treatment is started, secondary fluid resuscitation (Phase II) for the rest of the disease course if fluid and electrolyte loss pertains in order to replenish them. Approximate volume of solution for supporting fluid resuscitation is 80-100 ml/kg of body weight a day; - liquid volume calculation for every fluid resuscitation phase (Phase I – 80-90 ml/kg of body weight, Phase II - approximate volume of solution for supporting fluid resuscitation is 80-100 ml/kg of body weight a day; - divided and uniform introduction of liquid (the liquid is introduced in small quantities at regular intervals); - usage of solutions with optimal content (resuscitation soultions with reduced osmolarity of 200-240 mOsm/l) and taking into account water depletion type (isotonic, water- and salt-deficiency).
The principles of oral fluid resuscitation when providing emergency primary medical help on an outpatient basis with 2nd level anhydration have been specified correctly, their essence revealed.
Not all of the principles of oral fluid resuscitation and their essence in providing the emergency primary medical help on an outpatient basis for the 2nd level anhydration have been specified. or all the principles of oral fluid resuscitation when providing emergency primary medical help on an outpatient basis with 2nd level anhydration have been specified, but their essence has not been revealed, or has been revealed incompletely.
Incorrect answer: Wrong principles of oral fluid resuscitation are stated or specified without revealing the essence, or with incorrect essence.

4.2 List of practical skills

Surgical section

Medical examination of a surgical patient in community settings and at home.

Medical supervision by a GP (family doctor) of operated patients at their outpatient department stage

Diagnostic and treatment punctures of:

Pleural cavity

Probing cavities and fistulae

Pain relief:

Local infiltration anesthesia

General surgical techniques and operative interventions:

Primary surgical treatment of wounds

Removal of sutures

Burning wound surface treatment

Soft bandaging

Lancing and draining hypodermic abscesses, panaritiums, phlegmons

Blood and blood substitute transfusion:

All kinds of injections (hypodermic, intramuscular, intravenous)

Rapid blood grouping, Rh testing

Determining individual and biological blood compatibility

Determining blood adequacy for transfusion

Blood transfusion

Drip and steam transfusion of drugs and blood substitutes

Serum injection

External bleeding control:

Temporary external bleeding control (applying a tourniquet, finger occlusion, bending the limb in its joint, a compressing bandage, wound tamponage)

Temporary external bleeding control by putting a clamp in the wound

Bleeding control by topical hemostatic agents (hemostatic sponge, etc)

Bladder catheterization with a soft elastic catheter

Gastric lavage

Finger rectal and prostate examination

Techniques performed in case of traumas:

Transport immobilization in the case of broken limbs, vertebral fractures

Ophthalmology

Clinical eye examination (history collection, visual examination and palpation)

Eye anterior area examination with the help of sidelight

Examination of the posterior segment by means of transmitted light

Lacrimal duct examination

Ophthalmoscopy

Eidoptometry

Chromatic vision examination

Optical eyesight correction with trial lenses in case of myopia, hypermetropia, presbyopy

Measuring intraocular tension (palpation, with a Maklakov tonometer, electronic tonometry)

Local application of medicinal agents for treatment of ocular diseases

Removal of foreign objects from the eye without damaging keratoderma

Otorhinolaryngology (ENT)

Rhinoscopy

Pharyngoscopy

Indirect laryngoscopy

Otoscopy

Optically aided otoscopy

Anterior nasal packing

Eustachian tube patency checking

Probing and rinsing tonsillar lacunae

Performance of planned treatment of common ear, nose and throat diseases of adults and children with conservative methods

Drug administration into ear and nose (drops, cotton swabs, tampons)

Cerumen impaction removal

Providing emergency care for children and adults in case of emergencies complicating the course of diseases, traumas and burns affecting ENT organs:

Foreign object removal from ear and nose

Primary treatment of wounds affecting face, nose and earflap

Obstetrics and gynecology

Bimanual vaginal and rectovaginal examination

Pregnancy testing

External obstetric inspection, fetal heartbeats assessment

Management of normal delivery

Rescue emergency care

Methods for cleaning upper air passages in case of liquid aspiration

Artificial pulmonary ventilation mouth-to-mouth, mouth-to-nose, with an Ambu bag

Closed-chest cardiac massage

Defibrillation

Therapeutic section

Internal diseases

Medical examination of internal organs in community settings and at home.

Recording and analyzing ECG

Methods for acquisition and analysis of spirograms

Peak flowmetry

X-ray picture reading methods

Laboratory diagnostics

Performing rapid glucometry

Interpretation of complete blood cell count, biochemical blood assay, clinical urine examination and biochemical urine analysis

Preparation of swabs, material for cytological and bacteriological examination

Identification of protein, sugar and acetone in urine utilizing a rapid test method

Dermatovenereology

Examination procedure for patients with skin diseases

Use of topical agents to treat the skin diseases

Neurology

Clinical examination of neurological patients:

examination of 12 pairs of cerebral nerves

examination of pathological reflexes

examination of meningeal symptoms

examination of motor qualities (posture, muscle tone, contracture, muscular dystrophy)

assessment of tactile and pain sensitivity

assessment of reflexes (tendinous, periosteous, cutaneous and mucous)

motion coordination assessment

Paediatrics

Methods of determining and assessing the physical growth and development of children and teenagers

Methods fr determining the functional state of organism

Health groups stratification among children

Care for a newborn infant

Milk volume calculation and infant feeding when the infant is mature, premature or faces problems on the mother's side

Developmental care for premature infants

Compilation of a healthy child's menu and nurturing specifics for rachitis, diathesis, dyspepsia simplex

Conducting extramural diagnostics of common diseases among children and teenagers, with their scheduled treatment

Clinical examination of healthy and sick children

Utilizing drugs with children (per os, per rectum, by inhalation, externally)

Psychiatry

Clinical examination of psychic and narcological patients

History taking, acquiring objective history data regarding the mental disorder

Conducting supervision over the patient to evaluate behavioral reactions, emotional state

Conversation with a mentally disordered patient

Extramural syndrome-driven diagnostics of psychic diseases and behavioral disorders, alcohol dependence, abuse of narcotics and toxicomania;

Phthisiology

Mantoux test interpretation

Vaccination and revaccination

Dentistry

Methods for dental examination

Methods for teeth examination

Methods for parodontium examination

Methods for oral mucosa examination

Medical-preventive and organizational business section

Physical development assessment according to standards

Public health parameters Investigation and analysis of demographic and medical-social public health records of contractual population:

Record keeping in general medical practice

Arrangement of diagnostic and treatment process and preventive measures in outpatient care centers and at home when providing primary medical care:

Patient's route organization: set of diagnostic, health-related and rehabilitation measures, admissions by experts, hospitalization

Advocacy of medical science, healthy lifestyle

Cooperation with social welfare authorities and humanitarian services with regard to organization of support to the socially vulnerable patients

Temporary incapacity expert evaluation

General medical practice management

4.3 Examples of test questions

1.	Method selection for arresting atrial fibrillation seizure lasting 24 hours of a non-treated patient without organic heart diseases: A. intravenous induction of amiodarone; B. countershock; C. intravenous induction of lidocaine; D. intravenous induction of verapamil; E. vagal maneuver.
2.	The target cholesterol LDL level during statin therapy for patients with high cardiovascular risk is:

	A. 4.5 mmol/L; B. 4.0 mmol/L; C. 3.5 mmol/L; D. 3.0 mmol/L; E. ≤ 2.5 mmol/L.
3.	In case of a poor prognosis, the information is delicately communicated to: A. the patient B. the patient's family members C. the patient and family members D. the patient and family members upon the patient's consent E. upon request from the patient's place of employment
4.	In many polyclinics the doctors additionally receive patients on a commercial basis. In these cases, people receiving care according to the compulsory medical insurance are allotted less time and attention than those who pay to the doctor directly. What principle of biomedical ethics is violated: A. informed consent B. privacy C. beneficence D. veracity E. justice