

Ministry of Health of Ukraine
Danylo Halytsky Lviv National Medical University

'Approved'
Strapping First Vice-Rector for
Academic Affairs
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Medical Faculty № 1
Department of Family Medicine

Work Program

MEDICAL PRACTICE IN OUTPATIENT CLINIC OF FAMILY MEDICINE WITH THE
PROVISION OF MEDICAL CARE FOR CHILDREN AND ADOLESCENTS
for the students of 5th course of higher medical institutions

Educational and qualification level "Master"
Field of knowledge 22 "Health Protection"
Specialities: 220 "Medicine"
228 "Pediatrics"


Confirmed by the Chair session
of the Family Medicine Department
Protocol No. 6 dated «28» January 2022

The Head


Prof. O. Nadashkevich

Confirmed by the Profile
Methodological Commission
Protocol No.2 dated «30» March 2022

The Head


Prof. L. Besh

Lviv - 2022



The work program is developed for students of the medical faculty of Danylo Halytsky Lviv National Medical University on the basis of the new curriculum of 2015 and meets the criteria of the European Credit Transfer and Accumulation System (ECTNS) by MD, Professor, Head of the Family Medicine Department **O.N. Nadashkevich**, MD, Professor of Family Medicine Department **N.M. Gromnatska**, PhD, Associated Professor **N.B. Yarko**.

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Changes and additions to the curriculum for the academic year 2021-2022

№	Contents of changes (additions)	Data and number of the department session protocol	Notes
1.	The list of recommended literature has been updated by modern sources	Protocol №6 dated 30.03.2022	

I. Explanatory note

The program “Medical practice in outpatient clinic of family medicine with provision of medical care for children and adolescents” for the students of 5th course of higher medical institutions, educational and qualification level "Master", field of knowledge 22 “Health Protection”, Specialities: 220 “Medicine”, and 228 “Pediatrics” was created as study of principles of physician practice in family medicine department for children and adolescent medical care.

Program is prepared in accordance to the following regulations:

- Order of the Ministry of Health of Ukraine dated March 19, 2018 No 504 “On approval of the Procedure for Providing Primary Care”;
- Conceptual and strategic approach to family practice. Towards universal health coverage through family practice in the Eastern Mediterranean Region Conceptual and strategic approach to family practice; Towards universal health coverage through family practice in the Eastern Mediterranean Region. WHO Library Cataloguing in Publication Data World Health Organization;
- Law of Ukraine No 2168-VII of 19.10.2017 “On state financial guarantees of medical care “;
- Order No1080 of October 17, 2017 of the Ministry of Health of Ukraine «On Approval of Certain documents on Family Medicine» ;
- The standard of higher education of Ukraine of specialists training of the second (master's) level of education 22 "Health care" Specialties: 222 "Medicine", 228 "Pediatrics" educational qualification "Master of Medicine", professional qualification "Doctor".

Over 80% of ill people start and finish their treatment in outpatient conditions. The vast majority of graduates of medical universities (academies) after graduation begin their professional activities in outpatient clinics as family doctors. According to “Program of primary health care development based on family medicine for the period up to 2012” approved by Supreme Council of Ukraine in January, 2010. Family doctor – is a specialist providing primary health care in the prehospital phase. This requires adequate training of medical schools graduates to work in outpatient conditions.

The main purpose of the discipline “Medical Practice in Outpatient Clinic of Family Medicine with the provision of Medical Care for Children and Adolescents” is mastering basic knowledge about the organization of health care based on family medicine, basic principles of medical care in outpatient conditions, execution of necessary medical documentation. Reorganization of health practitioners, the transition from precinct-therapeutic principle of pediatricians in the organization of primary health care on the basis of family medicine, set new strategic challenges for different layers of health care, including family doctors training at undergraduate and postgraduate stages.

2. MEDICAL PRACTICE IN OUTPATIENT CLINIC OF FAMILY MEDICINE WITH THE PROVISION OF MEDICAL CARE FOR CHILDREN AND ADOLESCENTS

Summer medical outpatient internship of 5th year students in the scope of professional duties of a family doctor is held during the 1st week in the family department of the clinic (participation in outpatient reception and in the provision of medical care at home) and one shift (3 hours) in the emergency department assistance.

The main task of practice – is consolidation of knowledge and skills in the future professional activities, which are obtained in the study of basic theoretical and clinical disciplines.

During the internship in the family department of a polyclinic or family medicine outpatient clinic, students must learn the methods of work of a family doctor and narrow specialists in pediatrics and gain practical experience in the following areas of future profession:

- conducting outpatient reception of sick and healthy children and adolescents;
- treatment of sick children and adolescents at home and in the day hospital of the clinic, providing them with emergency care;
- early diagnosis of the diseases using the methods of examination available in the clinic;
- identification of risk groups of children and adolescents for regular screening examinations;
- rehabilitation of sick children and adolescents with extensive use of available rehabilitation measures;
- selection of sick children and adolescents for sanatorium
- resolving the issue of examination of temporary incapacity for
- keeping medical records by a family doctor and a doctor of narrow speciality;
- work planning, accounting and analysis of morbidity and efficiency of the family doctor;
- promotion of sanitary and hygienic knowledge and principles of a healthy lifestyle among children and adolescents;
- each student during the medical practice in the clinic is assigned to a family doctor, carries out with him outpatient reception of sick and healthy children and adolescents;

During the outpatient reception, a survey is conducted, patients are examined, treatment is prescribed and medical documentation is drawn up: updated form 074/o “Journal of outpatient registration”, patient registration record (form 039/o), history of the child's development (form 112/o), medical card of an outpatient (form 025/o), prescription forms, leaves of temporary incapacity for work, referrals for research and consultations of specialists, certificates for sanatorium treatment and sanatorium cards, etc.

Students get acquainted with the coding of the reasons for the patient's treatment, the diagnosis code and the actions of the doctor according to the ICPC-2 codes, approved by the Order of the Ministry of Health of Ukraine from 04.01.18. "On some issues of application of the Ukrainian-language version of the International Classification of Primary Care (ICPC-2-I)", work in the medical information system HELSI.

Issues of disability examination are being resolved

Description of the curriculum in the discipline " Medical practice in outpatient clinic of family medicine with the provision of medical care for children and adolescents"

Name of practice	Number of weeks	Number of credits	Year of study / semester	Type of control
Medical practice in outpatient clinic of family medicine with the provision of medical care for children and adolescents	1	1,0 credit	5 course/ X semester	Differentiated credit

3. PURPOSE AND TASKS OF STUDYING THE COURSE

The ultimate purpose of training "Medical practice in the family department of the clinic to provide medical care to children and adolescents" is set on the basis of the Educational Professional Program of training a doctor in the specialty in accordance with the block of its content module of professionally-oriented fundamental training and are the basis for building the content of the discipline. The description of goals is formulated through skills in the form of target tasks and actions.

The ultimate purpose of the discipline:

- defining the basic principles of medical care on the basis of family medicine;
- study of the basic forms and responsibilities of family medicine;
- Study of epidemiology, risk factors, possibilities of prevention and early diagnosis of the main most common children diseases;
- Acquaintance and filling in the relevant documentation: ambulatory card, certificate of incapacity for work, statistical coupon, referral to the physician control comete, control card of dispensary observation, etc.

Specific purpose

– to study the structure of the outpatient clinic, the functions of its departments, to master the basic principles of medical care in outpatient settings, to know the organizational forms of work and responsibilities of a family doctor;

– to identify groups of children who are subject to regular screening examinations by risk groups, be able to fill in the relevant regulatory reporting and accounting documentation, make a plan of diagnostic and rehabilitation measures for a particular disease.

– know the risk factors for the development of major diseases in children, be able to identify them, make a plan of necessary preventive measures.

Competences and learning outcomes, the formation of which provides the study of the discipline (general and special competencies).

General Competences (GC)

1. Ability to abstract thinking, analysis and synthesis.
2. The ability to learn and master modern knowledge.
3. Ability to apply knowledge in practical situations.
4. Knowledge and understanding of the subject area and professional activity.
5. Ability to adapt and act in a new situations.
6. Ability to make informed decisions.
7. Ability to work in a team.
8. Interpersonal skills.
9. Ability to communicate in the state language both orally and writing.
10. Ability to communicate in a foreign language.
11. Skills in the use of information and communication technologies.
12. Definiteness and perseverance in terms of tasks and responsibilities.
13. The ability to act socially responsibly and consciously.
14. The desire to preserve the environment.
15. Ability to act on the basis of ethical considerations (motives).

Special (Professional, subjects) competencies of the speciality (SC)

1. Skills of interviewing and clinical examination of the patient.
2. Ability to determine the required list of laboratory and instrumental studies and evaluate their results.
3. Ability to establish a preliminary and clinical diagnosis of the disease.
4. Ability to determine the required mode of work and rest in the treatment diseases.
5. Ability to determine the nature of nutrition in the treatment of diseases.
6. Ability to determine the principles and nature of treatment of diseases.

7. Ability to diagnose emergencies.
8. Ability to determine the tactics of emergency medical care.
9. Skills in providing emergency medical care.
10. Ability to carry out medical and evacuation measures.
11. Skills to perform medical manipulations.
12. Ability to contraceptive counseling skills in adolescents.
13. Ability to carry out sanitary and hygienic and preventive measures.
14. Ability to plan and carry out preventive and anti-epidemic measures against infectious diseases.
15. Ability to determine the tactics of management of persons subject to dispensary supervision.
16. Ability to conduct the medical examination.
17. Ability to keep medical records.
18. Ability to conduct epidemiological and medical-statistical studies of public health; processing of state, social, economic and medical information;
19. Ability to assess the impact of the environment, socio-economic and biological determinants on the health of the individual, family, population.
20. Ability to analyze the activities of a doctor, department, health care institution, to take measures to ensure the quality of medical care and improve the efficiency of medical resources.
21. Ability to take measures to organize and integrate medical care and marketing of medical services.

Matrix for providing software competencies with components of the educational program

The main components/program competencies

GK1	GK2	GK3	GK4	GK5	GK6	GK7	GK8	GK9	GK10	GK11	GK12	GK13
+	+	+	+	+	+	+	+	+	+	+	+	+
GK14	GK15											
+	+											
CK1	CK2	CK3	CK4	CK5	CK6	CK7	CK8	CK9	CK10	CK11	CK12	CK13
+	+	+	+	+	+	+	+	+	+	+	+	+
CK14	CK15	CK16	CK17	CK18	CK19	CK20	CK21					
+	+	+	+	+	+	+	+					

Program learning outcomes - a set of knowledge, skills, abilities and other competencies acquired by a student in the process of learning a educational, professional program "Medical practice in the family department of the clinic to provide medical care to children and adolescents".

Matrix of providing program learning outcomes with relevant components of the educational program

The main components/program learning outcomes			
PLO 1	+	PLO 14	+
PLO 2	+	PLO 15	+
PLO 3	+	PLO 16	+
PLO 4	+	PLO 17	+
PLO 5	+	PLO 18	+
PLO 6	+	PLO 19	+
PLO 7	+	PLO 20	+
PLO 8	+	PLO 21	+
PLO 9	+	PLO 22	+
PLO 10	+	PLO 23	+
PLO 11	+	PLO 24	+
PLO 12	+	PLO 25	+
PLO 13	+		

4. PROGRAME OF THE COURSE

Topic 1. The structure and organization of the family medicine department. The structure of the family doctor's station. Participation in conducting outpatient reception. Diagnosis and treatment of major childhood diseases in an outpatient setting. Indications for planned and urgent hospitalization of children in outpatient practice. Participation in the preparation of basic medical documents in the work of a family doctor.

1. The structure and work organization of the family medicine department.
2. Diagnosis and treatment of the most common children diseases in outpatient settings.
3. Conducting medical admission of children and adolescents in the clinic under the supervision of pediatrician or family doctor.
4. Interviewing and physical examination of healthy children and children with different internal pathologies.
5. Indication to scheduled and urgent hospitalization in outpatient practice.
6. Work in the laboratory, X-ray room and in the functional diagnosis room. Interpretation of laboratory and instrumental examinations in pediatrics: analysis of blood and urine, biochemical analysis of blood, X-ray films and fluoroscopy, ultrasound examination, computer tomogram scan, upper gastroenterology endoscopy, colonoscopy, etc.
7. Participation in a prevention measures and follow - up of children with diseases.

Topic 2. Medical care of healthy children. Estimation of a child's health. Assessment of physical, mental, motor and social development of the child. Nutrition of children of different ages.

1. Assessment of physical, mental, motor and social development of the child.
2. Assessment of the child's health.
3. Creating a diet for a healthy child.
4. Participation in the system of children's patronage.
5. Conducting sanitary and educational work.
6. Participation in preventive measures

Topic 3. First aid for pediatric patients under ambulatory conditions and at home. Assistance to pediatrician or family doctor in delivery of urgent care at prehospital stage in conditions: hyperthermia, acute cardiovascular and breathing insufficiency, anaphylactic shock, convulsive syndrome, poisoning, etc.

1. Examination of the child. Estimation of syndromes and emergency.
2. Assistance to pediatrician or family doctor in delivery of urgent care at prehospital stage in conditions: hyperthermia, acute cardiovascular and breathing insufficiency, anaphylactic shock, convulsive syndrome, poisoning, etc.

Topic 4. Participation in pediatric vaccination at outpatient clinic of family medicine. Indications and contraindications to vaccination. Follow-up, assessment, and treatment of vaccination reactions

1. Calendar of preventive vaccinations of children and adolescents according to the Order of the Ministry of Health of Ukraine No 947 of 18.05.2018 "On amendments to the calendar of preventive vaccinations in Ukraine".
2. Vaccination against tuberculosis, pertussis, diphtheria, tetanus, measles, mumps, rubella, HIB-infection, polio, hepatitis B: vaccines, time of vaccination.
3. The procedure for preventive vaccinations.
4. Indications and contraindications for vaccination in children.
5. Vaccination of children with a violation of the calendar of preventive vaccinations.
6. Vaccination of HIV-infected children and adolescents.
7. Participation in the provision of emergency care to children with post-vaccination reactions and complications.

5. Differentiated credit.

THEMATIC SCHEDULE
of Medical Practice in Outpatient Clinic of family medicine with the provision of medical care for children and adolescents

	Topics	Number of hours
1.	The structure and work organization of the family medicine department. Diagnosis and treatment of the most common children diseases in outpatient settings. Conducting medical admission of children and adolescents in the clinic under the supervision of pediatrician or family doctor. Interviewing and physical examination of healthy children and children with different internal pathologies. Indication to scheduled and urgent hospitalization in outpatient practice. Work in the laboratory, X-ray room and in the functional diagnosis room. Interpretation of laboratory and instrumental examinations in pediatrics: analysis of blood and urine, biochemical analysis of blood, X-ray films and fluoroscopy, ultrasound examination, computer tomogram scan, upper gastroenterology endoscopy, colonoscopy, etc. Participation in a prevention measures and follow - up of children with diseases	7
2.	First aid for pediatric patients under ambulatory conditions and at home. Assistance to pediatrician or family doctor in delivery of urgent care at prehospital stage in conditions: hyperthermia, acute cardiovascular and breathing insufficiency, anaphylactic shock, convulsive syndrome, poisoning, etc.	7
3.	Medical care of healthy children. Estimation of a child's health. Assessment of physical, mental, motor and social development of the child. Nutrition of children of different ages.	7
4.	Participation in pediatric vaccination at outpatient clinic. Indications and contraindications to vaccination. Follow-up, assessment, and treatment of vaccination reactions	7
5.	Differentiated credit	2
	TOTALLY	30

THEMATIC SCHEDULE
of individual work in Outpatient Clinic of family medicine with the provision of medical care for children and adolescents

No	Topics	Number of hours	Forms of assessment
1.	Formulation of clinical diagnosis according to the protocols of the Ministry of Health of Ukraine, European Clinical Protocols, World Clinical Practice Guidelines	2	The current control during practice
2.	Medical care for sick children at home under the	2	

	control of the family doctor or pediatrician. Organization of home hospital: the necessary lab and instrumental examinations, consultations of specialists, treatment		classes activities
3.	Emergency care at home and in the outpatient department, indication to urgent hospitalization in outpatient practice. Screening and rules of hospitalization of children in urgent need	2	
4.	Dispensarisation of sick and disabled children: registration according to diagnosis, performance of observation, consultations of specialists, basic and preventive treatment	2	
5.	The route of health-improvement measures, nutrition, sanitary choice in different children diseases	2	
6.	Diagnosis, prevention and treatment of rickets in children	1	
7.	Diagnosis, classification, prevention and treatment of anemia in children and adolescents	1	
8.	Diagnosis, prevention and treatment of acute respiratory diseases in children	1	
9.	Diagnosis, classification, prevention and treatment of pneumonia in children and adolescents	2	
TOTALLY		15	

**5. CONTENTS OF MEDICAL PRACTICE.
LIST OF KNOWLEDGE AND SKILLS THAT STUDENT SHOULD ACQUIRE AND
THEIR EVALUATION IN POINTS**

No	Practical skill	Score in points
1.	Carrying out medical reception of children and adolescents in the clinic under supervision of a family doctor or paediatrician. Examination of the children and adolescents: survey (complaints, life history, medical history), examination (palpation, percussion, auscultation), development of a plan of laboratory and instrumental examination, establishing the patient's route, evaluating the data, preliminary diagnosis, treatment plan, rehabilitation according to Universal and European guidelines.	3-5
2.	Substantiation and formulation of clinical diagnosis according to the Universal and European guidelines, international consensus, protocols of the Ministry of Health of Ukraine.	3-5
3.	Providing medical care to sick children at home under the supervision of family doctor.	3-5

4.	Treatment of sick children at home. Organization of a home hospital: necessary laboratory and instrumental examinations, consultations of specialists.	3-5
5.	Providing medical care in a day hospital clinic under the supervision of a hospital doctor.	3-5
6.	Carrying out general medical manipulations: subcutaneous, intramuscular and intravenous injections, drip injections, setting mustard and compresses, gastric lavage, cleansing and therapeutic enemas.	3-5
7.	Study and implementation under the supervision of a family doctor or pediatrician basic measures (manipulations) of emergency care in the prehospital stage in hyperthermic and convulsive syndromes, loss of consciousness, acute cardiovascular and respiratory failure, anaphylactic shock, Quincke's edema, etc. Study of indications and rules of urgent hospitalization of children.	3-5
8.	Study of indications and rules of urgent hospitalization of children.	3-5
9.	Conducting regular screening examinations of children by risk groups. Dynamic (dispensary) observation of children with certain diseases, list of diseases, secondary and tertiary prevention and treatment, nature and duration of observation.	3-5
10.	Sanatorium treatment: selection of children, indications and contraindications to sanatorium treatment, drawing up a route of improving actions, dietary food.	3-5
11.	Registration of medical documentation: history of child development (f.112/o), out-patient medical card (f.025/o), the journal of registration of out-patient patients (f.074/o), information of the account of visits of the patients (f. 039/o), medical passport of the station (f.075/o), card of the polyclinic day hospital patient (f.003/2/o), emergency report of an infectious disease, acute occupational poisoning, primary reaction on vaccination (f.058/o), preventive vaccination card (f.063/o), certificate for obtaining a permit for sanatorium treatment (f.070/o), sanatorium-resort card (f.072/o). Work in the HELSI medical information system, coding the reasons for the patient's observation, treatment, diagnosis and actions of the doctor according to ICPC-2 codes.	3-5
12.	Execution of documents of temporary incapacity for work: certificate of temporary incapacity for work.	3-5
13.	Extraction of prescriptions for medicines.	3-5
14.	Interpretation of the results of lab research methods: general blood test, biochemical blood test, urine test, urine samples according to Zymnitsky and Nechiporenko, microscopic analysis of feces for worm eggs and protozoa, coprograms, fecal analysis for dysbacteriosis, analysis of sputum pleural and ascitic fluid, gastric secretion, duodenal content, bile.	3-5
15.	Microbiological research of nasal secretion, covering of the tonsils, urine and stool.	

16.	Express methods of Helicobacter Pylori, Lambliia Gardia, Coronaviral infection, β -hemolytic Streptococ group A evaluation.	3-5
17.	ECG recording and reading of the results, Holter ECG and blood pressure monitoring.	3-5
18.	Evaluation of spirometry and peakflowmetry.	3-5
19.	Participation in ultrasound examination of abdominal organs, kidneys, thyroid gland, neurosonography of the brain, echocardiography, phonocardiography, hip joint.	3-5
20.	Participation in the fractional study of gastric secretion, pH-metry, esophagogastroduodenos-copy, colonoscopy.	3-5
21.	Evaluation of X-ray examination of the chest, gastrointestinal tract, gallbladder, kidneys, hip joints.	3-5
22.	Work in the vaccination office. Immunization of children, determination of the type of vaccine, route of administration, nature of the vaccination process, possible reactions and complications of the vaccination.	3-5
23.	Participation in the work of pediatric specialists: rheumatologist, cardiologist, endocrinologist, pulmonologist, gastroenterologist, otholaringo- logist, ophthalmologist.	3-5
24.	Work in the physiotherapy department of the clinic.	3-5

Students' practical training skills are assessed by the following criteria:

"5 points" - the student has perfectly mastered a certain skills and practical skills, thinks logically, freely uses the acquired theoretical knowledge in the analysis of practical material, expresses his attitude to problems;

"4 points" - the student has mastered a certain skills and practical skills, has the basic aspects of practical skills and abilities, expresses his views on certain issues, but assumes certain inaccuracies and errors in the analysis of practical actions.

"3 points" - the student has mainly mastered certain skills and practical skills, but unconvincingly answers, confuses concepts, additional questions cause the student uncertainty or lack of stable knowledge, answering questions of a practical nature shows inaccuracies in knowledge, can not assess the facts and phenomena.

6. METHODS OF CONTROL

Practice is assessed on a traditional four-point and 200-point scale.

The grade for the internship consists of the sum of points for the student's practical skills, which are checked by the direct supervisor from the internship base (max. 120 points - min. 72 points), and points for the final module control, which are set during the differentiated test (max. 80 points - min. 50 points).

Points from the discipline are independently converted into the ECTS scale and the 4-point scale. ECTS scale scores are not converted to a 4-point scale. The scores of students studying in one specialty are ranked according to the ECTS scale as follows:

A	The best 10% of students
B	The next 25% of students
C	The next 30% of students

D	The next 25% of students
E	The last 10% of students

Practice points for students who have successfully completed the program are converted into a traditional 4-point scale according to the absolute criterion.

Points of discipline	Score on a 4-point scale
From 170 to 200 points	5
From 140 to 169 points	4
From 139 to 122 points	3
Below 122 points	2

7. LIST OF QUESTIONS FOR DIFFERENTIATED CREDIT

1. The structure and main functions of the family medicine department, functional responsibilities of the family doctor.
2. The content of the patronage work of family doctor.
3. Care for newborns and infants at home, continuous monitoring of children of the first year of life at the outpatient clinic.
4. Indications and contraindications to hospitalization of somatic and infectious children in the hospital.
5. Indications and contraindications to the treatment of children in the day hospital, medical care.
6. Centralized and decentralized hospital at home for children.
7. Indicators of physical and neuropsychological development of children of the first year of life, the first three years of life, preschool and school age.
8. Breastfeeding of the child in the first year of life, the introduction of complementary foods.
9. Prevention and treatment of hypogalactia in breastfeeding mother.
10. Differential diagnosis of neonatal jaundice.
11. Etiology, pathogenesis, diagnosis, classification, clinic, nonspecific and specific prevention and treatment of rickets in children.
12. Etiology, pathogenesis, diagnosis, classification, clinic, nonspecific and specific prevention of iron deficiency anemia in children.
13. Acute respiratory viral infections, classification according to ICD-10, complications, specific and nonspecific methods of prevention and treatment.
14. Metabolic syndrome in children, risk factors, pathogenesis, diagnosis, clinic, prevention and treatment.
15. Community-acquired pneumonia, etiology, pathogenesis, clinic, diagnosis, classification by ICD-10, treatment, rehabilitation and prevention.
16. Emergency care for children in emergencies: convulsive and hyperthermic syndrome.
17. Calendar of preventive vaccinations of children and adolescents according to the Order of the Ministry of Health № 947 of 18.05.2018 "On amendments to the calendar of preventive vaccinations in Ukraine", indications and contraindications for vaccination, prevention of post-vaccination reactions and complications.
18. Model of regular screening examinations by risk groups.
19. Indications and contraindications to sanatorium treatment of children, selection of children, types of sanatoriums for children, preparation of documentation for referral to sanatorium treatment.

20. Evaluation of laboratory results (example of analysis): blood, urine and tests, biochemical blood tests (protein and its fractions, acute phase, blood urea and creatinine, electrolytes, glucose, blood bilirubin and its fractions, coagulation test, blood lipid profile, Sulkovich test, microbiological examination of biological fluids and secretions, polymerase chain reaction, enzyme-linked immunosorbent assay, general microscopic analysis of sternal puncture and cerebrospinal fluid.
21. Evaluation of instrumental methods of examination: ECG, echocardiography, ultrasound examination of liver, gallbladder, pancreas, kidneys, thyroid gland, neurosonography of the brain, spirometry, spirometry, peakflowmetry, electroencephalography, computer tomography and magnetic resonance imaging, X-ray films.
22. Calculation of indicators of quality of work of the family doctor: neonatal, perinatal and infant mortality, general morbidity, morbidity of children under one year, indices of infectious morbidity, health index, coverage of antenatal care, timeliness of coverage of newborns by medical supervision, frequency of breastfeeding, regular monitoring of children under 1 year, percentage of preventive vaccinations, etc.

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