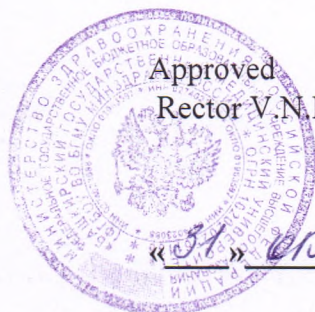


**Federal State Budget Educational Institution Of Higher a Education
Bashkir State Medical University of The Federal Ministry of Health
of Russian Federation**

Institute of Continuing Professional Education (ICPE)



Approved
Rector V.N. Pavlov

« 31 » 2019 г.

**Additional professional program of skills development of continuing
education**

otorhinolaryngology

**Research methods of auditory analyzer
(the period for completion is 36 academic hours)**

Ufa 2019.

Working Group

Additional professional Otorhinolaryngology program of skills development of continuing Education with the time of development for 36 academic hours was developed by department officials of FSBEI of HE BSMU of The Federal Ministry of Health of Russian Federation

№ · nn.	Name	Field of study	Present post	Place of work
1.	Arefyeva N.A	Doctor of Medical Sciences Professor	Professor at the Otorhinolaryngology department with the course of ICPE	FSBEI of HE BSMU of The Federal Ministry of Health of Russian Federation
2.	Tsyglin A.A.	Candidate of Medical Sciences Associate professor	Vice-Rector for Academic Affairs, Head of Otorhinolaryngology training course of the Department of Otorhinolaryngology with the course of ICPE	FSBEI of HE BSMU of The Federal Ministry of Health of Russian Federation
3.	Savelyeva E.E.	Candidate of Medical Sciences Associate professor	Head of the Department of Otorhinolaryngology with the course of ICPE Associate professor	FSBEI of HE BSMU of The Federal Ministry of Health of Russian Federation

1. Explanatory note

Relevance and prerequisites for the establishment of the program

Relevance of Additional professional program of skills development by the name "Research methods of auditory analyzer" is a reflection of the fact that diseases of auditory analyzer are continuing to spread, the great diversity of diagnostic and treatment techniques must be learned by modern otorhinolaryngologists for enhance the quality of life of the patients, there is a need for improvement and getting new competences of medical practice that adapted to the new economic and social conditions according to international requirements and standards.

2. The aims and purposes of Additional professional program of skills development by the name "Research methods of auditory analyzer".

The aim of Additional professional program of skills development by the name "Research methods of auditory analyzer" is an improvement and getting new competences, enhancement of professionalism within the existing qualification, acquisition of systematic and theoretical knowledge, necessary professional skills for early diagnosis, treatment and prevention of diseases of auditory analyzer when otorhinolaryngologists work.

The purposes of the theoretical part of the discipline studying: -improvement of the knowledge on the anatomic-functional condition of auditory analyzer normally and pathologically. - improvement of the knowledge on the prevalence and the structure of diseases of auditory analyzer -improvement of the knowledge on the modern diagnostic methods of diseases of auditory analyzer.

The purposes of the practical part of the discipline studying: -improvement of the knowledge and diagnostic skills of most common diseases of auditory analyzer -improvement of the knowledge and medical care to patients with hearing impairments -improvement of the knowledge and comprehensive treatment for diseases of auditory analyzer.

3. Category of students: doctors with higher education with a diploma "general edicine", "pediatric" and post-graduate education in otorhinolaryngology (internship or/and residency).

4. Duration of the course: 36 academic hours including 36 credits

5. Form of education, regime and duration of classes

training schedule form of education regime and duration of classes	Class hours per day	Days a week	Total duration of the course, Hours (weeks)
Off the job Partially off the job An individualized programm			
distance education	18	3	3 (1/2)
full-time education (Off the job)	18	3	3 (1/2)
Total	36	6	6 (1)

6. Planned training results doctors who successfully mastered the Additional professional program of skills development by the name “Research methods of auditory analyzer”:

6.1 characteristics of new labor functions and/or skill levels

According to the order of Ministry of Health and Social Development of Russia by 23.07.2010 N 541H About approval of common qualified directory of managers, specialists and employees posts, the section of “Qualifications of health workers” otorhinolaryngologists should:

- 1) To Provide qualified medical assistance in the specialty "otorhinolaryngology", using methods of diagnosis, treatment, prevention and rehabilitation.
- 2) Determine the tactics of treatment the patient in accordance with established standards using otorhinolaryngological diagnostic methods.
- 3) To diagnose or confirm the diagnosis according to anamnesis morbi, clinical observation, clinical-laboratory and instrumental tests
- 4) To conduct or organize individually the necessary diagnostic, curative, rehabilitative and preventive measures aimed at individual rehabilitation of patients with diseases or pathological condition of auditory analyzer.

6.2. qualification requirements

Higher professional education (higher education) in speciality “otorhinolaryngology” and:

- 1) post-graduate professional education (internship or residency) and certificate of specialist in specialty “otorhinolaryngology” with professional retraining in specialty "otorhinolaryngology";
- 2) post-graduate professional education (internship or residency) and certificate of specialist in specialty “otorhinolaryngology”.
- 3) Characteristics of professional competence of the otorhinolaryngologist as a result of learning the additional professional program subject to improve additional professional program

6.3. Characteristics of professional competencies of the doctor-otorhinolaryngologist, subject to improvement as a result of the development of additional professional training program in the specialty "otorhinolaryngology".

Source level of training of the learners – formed competencies, including:

Universal competences:

- readiness for abstract thought, analysis, synthesis (YK-1);

professional competences:

Diagnostic work:

A survey of the patients with diseases of auditory analyzer in order to establish the diagnosis (ПК-1);

curative activities:

- Provide the treatment to the patient with diseases of auditory analyzer, control of effectiveness and safety (ПК-2);

rehabilitation work.

Realization and control of efficiency of individual rehabilitation programs for patients with diseases of auditory analyzer (ПК-3);

organization, management:

- Organizing the preventive measures and health education to promote healthy lifestyle, decrease rates of diseases of auditory analyzer among adults and children and to monitor the efficiency (ПК-4);
- Provision of reporting documentation, medical and statistical data, organization of activities of subordinate medical personnel

emerging as a consequence of learning of additional professional training program for doctors in the specialty "otorhinolaryngology"

6.4. Characteristics of new professional competencies of the otorhinolaryngologist emerging as a consequence of learning of additional professional training program for doctors in the specialty "otorhinolaryngology":

A student who has successfully completed the program, will have new professional competencies which include:

official duties. (professional competence)	labour activities	necessary skills	necessary knowledge
ПК-1 To conduct or organize necessary diagnostic events in patients with diseases of auditory analyzer	1. Perform primary and repeat examinations of patients with acute and chronic diseases of auditory analyzer. 2. Diagnose in accordance with anamnesis morbi, results of clinical-laboratory and instrumental studies 3. refer patients with acute and chronic diseases of auditory analyzer to Instrumental diagnostics examination in accordance with current	1. Interpret and analyse the results of primary and repeat examinations of patients with acute and chronic diseases of auditory analyzer. 2. Evaluate the level of impairment of auditory analyzer. 3. Prove and plan further consultations of allied professionals, additional instrumental diagnostics examination of	1. Anatomical and functional condition of auditory analyzer normally, In cases of diseases and/or pathological conditions. 2. Aetiology and pathogenesis of diseases of auditory analyzer. modern classifications, clinical semiology of acute and chronic diseases of auditory analyzer 3. methodology for gathering of information from patients with acute and chronic diseases of auditory analyzer and their legal representatives 4. Inspection methods of

	federal clinical guidelines (treatment protocols) medical standards for the provision of medical assistance	patients with acute and chronic diseases of auditory analyzer.	patients with hearing disorders.
<p>ПК-2</p> <p>Determine the strategy of treatment of patients with acute and chronic diseases of auditory analyzer in accordance with current standards using modern techniques of conservative, surgical treatment and prevention of complications in the postoperative period; control their effectiveness and safety</p>	<p>1. Determine the strategy of treatment of patients with acute and chronic diseases of auditory analyzer in accordance with current standards</p> <p>2. To prescribe medication to the patients with diseases of auditory analyzer in accordance with clinical picture</p> <p>3. To develop a plan of treatment of patients with diseases of auditory analyzer and hearing loss</p> <p>4. Evaluation of the results of research, definition of type and level of hearing loss and curative strategy for patients with diseases of auditory analyzer, prevention and treatment of complications.</p>	<p>1. To justify choice of optimal drug treatment and/or surgical method in patients with diseases of auditory analyzer in accordance with the principles of evidence-based medicine</p> <p>2. Identify the indications and contraindications for surgical interventions and electroacoustical hearing correction in patients with diseases of auditory analyzer</p> <p>3. To perform psychoacoustic methods of examination of auditory analyzer, to assist, to perform separate stages of electrophysiological methods of examination of the function of hearing in patients with hearing disorders.</p> <p>4. To prevent or treat postoperative complications</p>	<p>1. Federal clinical guidelines (treatment protocols) medical standards for the provision of medical assistance for patients with hearing disorders.</p> <p>2. Modern Methods of Treating disorders of auditory analyzer in accordance with current regulations and standards of medical assistance, Federal clinical guidelines, indications and contraindications, possible complications and side effects</p> <p>3. Fundamentals of the legislation on health care and legal and regulatory documents that define the activities of medical organizations</p> <p>4. Mechanism of action of major groups of drugs and medical products applied in otorhinolaryngology; indications and contraindications for providing the treatment; possible complications and side effects</p> <p>5. Principles and methods of surgical treatment of disorders of auditory analyzer</p>

7. Training plan of additional professional program of skills development of continuing education in otorhinolaryngology

Objective: improvement and acquisition of new competencies, professional development within existing skills, receiving systematic theoretical knowledge, skills and necessary skills to identify, diagnose, treatment and prevention of disorders of auditory analyzer

Categories of students: doctors with higher professional education for one of specialties “general medicine”, “pediatrics” and post-graduate professional education (internship and/or residency) and certificate of specialist in specialty “otorhinolaryngology”.

Labour intensity of study: 36 hours, 36 credits.

Regime: 6 hours per day

Form of education: blended and distance-learning models DOT

7.1. Training plan

code	Titles of disciplines and topics	Total hours	DOT (webinar, web forum, educational portal)	full-time education		OS K	independent study	form of control
				L	S, PC			
1.	Module 1: Methods of examinations of auditory analyzer	16	5	2	1	6	2	Interim test control
1.1	Topic1. Psychoacoustic methods of diagnostic of diseases of auditory analyzer		2	1	1	3	1	
1.2.	Topic2. Electrophysiological methods of diagnosis of diseases of auditory analyzer		2	1			1	
1.3	Topic3. Hearing loss and deafness Differential diagnosis of conductive and neurosensory hearing loss.		1			3		
2.	Module2: Diseases of auditory analyzer	12	5	2	2		3	Interim test control
2.1	Topic 1. acute diseases of auditory analyzer.		2	1	1		1	
2.2	Topic 2. chronic diseases of auditory analyzer.		2	1			1	
2.3	Topic 3. nonsuppurative disorder of the inner ear		1		1		1	
3	Module3. Surgical methods of treatment of the pathology of the auditory analyzer indications and contraindications	4	2	1			1	Interim test control
4	Module4. Electroacoustical hearing correction	2		1	1			Interim test control
	End-of-course assessments.	2			2			Exam
	Total	36	12	6	6	6	6	

8. Program content and training curriculum

9.№	title of the topic	essential content
1	Module1. Methods of examinations of auditory analyzer	
1.1	Topic 1. Psychoacoustic methods of examination of auditory analyzer	Methodology for the acumetry, tuning fork tests, collection of hearing passport, tonal threshold, ultrathreshold and speech audiometry. Impedancemetry as a method of assessing the state of the middle ear before testing.
1.2	Topic 2. Electrophysiological methods of examination of auditory analyzer	Registration of various classes of otoacoustic emission and auditory evoked potential potentials.
1.3	Topic 3. Hearing loss and deafness Differential diagnosis of conductive and neurosensory hearing loss.	Diagnostic of Hearing loss and deafness, conductive, neurosensory and mixed hearing loss, differential diagnosis
2.	Module2: Diseases of auditory analyzer	
2.1	Topic 1. Acute diseases of auditory analyzer.	Etiology, diagnostics and treatment methods of acute diseases of auditory analyzer.
2.2	Topic 2. Chronic diseases of auditory analyzer.	Etiology, diagnostics and treatment methods of chronic diseases of auditory analyzer.
2.3	Topic 3. Nonsuppurative disorder of the inner ear	Sensory-neural hearing loss. Meniere's disease. Otosclerosis. Methods of treatment according to standards and clinical recommendations.
3	Module3. Surgical methods of treatment of the pathology of the auditory analyzer indications and contraindications	
4	Module4. Electroacoustical hearing correction	

Traineeship (6 hours) is realized on the basis of the Department of Otorhinolaryngology with the course of ICPE (specialized department, specialized otorhinolaryngological and surdological reception of patients in Republican G.G. Kuvatov Clinical Hospital's polyclinic. Objective of Traineeship is improvement of competence in the methods of examination of disorders of the auditory analyzer, assessment of the condition of the external, middle and inner ear and the pathways, differential diagnosis of neurosensory and conductive hearing loss based on diagnostic study data. During the course of the internship, the otorhinolaryngologist will receive new knowledge on how to diagnose pathology of the hearing analyzer and the differential diagnosis of diseases based on psychoacoustic and electrophysiological methods of hearing analyzer research and also improves the competence for diagnosis and treatment of diseases of the hearing analyzer with the use of modern technology

10. Methodological features of the realization of distance learning

10.1 Legal bases of DOT

-Federal Act of 28 december 2012 № 273-FA "On Education in the Russian Federation"

-Order of Ministry of Education and Science of 6 May 2005 № 137 "About the use of remote educational technologies"

- GOST P 53620-2009 "Information and communication technologies in education. Electronic educational resources. General regulations"

- Order of Ministry of Education and Science of 01 July 2013 № 499 "On approval Of The Order of organization and implementation of educational activity on additional professional programs"

The objective of distance learning is to provide to the students an opportunity to perform initial control, preparation of the project, part of the additional professional program directly at the place of residence. The main remote educational technologies on the training cycle PK « Methods of examinations of auditory analyzer" are internet technology with the method of synchronous and asynchronous distance learning. For this purpose, a case is formed on the educational portal of FSBEI of HE BSMU in the ICPE section inside of which located learning module folders: baseline knowledge monitoring questions, self-monitoring questions for each section, internet links, normative documents, project assignments for final certification work. The method of synchronous distance learning provides on-line communication, which is realized when the students are technically able in the form of a webinar or a web forum. Each student receives their own original password, which gives access to the training materials of the portal.

9.2. Implementation of the program in the form of internship

Additional professional program of skills development of continuing education on specialty "otorhinolaryngology" is realized partially in the form of an internship.

The internship is carried out in order to study best practices, as well as to consolidate the theoretical knowledge gained during the training program skills for their effective use in the performance of their duties and gaining of practical skills and skills for their effective use in the performance of their duties as a doctor. The internship is individual or group-based.

The internship (6 hours) is carried out at clinical bases: Republican G.G. Kuvatov Clinical Hospital

The purpose of the internship is to improve the labor functions/professional competencies (ПК) ПК-1, ПК-2.

Objective of traineeship:

Practical part of the study of discipline:

improve the skills in diagnosing auditory analyzer diseases

improve the skills in helping patients with auditory analyzer diseases

Improve skills and knowledge in the complex treatment of auditory analyzer diseases.

Improving the skills and knowledge available in the skilled management of patients with hearing loss and deafness. Improvement of methods of diagnostics of ear diseases. Improvement of practical skills on the conservative and surgical treatment of acute and chronic diseases of the auditory analyzer

During the internship, the otorhinolaryngologist will receive labor functions:

Independantly to conduct or organize necessary diagnostic events in patients with diseases of the auditory analyzer.

To define tactics of conducting the patient with acute and chronic diseases of the auditory analyzer in accordance with established standards using modern methods of conservative, surgical treatment and prevention of complications in the postoperative period; to control their effectiveness and safety

Improves labor actions on:

Examination and examination of patients with ear diseases

Diagnosis based on anamnesis morbi, clinic-laboratory and instrumental studies

To determine the tactics of conducting the patient with ear diseases in accordance with established standards

Prescription of medications to patients with acute and chronic diseases of the ear and mastoid, according to the clinical picture.

Determination of indications for surgical intervention and electro-acoustic hearing correction in patients with chronic ear diseases, prevention and treatment of complications.

Curator: Tsyglin A.A.

Improves labor actions on:

Examination and examination of patients with ear diseases

Diagnosis based on anamnesis morbi, clinical laboratory and instrumental studies

To determine the tactics of conducting the patient with ear diseases in accordance with established standards

Prescription of medications to patients with acute and chronic diseases of the ear and mastoid, according to the clinical picture.

Determination of indications for surgical intervention and electro-acoustic hearing correction in patients with chronic ear diseases, prevention and treatment of complications.

11. The types of certification

10.1. Forms of interim certification

Forms of interim certification:

1. Testing (with response levels)
2. Practical skills
3. Do situational sums (with answers).

Examples of test tasks.

1. Otosclerosis is characterized by the following otoskopal picture
 - a. Eardrum hyperemia
 - b. Pars flaccida perforation of eardrum
 - c. cicatricial changes of the eardrum with areas of tympanosclerosis
 - d. normal otoscopic picture

Right answer: 4

2. Positive Rinne test is characterized by
 - 1) conductive hearing loss
 - 2) sensorineural hearing loss
 - 3) mixed hearing loss
 - 4) sensorineural hearing loss and normal hearing

Right answer: 4

3. Glycerol test in Meniere's disease
 - 1) Positive (hearing improves)
 - 2) Negative (hearing is getting worse)
 - 3) Hearing does not change
 - 4) Carhart notch appears

Right answer: 1

4. Indications for Cochlear Implants

- 1) conductive hearing loss fourth-degree
- 2) bilateral sensorineural hearing loss and deafness
- 3) unilateral deafness with sensorineural hearing loss 2nd-3th-degree on the opposite side
- 4) mixed hearing loss of any degree

Right answer: 2

5. The objective electrophysiological method of hearing level examination is

- 1) registration of stationary auditory potentials
- 2) Whisper and spoken word tests
- 3) Impedanceometry
- 4) tubusometry

Right answer: 1

Examples of tasks that reveal practical training of a doctor

1. List the examination methods of the hearing analyzer
2. Differential diagnosis of neurosensory, conductive and mixed hearing loss.
3. Acute neurosensory hearing loss. Etiology, pathogenesis, diagnostics, treatment.
4. Indications for surgical treatment of chronic mean otitis.
5. Types of hearing aids. Indications, contraindications to hearing-prosthetics
6. List the diseases that lead to concutive hearing loss.

Examples of situational tasks

Qualification task N. 1

54 years old patient appealed to the ENT doctor with complaints of low-frequency noise in the ears and hearing loss. She fell ill 2 years ago, the cause of the disease is unknown.

When examining the ENT organs pathology hasn't been detected, Otoscopy - drum membrane is pale, sulfur is absent, according to the hearing passport mixed hearing loss 2 degrees to the right, 3 degrees to the left, the Kahart notch is on the audiogram, positive symptom of the Willis.

Questions:

1. Put a preliminary diagnosis.
2. Assign a supplementary survey
3. What treatment is required if the diagnosis is confirmed?

Answers to qualification tasks

Qualification task N. 1

1. Diagnosis: Otosclerosis, mixed form. Bilateral mixed hearing loss 2-3 degrees
2. Surgery is possible. Stapedoplasty

10.2. Requirements for the final certification

The final certification of additional professional program of skills development of continuing education in otorhinolaryngology is carried out in the form of a full-time examination and should identify the theoretical and practical training of a doctor-otorhinolaryngologist

The trainee is allowed to complete the final certification after studying the training modules in the amount provided by the curriculum of additional professional program of skills development of continuing education in otorhinolaryngology

Students who have mastered the additional professional program of skills development of continuing education in otorhinolaryngology and successfully passed the final certification receive the document of the the prescribed form- a certificate of professional development.

The document issued after completion of the training - Certificate of advanced training.

Type of the final certification

The final certification on the training cycle of the additional professional program for the improvement of the qualification of doctors "otorhinolaryngology" in the specialty "otorhinolaryngology" takes the form of exam

1st stage – solving situational tasks

2nd stage - valuation of practical skills

3rd stage - interview

10.3. Type of the final certification

The final certification on the training cycle of the additional professional program for the improvement of the qualification of doctors "otorhinolaryngology" in the specialty "otorhinolaryngology" takes the form of exam

1st stage - solving situational tasks

2nd stage - valuation of practical skills

3rd stage - interview

Examples of situational tasks for the final certification

Qualification task N. 1

The patient M. was treated for one week with the therapist for bronchopneumonia, 5 days after the use of "amikacin", felt the laying of ears and noise in the head and ears, more pronounced on the right. She saw the neurologist about the noise and was prescribed a course of drug therapy of desaggregants and vitamins of the B6 group

Questions:

1. What disease could be assumed?
2. What etiology could be assumed?
3. What survey methods are required?

4. What are the principles of treatment of this disease according to the standards and clinical recommendations?

Answers to qualification tasks

Qualification task N. 1

1. Acute sensorineural hearing loss

2. The ototoxic effect of aminoglycoside antibiotic "amikacin"

3. anamnesis morbi. Otoscopy. Akumetry (examination of the hearing of a whisper and spoken-word speech, conducting chamber-tone tests of Weber and Rinne). Audio Metric: Tone threshold audiometry with air and bone audio evaluation in the standard frequency range. Threshold tests (SISI, Lusher). Impedance audiometry (tympanometry and acoustic reflexometry). Speech audiometry in silence (speech intelligibility estimation at comfortable volume level) and against background of interference. Magnetic resonance imaging, including contrast, areas of internal auditory passages, bridge-cerebellar corners, posterior fossa - with asymmetry of hearing. All-clinical examinations (consultation of the therapist, neurologist, clinical and biochemical blood tests) - with sudden and acute sensorineural hearing loss. Electrocochleography - if endolymphatic hydrops is suspected. Registration of the caused acoustic emission - to solve the questions of examination of hearing loss and deafness.

4. Emergency hospitalization in the department of otorhinolaryngology (or neurology).

Protective hearing regime. Intravenous infusion therapy with the following drugs (prescribed individually, in accordance to all concomitant diseases in the patient, contraindications to the administration of drugs and possible side effects):

Glucocorticoids according to the decreasing scheme (for example, Dexamethasone per 100 ml of NaCl 0,9% solution in the 1st and 2nd days - 24 mg, 3rd and 4th days - 16 mg, 5th day - 8 mg, 6th day - 4 mg, 7th day the drug is not injected, 8th day - 4 mg).

Drugs that improve microcirculation and rheological properties of blood (for example, Pentoxifyllin 300 mg, or Vinpocetin 50 mg, for 500 ml of NaCl 0,9% solution, slowly, for 5-7 hours - 8-10 days).

Antihypoxants and antioxidants (for example, Ethylmethylhydroxypyridine succinate 5% - 4 ml per 16 ml of NaCl 0,9% solution - 8-10 days).

At the end of the infusion therapy - the transition to tablet forms of drugs of the following groups: A. Vasoactive preparations B. Nootropic remedies C. Antihypoxants, antioxidants

Examples of tasks that reveal practical training of a doctor

1. Collect hearing Passport

2. Name the types and degrees of hearing loss.

3. Perform chamber tones.

4. Perform a tone threshold audiometry.

5. Perform Impedance audiometry.

6. Formulate indications and contraindications for cochlear implantation.

Indicative themes of the control questions of the final certification

1. Methods of examination of the auditory analyzer in adults and children.
2. Nonsuppurative diseases of the inner ear (etiopathogenesis, clinical features, diagnostics, treatment).
3. Chronic Purulent Medial Otitis (etiology, clinical features, treatment).
4. Cochlear implantation (indications, contraindications, rehabilitation of patients).

11. Organizational and pedagogical conditions for the program implementation

11.1. Legislative and regulatory documents according to the profile of the specialty:

1. Federal Law of the Russian Federation by 29 december 2012 №273-FL "On Education in the Russian Federation"
2. Federal Law of the Russian Federation by 21 november 2011 №323-FL "On the basis of the protection of citizens' health in Russian Federation"
3. Order of Ministry of Education and Science of Russian Federation by 1 july 2013 №499 "On approval Of The Order of organization and implementation of educational activity on additional professional programs"
4. Order of Ministry of Health of the Russian Federation by 3 august 2012 №66H "On approval Of The Procedure and terms of improvement by medical workers and pharmaceutical workers of professional knowledge and skills by training on additional professional educational programs in educational and scientific organizations"
5. Order of Ministry of Health of the Russian Federation by 8 october 2015 №707H "On approval Of Qualification requirements for medical and pharmaceutical workers with higher education in the field of training "Healthcare and medical sciences""
6. Order of Ministry of Health and Social Development of Russia by 23.04.2009 N 210H (ed. 09.02.2011) "On the nomenclature of specialties of specialists with higher and post-graduate medical and pharmaceutical education in the field of health care of the Russian Federation"
7. Order of Ministry of Education and Science of Russian Federation by 26 august 2014г. № 1101 "On approval of the federal state educational standard of higher education on specialty 31.08.58 Otorinolaryngology (level of training of the personnel of the highest qualification)"
8. Order of Ministry of Health and Social Development of Russia by 23 july 2010 г. № 541H "On approval of a single qualification manual for the positions of managers, specialists and employees, the section "Qualification characteristics of positions of employees in the field of health care""
9. Order of the Government of the Russian Federation by 15.04.2013 г. № 614-p "On a set of measures to provide the health care system of the Russian Federation with medical personnel until 2018"
10. Order of Ministry of Education and Science of Russian Federation by 25.07.2012г. № 941 "On state accreditation of educational institutions and organizations"
11. Federal State Educational Standards Of Higher Education (Level of training of the staff of the highest qualification – Program of residency specialty 31.08.58 – Otorinolaryngology) Approved by the Ministry of Education and Science of the Russian Federation 1101 of August 26, 2014.
12. Order of Ministry of Health of the Russian Federation by 12.11. 2012 N 905H "On approval Of The Order of rendering medical assistance to the population according to the profile "otorhinolaryngology"

11.2. Training, methodological and information support

11.2.1. producing visual aids

№	Name	quantity
1.	multimedia presentations	
1.1.	methods of examination of auditory analyzer Autor – Associate professor Savelyeva E.E.	1
1.2.	Nonsuppurative diseases of the ear	1

	Autor – Associate professor Savelyeva E.E.	
1.3.	Acute diseases of the middle ear Autor – Professor Arefyeva N.A	1
1.4.	Chronic diseases of the middle ear . Autor – Associate professor Tsyglin A.A.	1
1.5.	psychoacoustic methods of examination of auditory analyzer Autor – Associate professor Savelyeva E.E.	1
1.6.	Electrophysiological methods of examination of the function of Autor – Associate professor Savelyeva E.E.	1
1.7	Modern approaches to the treatment of ear diseases. Autor – Professor Arefyeva N.A	1
1.8	Justification for the treatment algorithm for Meniere's disease. Autor – Professor Arefyeva N.A	1

11.2.2. List of educational, educational and methodical materials published by the personnel of the department (2010-2016)

№	Name of methodical instructions, manuals and other educational and methodical materials	the drafters , publishing house , year of publication	availability	
			Quantity at the Department	electronic edition
	adaptation mechanisms of tissue immunity	Aznabaeva L.F., Arefyeva N.A. Sharipova E.R. / methodological recommendations / Ufa, 2010. – 32 p.	10	
	Methods of examinations of auditory analyzer	Savelyeva E.E., Arefyeva N.A., Tsyglin A.A. Sharipova R. A. methodological recommendations / Ufa, , 2012. – 47 c.	5	
	Development, structure and function of the <i>olfactory</i> , hearing and <i>equilibrium</i> organ (introduction to pathology)	Kayumov F.A., Tsyglin A.A Savelyeva E.E., training manual / Ufa, , 2013. – 87 c.	5	
	Physiotherapy in diseases of ENT organs: A textbook	L. T. Gilmutdinova , Tsyglin A.A , D. R. Iseyeva . - Ufa : 2011. - 42 c.	5	
8	Professional diseases of ENT organs / a textbook for doctors-otorhinolaryngologists, etc.	Volgareva A.D., Bakirov A.B . Arefyeva N.A., Savelyeva E.E., - Ufa : Dialog Publishing House - 70 p.	5	

14.3. Software and Internet resources

11.3.1. Interactive learning tools

№	Name of technical training aids	Compilers, year of publication	availability	
			availability at the Department	electronic edition
	1	2	3	4
1.	videotape of reconstruction of the middle ear	Prof.Ugo Fisch C.3. – 2012г.	1	1
2	videotape of Diagnosis of nose diseases and paranasal sinuses	Kursk, Piskunov S.Z. – 2002г.	1	
3	videotape of vestibular vertigo	Solvay pharma, Guta clinic	2	
4	Pocket Atlas of Sectional Anatomy, Vol. 1: Head and Neck, Computed Tomography and Magnetic Resonance Imaging	2014	1	
5	videotape of eardrum bypass surgery	РМАПО, 2006 г.	1	
6	I hear the World	СПТР НИИ ЛОР, 2012г.	2	
7	Surgery of the middle ear	Prof St..Dazert . Prof.And. Neumann	1	

11.3.2. Internet resources

Library of BSMU	http://bgmy.ru/biblioteka_bgmu/
Full-text database	
Обследование оториноларингологического больного [Электронный ресурс] / В. Т. Пальчун, Л. А. Лучихин, М. М. Магомедов, Е. И. Зеликович - М.:Литтерра, 2014. - 336 с. –	access mode: http://www.studmedlib.ru/ru/book/ISBN9785423501051.html
Рациональная фармакотерапия заболеваний уха, горла и носа : руководство / под ред. А.С. Лопатина.- М., 2011. - 816 с.	access mode: http://www.studmedlib.ru/ru/book/ISBN9785904090326.html
Electronic learning library	FSBEI of HE BSMU of The Federal Ministry of Health of Russian Federation , certificate №2009620253 от 08.05.2009 http://library.bashgmu.ru
electronic library eLIBRARY. Collection of Russian scientific journals on medicine and health care	ООО РУНЭБ, Договор №653 от 30.11.2015 http:// elibrary.ru
web site ФГБУ «СПБ НИИ ЛОР»	www.lornii.ru
Reviews of world medical journals in Russian	http://www.medmir.com
A collection of electronic journals on the platform OvidSP «LWW Proprietary Collection Emerging Market – w/o Perpetual Access»	ООО «Миверком», Договор № 680 от 07.12.2015 http://ovidsp.ovid.com/
Database of scientific medical 3D illustrations	ООО «Миверком», Договор № 680 от

Visible Body Premium Package	07.12.2015 http://ovidsp.ovid.com/
Collection of electronic books on medicine and health care «LWW Medical Book Collection 2011»	ЗАО КОНЭК, Государственный контракт № 499 от 19.09.2011 http://ovidsp.ovid.com/
US National Library of Medicine National Institutes of Health	http://www.ncbi.nlm.nih.gov/pubmed
periodical publications	
Russian rhinology	http://www.mediasphera.ru
Journal of otorhinolaryngology	http://www.mediasphera.ru
Russian otorhinolaryngology	http://entru.org
Science Journals	http://www.sciencemag.org
The New England Journal of Medicine	http://www.nejm.org
Rhinology	www.rhinologyjournal.com

11. Facilities to ensure the organization of all types of disciplinary training

12.1. provision of facilities

	Name of technical training aids	Quantity on the course
	1	2
1	Personal computer with connection to the Internet with access to information of BSMU	2
2	Computer	2
3	Laptop	2
4	Multimedia projector	2
5	projection screen.	1
6	X-ray view box	1
7	Sets of tools for examination of ENT organs in patients, reflectors.	
8	Workplace of otorhinolaryngologist	10
9	Topic videos	
1	X-ray, CT, and MRI image sets by subject, laboratory results.	
1	Furniture - tables for 16 people	8
1	Thematic set of illustrations (tables)	
1	Models, phantoms for anterior and posterior tamponade with nosebleeds, hook for removing foreign bodies from the nose	
1	Library of the department of 380 books on otorhinolaryngology	

12.2 Classrooms

№ п/п	List of rooms	quantity	Area in m2
1.	Lecture room	1	26
2.	Lecture room	1	26

The total area of teaching rooms is 52 sq. m Per student (with a maximum simultaneous load of 15 people) is 3.5 sq.m.

12.3 clinical rooms

№ п/п	List of rooms	quantity	Area in m2
1.	doctors' lounge	1	26
3	operating room	2	80
4	procedure room	1	26
5	Dressing room	2	52
6	Audiological examination room	1	20
7	Otorhinolaryngology department with 60 beds	15 beds	390

The total area for teaching, including the premises of the clinical base is 646 sq.m. For one student (with a maximum simultaneous load of 15 people) is 43 sq.m

12. Staffing of educational process

№ п/п	Name of modules (disciplines, modules, sections, topics)	Name	Field of study	Present post	Place of work
1.	Module1. Methods of examinations of auditory analyzer	Savelyeva E.E.	Candidate of Medical Sciences Associate professor	Head of the Department of Otorhinolaryngology with the course of ICPE Associate professor	FSBEI of HE BSMU of The Federal Ministry of Health of Russian Federation
2.	Module2: Diseases of auditory analyzer	Arefyeva N.A	Doctor of Medical Sciences Professor	Professor at the Otorhinolaryngology department with the course of ICPE	FSBEI of HE BSMU of The Federal Ministry of Health of Russian

					Federation
3.	Module3. Surgical methods of treatment of the pathology of the auditory analyzer indications and contraindications	Tsyglin A.A.	Candidate of Medical Sciences Associate professor	Vice-Rector for Academic Affairs, Head of Otorhinolaryngology training course of the Department of Otorhinolaryngology with the course of ICPE	FSBEI of HE BSMU of The Federal Ministry of Health of Russian Federation
4.	Module4. Electroacoustical hearing correction	Savelyeva E.E.	Candidate of Medical Sciences Associate professor	Head of the Department of Otorhinolaryngology with the course of ICPE Associate professor	FSBEI of HE BSMU of The Federal Ministry of Health of Russian Federation
5.	Workplace internship.	Savelyeva E.E.	Candidate of Medical Sciences Associate professor	Head of the Department of Otorhinolaryngology with the course of ICPE Associate professor	FSBEI of HE BSMU of The Federal Ministry of Health of Russian Federation

№	Marked Fields	Fields to fill
	Program name	Methods of examinations of auditory analyzer
	The volume of the program (including class hours)	36 hours, including 18 class-hours
	learning options.	blended model with the use of remote educational technologies
	Type of issued document after completion of training	persons who have successfully mastered the relevant Additional professional program of skills development of continuing education on specialty "otorhinology" and have passed the final certification are issued a certificate of advanced training.
	Requirements to the level and profile of the previous professional education of students	certificate of specialist in specialty "otorhinology"
	Categories of students	<p>Otorhinologist; otorhinologist the head of the structural unit (department, laboratory, cabinet, detachment and other) of the medical organization, doctor of the emergency room (in a specialized medical organization or in the presence of the relevant specialized structural unit in the medical organization)¹</p> <p>¹ Order of Ministry of Health of the Russian Federation by 8 october 2015 №707H "On approval Of Qualification requirements for medical and pharmaceutical workers with higher education in the field of training "Healthcare and medical sciences""</p>
	structural unit implementing the Programme	FSBEI of HE BSMU of The Federal Ministry of Health of Russian Federation, Department of Otorhinology with the course of ICPE
	contact	Ufa, Lenina 3, Department of Otorhinology with the course of ICPE
	Estimated starting period	According to the ICPE curriculum
	The main teaching staff	<p>Arefyeva N.A. Doctor of Medical Sciences Professor Professor at the Otorhinology department with the course of ICPE FSBEI of HE BSMU of The Federal Ministry of Health of Russian Federation</p> <p>Savelyeva E.E. Candidate of Medical Sciences Associate professor Head of the Department of Otorhinology with the course of ICPE Associate professor FSBEI of HE BSMU of The Federal Ministry of Health of Russian Federation</p> <p>Tsyglin A.A. Candidate of Medical Sciences Associate professor Vice-Rector for Academic Affairs, Head of Otorhinology training course of the Department of Otorhinology with the course of ICPE FSBEI of HE BSMU of The Federal Ministry of Health of Russian Federation</p>
	summary	The program aims to improve existing and new competencies required for professional activities and to improve the professional level within the existing qualification of the otorhinologist. The planned results reflect continuity with professional standards, qualification characteristics in the corresponding specialty of the doctor-otorhinologist (qualification requirements for professional knowledge and skills necessary for the performance of official duties, which are established in accordance with federal laws and other legal acts of the Russian Federation on public

		service)
	the purpose and objectives	Acquisition and improvement of professional knowledge and practical skills on ear diseases necessary for professional activity and professional development within the existing qualification of the otorhinolaryngologist.
	Modules (topics) of the program curriculum	Module1. Methods of examinations of auditory analyzer Module2: Diseases of auditory analyzer Module3. Surgical methods of treatment of the pathology of the auditory analyzer indications and contraindications Module4. Electroacoustical hearing correction
	The uniqueness of the program, its distinctive features, advantages	Leading specialists in the field of otorhinolaryngology of the Republic of Bashkortostan participate in the implementation of the program. Remote learning technologies are used. The latest achievements of medicine and modern approaches in diagnosis and treatment of ear diseases are discussed.
14.	additional information	http://su0.ru/D882