FEDERAL STATE BUDGET EDUCATIONAL
HIGHER EDUCATION INSTITUTION
"ROSTOV STATE MEDICAL UNIVERSITY"
MINISTRY OF HEALTH OF THE RUSSIAN FEDERATION

FACULTY OF TREATMENT AND PREVENTION

Appraisal Fund
in the discipline "Public Health and Healthcare"

Specialty 05/31/01 General Medicine

2023

1. Interim certification form: test.
2. Type of intermediate certification: interview, test control (test), situational tasks.

3.**List of competencies formed by the discipline or in formation which discipline is involved:**

Code competencies	Content of competencies (results of mastering OOP)	Contents of elements competencies, in the implementation of which discipline involved
OPK – 1	Able to solve standard problems of professional activity using information, bibliographic resources, medical and biological terminology, information and communication technologies and taking into account basic information security requirements	Fundamentals of public health and healthcare as an educational and scientific discipline. Organization of medical and social (social and hygienic) research.
OPK – 3	ability to use the basics of economic and legal knowledge in professional activities	Regulatory and legal framework for providing free medical help citizens RF. Programs state guarantees (SGG). Planning and financing healthcare. International healthcare. Sanitary epidemiological well-being population.
OPK – 6	readiness to lead medical documentation	Organization medical and social help various groups population depending on the stage, profile and attachment population. Organization medical assistance to the population. Maintaining medical documentation V outpatient outpatient And stationary conditions.
PC – 4	ability and readiness to use social hygienic methods for collecting and medical-statistical analysis of information on population health indicators.	Organization of medical and social research. Practical use of statistical methods in public health and healthcare. Population health: criteria and methods of assessment, levels, modern tendencies. Methods of studying and criteria for assessing public health. Organizational basics healthcare.

PC – 17	ability to apply the basic principles of organization and management in the field of security health of citizens, in medical organizations and their structural divisions.	Primary health assistance (PHC). Organization of outpatient and inpatient care for urban and rural to the population. Organization obstetric-gynecological And pediatric help to the population.
PC – 18	readiness to participate in assessing the quality of medical care using basic medical and statistical indicators.	Quality of medical care (QMC): methodological approaches to assessment organization examination quality And security medical care in the Moscow Region.
PC – 22	readiness to participate in the implementation of new methods and techniques aimed at protecting the health of citizens.	Planning healthcare. Health financing. Modern medical and social Problems, questions fortifications health population, basic directions of prevention.

*4.***Stages of developing competencies in the process of mastering**<u>**educational programs**</u> :

Competence	Disciplines	Semester
OPK – 1	Medical informatics	1
	Anatomy	1,2,3
	Propaedeutics of internal diseases	5.6
OPK – 3	Economy	
	Forensic Medicine	eleven
	Jurisprudence	4
OPK – 6	Forensic Medicine	eleven
	Propaedeutics of internal diseases	5.6
	general surgery	5.6
	Jurisprudence	eleven
PC – 4	Epidemiology	10
	Non-infectious epidemiology	
PC – 17		
PC – 22	Dermatovenereology	7
	Neurology, medical genetics, neurosurgery	8
	obstetrics and gynecology	7,8,9,10
	Pediatrics	7,8,9
	Radiation diagnostics	7
	Outpatient therapy	9,10,11,12
	general surgery	5.6
	Faculty Surgery	7.8
	Urology	7
	Hospital surgery	9,10,11

	Pediatric surgery	eleven
	Reproductive medicine	

5.**Stages of developing competencies in** **process of mastering the discipline**

Sections of the discipline	Codes of formed competencies					
	OPK-1	OPK-3	OPK-6	PC-4	PK-17	PC-22
Semester XI						
Section 1	+					
Section 2	+			+		+
Section 3					+	
Section 4			+		+	
Section 5		+			+	

6. Forms of assessment tools in accordance with the competencies being developed

Code competencies	Forms of assessment tools	
	Current certification	Interim certification
OPK – 1	Tests Situational tasks Oral survey, interview	Tests Situational tasks
OPK – 3	Tests Situational tasks Oral survey, interview	Tests Situational tasks
OPK – 6	Tests Situational tasks Oral survey, interview	Tests Situational tasks
PC – 4	Tests Situational tasks Oral survey, interview	Tests Situational tasks
PC – 17	Tests Situational tasks Oral survey, interview	Tests Situational tasks
PC – 22	Tests Situational tasks Oral survey, interview	Tests Situational tasks

7. Current control

Forms of control from discipline RPD	number of exemplary (typical) tasks
Tests	10 questions
Situational tasks	3 tasks with standard answers
Practical skills	5 skills
Oral survey, interview	test questions on the topics of the section
Other	

Interview

1. Public health and healthcare as a science and subject of teaching.

2. Stages of medical and social research.

3. Average values, types, procedure for calculation and analysis, use in the work of a doctor.

4. Medical demography as a branch of the science of demography, its sections.

5. Primary morbidity, calculation and analysis procedure, structure, levels and trends.

6. Primary health care (PHC). WHO strategy for achieving health for all, principles, elements.

7. Providing medical and social assistance to women: types of institutions, tasks, structure, performance indicators.

8. Rights and obligations of citizens of the Russian Federation in the system of compulsory health insurance (CHI).

9. Departmental and non-departmental examination of the quality of medical care.

10. The procedure for issuing a certificate of temporary disability for pregnancy and childbirth.

Test control

List of test tasks for intermediate certification with standard answers:

1. Indicate the main causes of maternal mortality, all except:
    a. injuries, poisonings, accidents;
    b. extragenital pathology;
    c. edema, proteinuria, hypertensive disorders;
    d. obstetric embolism.

2. Indicate the share of influence of lifestyle factors on the health of the population:
    a. 50-55%;
    b. 31-45%;
    c. 21-30%;
    d. 10-20%.

3. The infant mortality rate in Russia in recent years has been within the following range:
    a. from 5 to 15‰;

b. >25‰;

c. from 16 to 20‰;

d. <5‰.

4. Indicate how the neonatal mortality rate is calculated:

a. (absolute number of children who died during the first 28 days of life) divided by (absolute number of children born alive) *1000 b. (absolute number of children who died in the first 168 hours of life) divided by (absolute number of children born alive) and *1000 c. (absolute number of children who died on days 7-28 of life) divided by (absolute number of children born alive and died in the first 168 hours) and *100;

d. absolute number of children who died on days 7-28 of life) divided by (absolute number of children born alive) and *1000.

5. Indicate the correct definition of the concept of "population seeking medical help":

a. the patient's first visit to a doctor regarding this disease registered in a medical institution in the current year;

b. a patient's visit to a health care facility;

c. a repeat visit of the patient to the doctor;

d. patient's visit to the doctor.

6. Primary health care, according to WHO recommendations, is assessed according to the following indicators, with the exception of:

a. birth rate, mortality rate, average life expectancy;

b. number of live births by maternal age;

c. percentage of infants vaccinated during the first year of life against major childhood infectious diseases; d. number of induced abortions per 1000 live births.

7. Specify the main causes of maternal mortality, all except:

a. injuries, poisoning, accidents

b. extragenital pathology

c. edema, proteinuria, hypertensive disorders

d. obstetric embolism

8. A family doctor is:

a. a general practitioner who provides primary multidisciplinary medical and social care to the family, regardless of the age and gender of the patients;

b. a medical specialist who treats both adults and children;

With. a medical specialist working independently under compulsory medical insurance conditions; d. doctor is a general specialist.

9. Indicate which classes of diseases occupy the first three places in the structure of primary morbidity of the child population aged 0-14 years inclusive, except:

a. diseases of the nervous system;

b. respiratory diseases;

With. injuries, poisoning and some other consequences of external causes;

d. diseases of the skin and subcutaneous tissue.

10. Definition of the discipline "Public Health" as a health And science:

a. public health and healthcare - the science of the laws of public health and healthcare;

b. public health and healthcare - a system of measures to protect public health;

c. public health and healthcare - the science of social problems of medicine and healthcare;

d. public health and healthcare is the science of the influence of social factors on the health of the population.

Sample answers:
1-a; 2-a; 3-a; 4-a; 5-a; 6-a; 7-a; 8-a; 9-a; 10-a.

Situational tasks

Task No. 1
"Assessing the reliability of the results of medical and social research"

When studying the performance of dental students faculty who are not working and who combine study with work, the following data were obtained: among those who were not working, the average score at the end of the session was M_1= 4.10 (m_{M1}=±0.09), for those who combine study and work – M_2=3.65 (m_{M2}=±0.05). It is required to assess the reliability of the difference between two average values.

Task No. 2 "Medical and demographic statistics". The population of the city is 80,000 people, including 16,500 women aged 15-49 years. The number of births per year is 1,235 people. The number of deaths is 1207 people, including 10 people who died under the age of 1 year. Do you need to calculate general and special indicators of fertility and mortality?

Task No. 3 "Disability statistics."

The population of the R-th region is 4,134 thousand people, while the working population is 2,386 thousand people. In 2014, in the region, for the first time, 28,600 people were recognized as disabled among adults, including 17,400 people among the working population. Disabled people were distributed by group as follows: group 1 – 4390 people; Group 2 – 11,812 people; Group 3 – 12,398 people, and for reasons of disability:

• diseases of the circulatory system –10,296 people;

• neoplasms –6350 people;

• diseases of the musculoskeletal system and connective tissue –2860 people;

• consequences of injuries, poisoning and other influences of external causes –1430 people;

• mental disorders and behavioral disorders –1144 people

• other –6520 people

You need to calculate:

1. Primary disability of the population of the R-th region for 2014.

2. Primary disability of the working population of the R-th region for 2014.

3. The structure of primary disability by severity of disability.

4. The structure of primary disability by causes of disability.

Task No. 4 "Organization of medical and social assistance to children."

The child population of the urban area was 30,000 people, the standard for outpatient visits to a pediatrician per resident per year was 6.9. The actual function of the physician position is 6,300 visits per year. Calculate how many positions of pediatricians are needed to serve the population of the region.

Task No. 5 "Examination of temporary disability." Worker P., after an accident at work, was

arm amputated. He was sent to the clinic of a prosthetic and orthopedic enterprise

for prosthetics, where he stayed for 35 days. Does he have the right to receive a

certificate of incapacity for work and for how long?

Sample answers to problems

Task No. 1 "Assessing the reliability of the results of medical and social research"

To assess the reliability of the difference between two average values, we use the formula:

$$t = \frac{1-2}{\sqrt{2-2}} = \frac{4.1-3.65}{\sqrt{(\pm0.09)2-(\pm0.05)2}} = 4.5$$

Conclusions. 1. The difference in performance indicators is reliable (statistically significant).

2. An error is possible, but its probability does not exceed 1% (0.001).

Task No. 2 "Medical and demographic statistics".

We calculate the total fertility rate:

Overall coefficient =<u>Absolute number of children born alive per year</u> ×1000

birth rate   Average annual population

Overall coefficient = $\dfrac{1235}{80000} \times 1000 = 15.4‰$
birth rate

   2. We calculate the overall mortality rate using the formula:

Overall coefficient = $\dfrac{\text{Absolute number of deaths per year}}{\text{Average annual population}} \times$
1000 Mortality

Overall coefficient = $\dfrac{1207}{80000} \times 1000 = 15.1‰$
mortality

   3. Fertility rate:
Coefficient = $\dfrac{\text{Total number of children born alive per year}}{\text{Average annual number of women}} \times 1000$
fertility
(fertility) fertile age (15-49 years)

Coefficient = $\dfrac{1235}{16500} \times 1000 = 74.8‰$
fertility

   4. Infant mortality rate:

Coefficient
infant= $\dfrac{\text{Number of children who died in the first year of life during the calendar year} \times 1000}{\text{Number of children born alive}}$ mortality

Coefficient
infant
mortality = $\dfrac{10 \times 1000}{1235} = 8 \ \text{per 1000}$

Conclusion:
   1. The birth rate (15.4‰) is low (11-15‰).
   2. The overall mortality rate (15.1‰) is average (11‰-15‰).
   3. The infant mortality rate corresponds to the national average.

Task No. 3 "Disability statistics"

We carry out the calculation using the above data: 1. Number
for the first time

recognized as disabled = $\dfrac{\text{Number of people recognized as disabled for the first time}}{\text{Average annual population}} \times 10,000$
(per 10 thousand population)

Number for the first time
recognized as disabled = (per 10 $\dfrac{28600}{4,134,000} \times 10,000 = 69.2$ on 10,000 population
thousand population)

2. Number for the first time

recognized as disabled = $\dfrac{\text{Number for the first time recognized as disabled}}{\text{Average annual number (working) population}} \times 10,000$
(per 10 thousand working-age
population)

Number for the first time

recognized as disabled= $\dfrac{17400}{2\,386000} \times 10{,}000 = 72.9$ per 10,000

(per 10 thousand working-age population)

3. Primary structure

disability (%) by severity= $\dfrac{\text{Number of people recognized as disabled people of group 1(2,3) for the first time}}{\text{Number for the first time recognized as disabled}} \times 100\%$

disability

- Specific weight (in%) of disabled people

1 group= $\dfrac{4390}{28600} \times 100 = 15.4\%$

- Specific weight (in%) of disabled people

2 groups= $\dfrac{11812}{28600} \times 100 = 41.3\%$

- Specific weight (in%) of disabled people

3 groups= $\dfrac{12398}{28600} \times 100 = 43.3\%$

4. Primary structure

disability (in%) by disease class $= \dfrac{\text{Number of people recognized as disabled for the first time in connection with a certain class of diseases}}{\text{Number of people recognized as disabled for the first time}} \times 100\%$

- Specific weight (in%) of disabled people due to

diseases of the circulatory system $= \dfrac{\text{Number of people recognized as disabled for the first time for diseases of the circulatory system}}{\text{Number of people recognized as disabled for the first time}} \times 100\%$

- Specific weight (in%) of disabled people due to

diseases of the circulatory system $= \dfrac{10296}{28600} \times 100 = 36.0\%$

- Specific weight (in%) of disabled people

due to neoplasms= $\dfrac{\text{Number of first time recognized disabled people due to neoplasms}}{\text{Number of people recognized as disabled for the first time}} \times 100\%$

- Specific weight (in%) of disabled people

due to neoplasms $= \dfrac{6350}{28600} \times 100 = 22.2\%$

- Specific weight (in%) of disabled people due to

diseases of the musculoskeletal system= $\dfrac{\text{Number of people recognized as disabled for the first time for diseases of the musculoskeletal system}}{\text{Number of people recognized as disabled for the first time}} \times 100\%$

- Specific weight (in%) of disabled people due to

diseases of the musculoskeletal system= $\dfrac{2860}{28600} \times 100\% = 10.0\%$

- Specific weight (in%) of disabled people

due to external reasons $= \dfrac{\text{Number of first time recognized disabled due to external reasons}}{\text{Number of people recognized as disabled for the first time}} \times 100\%$

- Weight (in%) of disabled people due to
external causes =$\frac{1430 \times 100}{28600}$% = 5.0%

- Specific weight (in%) of disabled people due to
mental and behavioral disorders

$$= \frac{\text{The number of people recognized as disabled for the first time due to mental and behavioral disorders}}{\text{Number of people recognized as disabled for the first time}} \times 100\%$$

- Proportion of people with disabilities due
to mental disorders (in %)
and behavioral disorders=$\frac{1144 \times 100}{28600}$% = 4%

- Specific weight (in%) of disabled people due to
"other" diseases=$\frac{\text{Number of people recognized as disabled for the first time for other diseases}}{\text{Number of people recognized as disabled for the first time}} \times 100\%$

- Proportion of people with disabilities due to
"other" diseases (in %)=$\frac{6520 \times 100}{28600}$% = 22.8%

Conclusions.*Indicator of the population of the R-th region recognized as disabled for the first time is 69.2 per 10,000 population, among the working-age population it is 72.9 per 10,000 population. In terms of the share in the structure of disability, group 3 prevails by severity of disability - 43.3% (group 2 - 41.3%, group 1 - 15.4%). For reasons of disability, 1st place is occupied by disability due to diseases of the circulatory system - 36%; 2nd place for neoplasms – 22.2%; 3rd place for diseases of the musculoskeletal system and connective tissue – 10%.*

Task No. 4 "Organization of medical and social assistance to children."

To calculate the positions of pediatricians, you need to:

1. 30,000 x 6.9 = 207,000 visits

2. 207000: 6300 =33 pediatrician positions.

Conclusion: the required number of pediatricians is 33.

Task No. 5 "Examination of temporary disability."
In accordance with the order of the Ministry of Health and Social Development of the Russian Federation dated June 29, 2011 No. 624n (as amended on July 2, 2014) "On approval of the procedure for issuing certificates of incapacity for work" to citizens referred by a medical organization for prosthetics to a hospital specialized institution, a certificate of temporary disability is issued to the referring organization for the duration of travel to the prosthetics clinic. The issued certificate of incapacity for work is extended by the medical worker of the inpatient specialized institution for the entire period of stay and the time of travel to the place of registration at the place of residence (at the place of stay, temporary residence).

8. Interim certification

9. Description of indicators and criteria for assessing competencies at the stages of their formation, description of assessment scales

	Levels of competency development		
	Threshold	*Sufficient*	*High*
Criteria	Competence formed. Demonstrated threshold, satisfactory sustainable level practical skill	Competence formed. Demonstrated enough level independence, sustainable practical skill	Competence formed. Demonstrated high level independence, high adaptability practical skill

Competency assessment indicators and rating scales

Grade "unsatisfactory" (not accepted) or absence formation competencies	Grade "satisfactorily" (passed) or satisfactory (threshold) level of development competencies	Rated "good" (passed) or sufficient level development competencies	Excellent rating (passed) or high level development competencies
failure to student on one's own demonstrate knowledge when solving assignments, lack independence in application of skills. Absence availability confirmation formation competencies indicates negative development results academic discipline	student demonstrates independence in application of knowledge skills and abilities to solve educational tasks in full According to sample given teacher, by tasks, solution of which there were shown teacher, it should be considered that competence formed on satisfactory level.	student demonstrates independent application of knowledge, skills and abilities when deciding tasks, tasks similar samples that confirms Availability formed competencies for higher level. Availability such competence on sufficient level indicates sustainable fixed	student demonstrates ability to full independence in choosing a method solutions non-standard assignments within disciplines with using knowledge, skills and skills, received as in development progress of this discipline, and adjacent disciplines should count competence formed on high level.

		practical skill	

Evaluation criteria for the test

Mark	Descriptors		
	strength of knowledge	**ability to explain** the essence of phenomena, **processes, do** conclusions	**logic and subsequence** answer
passed	solid knowledge of the basic processes of the studied subject area, the answer differs in depth and completeness of the topic; possession terminological apparatus	ability to explain essence, phenomena, processes, events, draw conclusions and generalizations, give reasoned answers, give examples	logic and subsequence answer
not accepted	insufficient knowledge subject matter being studied areas, unsatisfactory disclosure of the topic; weak knowledge of basic issues of theory, Allowed serious mistakes in content of the answer	weak analysis skills phenomena, processes, events, inability give reasoned answers given the examples are wrong	lack of logic and consistency answer

Criteria for evaluating forms of control:

Interviews:

Mark	Descriptors		
	strength of knowledge	**ability to explain** the essence of phenomena, **processes, do** conclusions	**logic and subsequence** answer
Great	strength of knowledge, knowledge of basic processes subject matter being studied areas, the answer differs in depth and completeness disclosure of the topic; possession terminological apparatus; logic and consistency answer	high skill explain the essence phenomena, processes, events, draw conclusions and generalizations, give reasoned answers, give examples	high logic and subsequence answer
Fine	solid knowledge of the basic processes of the studied subject area, differs in depth and completeness of the topic; possession	ability to explain essence, phenomena, processes, events, draw conclusions and generalizations, give reasoned	logic and subsequence answer

	terminological apparatus; free mastery of monologue speech, but one or two inaccuracies in the answer are allowed	answers, give examples; however one or two inaccuracies in the answer are allowed	
satisfactory really	satisfactory process knowledge subject matter being studied areas, answer, different insufficient depth and completeness of the topic; knowledge of basic theoretical issues. Several are allowed errors in content answer	satisfactory ability to give reasoned answers and provide examples; satisfactorily formed analysis skills phenomena, processes. Several are allowed errors in content answer	satisfactory logic and subsequence answer
will not satisfy really	poor knowledge of the subject area being studied, shallow opening Topics; poor knowledge basic theoretical issues, poor analysis skills phenomena, processes. Serious errors in content answer	inability to give reasoned answers	lack of logic and consistency answer

Test control grading scale:

percentage of correct answers	Marks
91-100	Great
81-90	Fine
71-80	satisfactorily
Less than 71	unsatisfactory

Situational tasks:

Mark	Descriptors			
	understanding Problems	analysis situations	skills solutions situations	professional thinking
Great	complete implication problems. All requirements, submitted to adania, completed	high benefit analyze situation, draw conclusions	high benefit select method solutions problems faithful solution skills situation	high level professional thoughts

Fine	complete implication problems. All requirements, submitted to adania, completed	benefit analyze situation, draw conclusions	benefit select method solutions problems faithful solution skills situation	residual level professional thoughts. drops one or two precision in the answer
satisfactory really	astastic implication problems. majority requirements declared to adania, completed	satisfactory Naya benefit analyze situation, draw conclusions	satisfactory skills solutions situation	residual level professional thoughts. falls more a bunch of inaccuracies in reply
will not satisfy really	misunderstanding problems. legs requirements, submitted to I hope not completed. No Tveta. Did not have experiments to solve hello	izkaya benefit analyze situation	insufficient solution skills situation	missing

Skills:

Mark	Descriptors		
	consistency theoretical knowledge	knowledge of the methodology **execution practical skills**	**performance practical skills**
Great	system stable theoretical knowledge about services and contraindications, possible complications, regulations, etc.	stable knowledge implementation methods practical skills	independence and correctness fulfillment practical skills skills
Fine	system stable theoretical knowledge about services and contraindications, possible complications, regulations, etc., some are omitted preciseness that independently are detected quickly cope	stable knowledge implementation methods practical skills; some are omitted preciseness that independently are detected quickly cope	independence and correctness fulfillment practical skills skills
satisfy flax	satisfactory theoretical knowledge about services and contraindications, possible complications, regulations, etc.	knowledge of the basic principles of implementation methodology practical skills	independence fulfillment practical skills skills, but go down some mistakes, which are being corrected

				with help tutor
dissatisfy strictly	low level of knowledge services contraindications, possible complications, regulations, etc. and/or can't do it on its own demonstrate tactical skills or fulfills them, allowing common mistakes	O And	izky level knowledge methods execution practical skills	epossibility independent performing the skill whether skills

Presentations/reports

Mark	Descriptors			
	Disclosure Problems	**Performance**	**Decor**	**Answers to questions**
Great	Problem revealed fully. Conducted analysis problems with involving additionally th literature. conclusions justified.	Represented information systematized, consistent and logically connected. Used more than 5 professional terms.	Wide used informational e technologies. None errors in represented information.	Answers to questions full with ghost examples and/or explanations.
Fine	Problem revealed. Conducted analysis no problems attracting additionally th literature. Not all conclusions made and/or justified.	Represented information systematized and consistent. Used more than 2 professional terms.	Used informational e technologies. No more than 2 errors in represented information	Answers to questions complete and/or partially full
Satisfactorily	Problem not disclosed fully. The conclusions are not made and/or conclusions are not justified.	Represented no information systematized and/or not consistent. Used 1-2 professional term.	Used informational e technologies partially. 3-4 errors per represented information.	Only answers to elementary e questions.
Unsatisfactory O	The problem is not revealed. None conclusions.	Represented information logically not connected. Not used	Not used informational e technology. More than 4 errors	No answers to questions.

CHECKLIST FOR THE EXAMINATION PROCEDURE when
using a point-rating assessment system
(in case of completing the discipline with an exam)

No.	Examination event*	Points
1		
2		
...		
Total maximum number of points for the examination procedure:		100

*Specific types, stages of the examination procedure, points for each stage are indicated, based on a maximum of 100 points in total for the examination procedure.

CHECKLIST FOR EXAMINATION PROCEDURE

(checklist for the second (commission) retake in case
if the study of the discipline ends with a test, a differentiated test,
exam)

No.	Examination event*	Points
1	Practical skills	10
2	Oral survey	90
Total maximum number of points for the examination procedure:		100

*Specific types, stages of the examination procedure, points for each stage are indicated, based on a maximum of 100 points in total for the examination procedure.