FEDERAL BUDGETARY EDUCATIONAL INSTITUTION OF HIGHER EDUCATION "BASHKIR STATE MEDICAL UNIVERSITY" MINISTRY OF HEALTH OF THE RUSSIAN FEDERATION

INSTITUTE OF ADDITIONAL VOCATIONAL EDUCATION

AFFIRMED V.N. Pavlov Rector ot ormula 2019

### ADDITIONAL PROFESSIONAL QUALIFICATION PROGRAM CONTINUOUS EDUCATION specialty "Therapy"

"THYROID GLAND DISEASES"

(36 ACADEMIC HOURS)

UFA – 2019

#### COMPOSITION OF THE WORKING GROUP

An additional professional training program for doctors of 36 academic hours in the specialty "Therapy" was developed by the staff of the Department of Therapy and General Medical Practice with a course of Geriatrics.

No	Full name	Academic degree, academic rank	Position held	Place of work
	Farkhutdinova Leyla	Doctor of Medical	Professor of the	Federal Budgetary
	Muratovna	Sciences, Professor	Department of Therapy and General Medical	Educational Institution of Higher Education
			Practice with a course of	"Bashkir State Medical
			Geriatrics	University" of
				Ministry of Health of
				the Russian Federation

#### 1. Explanatory Note

#### *Relevance and prerequisites for the creation of the program*

The relevance of the additional professional continuing education program "THYROID GLAND DISEASES" in the specialty "THERAPY" is due to the significant prevalence of this pathology, the development of severe complications with untimely diagnosis and the lack of adequate treatment. In this regard, it is necessary for the general practitioner to improve the competencies of medical activities, adapted to modern economic and social conditions, taking into account international requirements and standards.

## 2. The purpose and objectives of the additional professional training program for doctors "THYROID GLAND DISEASES"

The purpose of the additional professional training program for doctors "THYROID GLAND DISEASES" in the specialty "THERAPY" is to improve competencies, obtain systematic theoretical knowledge, skills and necessary professional skills for timely detection, diagnosis, treatment and prevention of thyroid pathology by general practitioners.

#### The tasks of the theoretical part of the training program:

1. improving knowledge of the diagnosis, treatment and prevention of thyroid diseases;

2. improving knowledge of the features of the clinic and the treatment of complications developing against the background of thyroid diseases;

3. improving knowledge of the organization of the program of therapeutic measures for diseases of the thyroid gland and associated pathology.

#### The tasks of the practical part of the training program:

1. improving the skills of the diagnosis of thyroid disease;

2. improving the skills for the adequate treatment of thyroid diseases and complications developing against their background;

3. improving the skills in the prevention of thyroid pathology.

**3.** Categories of participants: doctors with higher professional education in the specialty "General Medicine" and postgraduate and / or additional professional education and a certificate of a specialist in the specialty "Therapy".

Additional specialties: endocrinology, family practitioner, geriatrics, cardiology.

4. Program duration: 36 academic hours, including 36 academic units.

#### 5. Form of study, mode and duration of classes

Training sche	edule Classroom hours	Days a week	The total duration of the program
Full-time	18	3	0.5 weeks
Remotely	18	3	0.5 weeks
TOTAL:	36	6	l week

## 6. Planned results of training for doctors who have successfully mastered the additional professional program

#### 6.1. Description of new labor functions and (or) skill levels

The participant must have the following professional competencies (hereinafter – PC):

- On the basis of new scientific data, modern clinical recommendations and evidence-based medicine, the provision of medical care to patients with thyroid pathology and the organization of the treatment and diagnostic process (PC-1);

- Based on new scientific data, modern clinical recommendations and evidence-based medicine, the appointment of treatment for patients with thyroid pathology and associated diseases, as well as monitoring its effectiveness and safety (PC-2);

- Organization of independent study of scientific literature on thyroid pathology, participation in research activities with the aim of improving the quality of the provision of therapeutic and diagnostic care to patients (PC-3).

#### 6.2. Qualification requirements

Higher professional education (higher education) in the specialty "medical business" and postgraduate professional education (internship or residency) and a specialist certificate in the specialty "THERAPY".

# 6.3. Description of professional competencies of a general practitioner to be improved as a result of the development of an additional professional continuing education program in the specialty "THERAPY"

The participant must have the following professional competencies (hereinafter - PC):

- Based on new scientific data, modern clinical recommendations and evidence-based medicine, the provision of medical care to patients with thyroid diseases and associated pathology (PC-1).

- Based on new scientific data, modern clinical recommendations and evidence-based medicine, the appointment of treatment for patients with thyroid diseases and associated pathologies, monitoring its effectiveness and safety (PC-2).

- Organization of independent study of scientific literature on thyroid diseases and associated pathology, participation in research activities with the aim of improving the quality of the provision of therapeutic and diagnostic care to patients (PC-3).

# 6.4. Description of the professional competencies of the general practitioner, which are formed as a result of the development of an additional professional program for advanced training of doctors in the specialty "THERAPY"

Labor function (professional competence)	Activities	Essential skills	Necessary knowledge
On the basis of new scientific	Abilities to identify	Abilities to detect	Knowledge of the causes and

data, modern clinical recommendations and evidence-based medicine, the provision of medical care to patients with thyroid diseases and associated pathology and the organization of the treatment and diagnostic process for patients (PC-1)	thyroid diseases and associated pathology, as well as providing medical care and organizing a medical diagnostic process	thyroid diseases and their associated pathology	features of the course of diseases of the thyroid and associated pathology, modern methods of laboratory and instrumental diagnostics, risk groups for the development of this pathology
Based on new scientific data, modern clinical recommendations and evidence-based medicine, the appointment of treatment for patients with thyroid disease and associated pathology and monitoring its effectiveness and safety (PK-C)	Skills in prescribing adequate therapy for patients with thyroid diseases and associated pathology, and in controlling treatment	Abilities to prescribe adequate therapy to patients with thyroid diseases and associated pathology, taking into account the peculiarities of the pharmacokinetics of drugs and to monitor the effectiveness of treatment	Knowledge of the procedure for providing medical care to patients with thyroid and associated pathology diseases, the clinical pharmacology of the main drugs used in therapeutic practice, modern clinical guidelines for the treatment of thyroid pathology and diseases developing against their background
Organization of independent study of scientific literature on thyroid diseases, participation in research activities with the aim of improving the quality of the provision of medical and diagnostic care to patients (PC- 3)	Skills to independently study the scientific literature on thyroid diseases, to analyze the quality of medical care for patients	Abilities to analyze literature data on thyroid diseases to improve the quality of the provision of therapeutic and diagnostic care to patients	Knowledge of modern scientific achievements in the diagnosis and treatment of thyroid diseases, algorithms for providing quality medical care to patients

#### 7. Training plan

## additional professional training program for doctors "DISEASES OF THE THYROID GLAND" in the specialty "THERAPY"

**Purpose:** obtaining knowledge and skills necessary for professional activities within the framework of existing qualifications.

The category of participants: doctors with higher professional education in the specialty of "medical care" and postgraduate and / or additional professional education and a certificate of a specialist in the specialty "THERAPY". Additional specialties: endocrinology, family practitioner, geriatrics, cardiology.

The complexity of training: 36 academic hours / 36 academic units

Classes: 36 hours, 6 - per day, 18 - classroom. 18 - remotely

Form of study: full-time and part-time with distance learning technologies and internship

Code	Name of the sections of	Total	Remo	Full-tin	ne	Internship	Form of control
	disciplines and themes	hours	tely	lectur e	semin ar, practi ce	P	
1.	Section 1. Thyroid dysfunction	24	14	6		4	Interview, test control
1.1	Theme 1. Diffuse toxic goiter, pathogenesis, clinic, diagnosis, treatment	12	6	2		2	

1.2	Theme 2. Hypofunction of	8	4	2		2	
	the thyroid gland, etiology,						
	pathogenesis, clinic,						
	diagnosis, treatment						
1.3	Theme 3. Central	2	2	1			
	hypothyroidism, features						
	of diagnosis, clinic and						
	treatment						
1.4	Theme 4. Amiodarone-	2	2	1			
	induced thyroidopathiesии						
2.	Section 2. Focal thyroid	6	4		2		Interview, test
	formations						control
2.1	Theme 1. Nodular goiter	4	2		2		
2.2	Theme 2. Highly	2	2				
	differentiated thyroid						
	cancer						
	Final examination	6			4		Graduation
							certification work
					2		Exam
	TOTAL	36	18	6	8	4	

#### 8. The thematic plan and content of the program

Nº	Topic title	Main content
1	Section 1. Thyroid dysfunction	
1.1	Theme 1. Diffuse toxic goiter, pathogenesis, clinic, diagnosis, treatment	Relevance. Pathogenesis. Clinical manifestations, age-related features. Laboratory and instrumental diagnostics. Differential diagnosis. Complications of thyrotoxicosis. Thyrostatic therapy. Indications for surgical treatment. Radioiodine therapy.
1.2	Theme 2. Hypofunction of the thyroid gland, etiology, pathogenesis, clinic, diagnosis, treatment	Relevance. Pathogenesis. Clinical manifestations. Laboratory and instrumental diagnostics. Replacement therapy.
1.3	Theme 3. Central hypothyroidism, features of diagnosis, clinic and treatment	Etiology. Features of the clinic, diagnosis and replacement therapy.
1.4	Theme 4. Amiodarone-induced thyroidopathie	Relevance. The mechanism of development. Amiodarone-induced hypothyroidism. Amiodarone-induced thyrotoxicosis of the 1st and 2nd types. Diagnosis, differential diagnosis, treatment features.
2	Section 2. Focal thyroid formations	
2.1	Theme I. Nodular goiter	Classification. Laboratory and instrumental diagnostics. Fine needle aspiration biopsy of nodes. Functional autonomy of the thyroid gland nodes. Oncological risk of thyroid nodes. Indications for surgical treatment.
2.2	Theme 2. Highly differentiated thyroid cancer	Relevance. Classification. Diagnostics. Categories of cytological findings from fine-needle aspiration biopsy. Therapeutic tactics.

#### Methodological features of the implementation of distance learning 9.

9.1. Legal basis for the use of distance learning technologiesFederal Law of December 29, 2012 No. 273-FL On Education in the Russian Federation;

- Order of the Ministry of Education and Science of the Russian Federation of May 6, 2005 No. 137 "On the Use of Distance Learning Technologies";

- GOST R 53620-2009 "Information and communication technologies in education. Electronic educational resources. General Provisions;

- Order of the Ministry of Education and Science dated July 01, 2013 No. 499 "On approval of the Procedure for the organization and implementation of educational activities for additional professional programs".

The goal of distance learning is to provide listeners with the opportunity to conduct initial control, prepare a project assignment, and part of the content of an additional professional program directly at the place of residence. The main distance educational technologies on the PC cycle "Thyroid Diseases" are: Internet technology with the method of synchronous and asynchronous distance learning. In order to do this, on the educational portal of Federal Budgetary Educational Institution of Higher Education "Bashkir State Medical University" of Ministry of Health of the Russian Federation, a case is formed in the Institute of Additional Vocational Education section, inside which there are folders for the training module: questions of controlling the initial level of knowledge, questions for self-control for each section, test tasks, Internet links, regulatory documents, design tasks for final certification work. The method of synchronous distance learning provides on-line communication, which is implemented with the technical ability of students in the form of a webinar or web forum. Each student receives their original password, which gives access to the educational materials of the portal.

#### 9.2. Implementation of the internship program

An additional professional training program for doctors in the specialty "THERAPY" is implemented in part in the form of an internship. The internship is carried out in order to study best practices, as well as consolidate the theoretical knowledge gained during the development of a professional retraining program, and acquire practical skills for their effective use in the performance of their duties as a doctor. The internship is individual or group. An internship (4 hours) is implemented on a clinical basis: Republican Clinical Hospital named after G.G. Kuvatov. The purpose of the internship is to improve the labor functions of a general practitioner in providing medical care to patients with thyroid diseases and associated pathology.

Internship tasks:

- Improving existing professional knowledge and skills in the qualified management of patients with thyroid diseases and associated pathology.
- Improving methods for the diagnosis of thyroid pathology.
- Improving practical skills in the treatment of patients with thyroid disease.

During the internship, the therapist will receive labor functions:

- Early detection of thyroid diseases.
- Providing medical care to patients with thyroid pathology.

Improves labor activities for diagnostic treatment of patients with thyroid pathology based on modern clinical recommendations.

Curator: L.M. Farkhutdinova.

10. Forms of certification

10.1. Forms of intermediate certification

Forms of intermediate certification:

- 1) Testing (with standards of answers).
- 2) Questions to identify practical skills.
- 3) The solution of situational tasks (with standards of answers).

#### Example of test

Choose one correct answer:

#### 1. THE MOST COMMON CAUSE OF THYROTOXICOSIS SYNDROME IS

A. diffuse toxic goiter

B. autoimmune thyroiditis

C. nodular goiter

D. thyroid cancer

Answer A

#### 2. ECHOCG DATA FOR THYROTOXICOSIS IS CHARACTERIZED

A. focal impairment of contractile function

B. low ejection fraction

B. severe left ventricular hypertrophy

G. dilatation of the chambers of the heart

Answer D

#### 3. ATRIAL FIBRILLATION IN THYROTOXICOSIS IS A CONSEQUENCE A. genetic disorders

B. atrial myocardial dystrophy and hypersympathicotonia

B. Atrial myocardial ischemia

D. atherosclerotic changes in the myocardium Answer B

#### 4. CLINIC OF THYROTOXICOSIS IN ELDERLY DIFFERENT

A. marked increase in thyroid volume

B. the development of thyrotoxicosis in the absence of an increase in the volume of the thyroid gland

B. severe ophthalmopathy

D. expressed changes in the results of laboratory tests Answer B

#### Examples of tasks revealing the practical training of a doctor

1. To evaluate the results of a study of thyroid status of a patient with diffuse toxic goiter.

2. To interpret the data of a biochemical study of a patient with diffuse toxic goiter.

3. To evaluate the results of ECG and echocardiography of a patient with diffuse toxic goiter.

4. To interpret the results of a biochemical study of a patient with hypothyroidism.

5. To analyze the ultrasound data of a patient with nodular goiter.

#### **Examples of situational tasks**

#### Situational task

The patient is 76 years old. Worsening of well-being within 3 months: weakness, weight loss, swelling of the legs. Examination data: low nutrition, swelling of the legs. Heart sounds are arrhythmic, heart rate is 68 in 1 minute. The thyroid gland is not enlarged, with palpation soft elastic, mobile, painless. Blood test for hormones: T4 - 33.1 pmol / L (10.0-23.2), TSH - 0.04 mIU / L (0.23–3.4); antibodies to TPO - 682.7 U / ml (up to 30). Ultrasound of the thyroid gland: volume - 24 cm3 (up to 25 cm3), diffuse decrease in echogenicity, increased blood flow.

ECG: atrial fibrillation, normosystolic form, heart rate -58-74 beats per 1 minute. Echocardiography: dilatation of all cardiac cavities, more right ones, regurgitation on the mitral and tricuspid valves 2+, diffuse myocardial hypokinesis, reduction of ejection fraction to 46% (56-70).

#### Questions:

- 1. Justify the alleged diagnosis.
- 2. What explains the absence of an increased thyroid gland and tachycardia?
- 3. The tactics of treatment.

#### The answers:

- 1. The presence of clinical signs of thyrotoxicosis, typical changes in the results of laboratory tests, decreased echogenicity and increased blood flow according to ultrasound of the thyroid gland indicate a diagnosis of diffuse toxic goiter.
- 2. For elderly people is not characterized by an increase in the volume of the thyroid gland with diffuse toxic goiter. The absence of tachycardia is due to a sick sinus syndrome.
- 3. Thyrostatic therapy to relieve thyrotoxicosis followed by a solution to the issue of radical treatment of diffuse toxic goiter.

#### 10.2. Final attestation requirements

The final certification for an additional professional training program for doctors in the specialty "THERAPY" is carried out in the form of a full-time exam and should identify the theoretical and practical training of a general practitioner.

The student is allowed to final certification after studying the training modules to the extent provided for in the curriculum of an additional professional training program for doctors in the specialty "THERAPY", and the completion of graduation certification work.

#### Examples of topics for graduation certification work:

- 1. Thyrotoxicosis syndrome, differential diagnosis.
- 2. Features of the diagnosis of diffuse toxic goiter in the elderly.
- 3. Clinical masks of hypothyroidism.
- 4. Instrumental research methods in thyrology.
- 5. Amiodarone-associated thyroidopathy.
- 6. Differential diagnosis of nodular forms of goiter.
- 7. Differentiated forms of thyroid cancer.

Persons who have mastered the additional professional training program for doctors in the specialty "THERAPY" and have successfully passed the final certification receive a document of the established form – a certificate of professional development.

#### Document issued after completion of training – Certificate of professional development.

#### 10.3. Final attestation form

The final certification on the cycle of an additional professional training program for doctors "DISEASES OF THE THYROID GLAND" in the specialty "THERAPY" is carried out in the form of an exam.

Stage 1 - solving situational problems Stage 2 - assessment of the development of practical skills Stage 3 - interview

#### Examples of situational tasks for final certification:

#### Situational task

The patient is 62 years old. He was hospitalized in the intensive care unit in a serious condition: forced position – orthopnea, severe cyanosis, shortness of breath (respiratory rate - 30 in 1 minute), cough, worse when trying to take a horizontal position, massive swelling of the legs. Medical history: he went to the doctor with complaints of palpitations, shortness of breath, weakness, sweating, weight loss 9 months ago. Diagnosed with diffuse toxic goiter. Previous diseases – respiratory viral infections, do not abuse alcohol. Heredity – the mother has hypertension.

Within a month, against the background of thyrostatic therapy, the state of health improved significantly; surgical treatment was recommended after removal of thyrotoxicosis, which the patient refused. Discharged in satisfactory condition, independently stopped taking thyreostatics. His health began to gradually deteriorate again, he went to the doctor again when the above complaints appeared. With auscultation of the lungs – common wet rales in all fields. Arrhythmia, heart rate up to 180 in 1 min. The liver protrudes 3 cm from under the costal arch.

The results of the study of hormones: T4 - 25.1 pmol / L (10.0–23.2), TSH - 0.03 mIU / L (0.23–3.4). The volume of the thyroid gland by ultrasound is 25 cm3 (the norm is up to 25). According to the ECG – atrial fibrillation, heart rate – 150-200 per 1 minute, diffuse repolarization disorders. Echocardiography – the ejection fraction is sharply reduced – 35% (norm 56–70%). diffuse myocardial hypokinesis, an increase in all 4 cardiac cavities, mitral and tricuspid regurgitation, pulmonary hypertension. Ultrasound of the abdominal organs – an increase in the liver, fluid in the abdominal cavity. X-ray of the chest organs – congestive lungs, fluid in the pleural cavity on both sides, expansion of the borders of the heart.

#### Questions:

- 1. The cause of heart failure.
- 2. Differential diagnosis.
- 3. Formulation of the diagnosis
- 4. Therapeutic tactics.

#### Examples of tasks revealing the practical training of a doctor

- 1. To interpret the result of the study of blood hormones in a patient with hypothyroidism.
- 2. To analyze the ECG of a patient with thyrotoxicosis.
- 3. To interpret the results of a biochemical study of the blood of a patient with thyrotoxicosis.
- 4. To substantiate the conclusion of ultrasound examination of the thyroid gland in a patient with nodular goiter.
- 5. To formulate a conclusion on the results of a study of thyroid hormones in an elderly patient with suspected diffuse toxic goiter.

#### Approximate topics of control questions of final certification:

- 1. Features of the course of diffuse toxic goiter in elderly patients.
- 2. Risk factors for developing malignant thyroid disease.
- 3. Indications for the radical treatment of diffuse toxic goiter.
- 4. The principles of thyreostatic therapy for diffuse toxic goiter.
- 5. The principles of substitution therapy and hypothyroidism.
- 7. Features of replacement therapy for hypothyroidism in the elderly.

8. Laboratory and instrumental diagnostics of nodular goiter.

#### 11. Organizational and pedagogical conditions for the implementation of the program

- 11.1. Legislative and regulatory documents in accordance with the profile of the specialty:
  - Federal Law of the Russian Federation dated December 29, 2012 No. 273-FL "On Education in the Russian Federation".
  - Federal Law of the Russian Federation of November 21, 2011 N 323-FL "On the Basics of Protecting Citizens' Health in the Russian Federation".
  - Order of the Ministry of Education and Science of the Russian Federation of July 1, 2013 N 499 "On approval of the Procedure for the organization and implementation of educational activities for additional professional programs".
  - Order of the Ministry of Health of the Russian Federation dated August 3, 2012 N 66n "On approval of the Procedure and terms for improvement of professional knowledge and skills by medical workers and pharmaceutical workers through training in additional professional educational programs in educational and scientific organizations".
  - Order of the Ministry of Health of Russia No. 707n dated 08.10.2015 "On approval of the Qualification requirements for medical and pharmaceutical workers with higher education in the field of training "Health and Medical Sciences"),
  - Order of the Ministry of Health and Social Development of the Russian Federation of July 23, 2010 N 541n "On approval of a unified qualification directory of positions of managers, specialists and employees, section "Qualification characteristics of the positions of workers in the field of Healthcare".
  - Order of the Ministry of Health of the Russian Federation No. 1183n dated 12/24/2010 "On approving the procedure for providing medical care to the adult population of the Russian Federation for diseases of a therapeutic profile" Registered by the Ministry of Justice of Russia 02/11/2011 Order of the Ministry of Health of Russia No. 923n dated November 15, 2012 "On approval of the Procedure for the provision of medical care to adults in the" therapy "profile". Registered in the Ministry of Justice of Russia on December 29, 2012, No. 26482.

## 11.2 Educational-methodical documentation and materials for all work programs of training modules

Participants will be presented with materials for distance learning on the following topics: diffuse toxic goiter, hypothyroidism, central hypothyroidism, amiodarone-induced thyroidopathy, nodular goiter, highly differentiated thyroid cancer.

To conduct performance monitoring, the department created funds for assessment tools, which include tests and situational tasks.

The Library of Bashkir State Medical University	http://bgmy.ru/biblioteka_bgmu/
Publishing Office Sage	http://online.sagepub.com/
Publishing Office Cambridge	http://www.journals.cambridge.org/archives
Annual Reviews Sciences Collection	http://arjournals.annualreviews.org/action/showJourn als
Patent Data Base of the Company Questel	http://www.orbit.com
US National Library of MedicineNational Institutes of Health	http://www.ncbi.nlm.nih.gov/pubmed
Endocrinology Problems	http://www.mediasphera.ru
Journal of Physical Society of Japan	http://jpsj.ipap.jp/index.html

#### 11.3. Internet resources

Science Journals	http://www.sciencemag.org
The New England Journal of Medicine	http://www.nejm.org

12. Material and technical bases ensuring the organization of all types of disciplinary training

#### 12.1. Logistics

N₂	Name of technical training aids	Quantity at the department
]	Multimedia projectors BenQ MP622C № 0001311736	
2	Computers   N-TEX C300 № 10104001218   N-TEX C300 №10104001219   N-TEX C300 №10104001220   IntelCore2DUO № 0001312245   IntelCore2DUO № 0001312246   IntelCore2DUO № 0001312247   IntelCore2DUO № 0001312248   PU Intel Core 2 № 0001312248   PU Intel Core 2 № 000131915   P4 № № 0001309084	8
3	Direct projection interactive whiteboard IQBoardET A080 № 0001312451	1
4	Copy machine CanonFC-128 № 0001312292 Canon № 0001303437 CanonFC-128 № 0001303438	3
5	Multifunction device HP LaserJetM1522 № 00013112281 HP LaserJetM1522 № 00013112282	2
6	Laptops AcerExtensa № 00013111262 ActrAspire 5024 WLMiiAMD № 00013009579 DELL Latitude D531 № 00013111745 DELL Studio 1535 № 0001312262 DELL Studio 1535 № 0001312263 DELL Studio 1535 № 0001312264 Fujitsu LIFEBOOK A5332 NG 15,6 Core № 10104000551	7

#### 1.2. The list of thematic study rooms and laboratories

Nº	List of premises	Amount	Area in sq. m
н/п			
1.	Cabinet of Prof. Farkhutdinova L.M.	1	12 sqm
2.	Laboratory room	1	10 sqm
3.	Lecture audience	1	100 sqm
4.	Lecture audience	1	50 sqm

The total area of teaching facilities is 274 sqm. For one participant with a maximum simultaneous load of 30 people it is 9 sqm. The total area for teaching, including the premises of the clinical base -437 sqm. For one participant (with a maximum simultaneous load of 30 courses) -14.6 sqm.

#### 2. Educational process staff

№ п/п	Name of modules (disciplines, modules, sections, topics)	Full name	Academic degree, academic rank	Primary place of work, position	Place of work and part-time position
	Diffuse toxic goiter, pathogenesis, clinic, diagnosis, treatment Hypofunction of the thyroid gland, etiology, pathogenesis, diagnosis, treatment Central hypothyroidism, clinical diagnosis and treatment features Nodular goiter Highly Differentiated Thyroid Cancer	Farkhutdinova Leyla Muratovna	Doctor of Medical Sciences, Professor	Federal Budgetary Educational Institution of Higher Education "Bashkir State Medical University" of Ministry of Health of the Russian	
	Amiodarone-induced thyroidopathies			Federation, Institute of Additional Vocational Education	

### 3. Basic information about the program (in electronic form)

Nº	Marked fields	Fields to fill
1.	Program name	"Thyroid gland diseases" in the specialty "Therapy"
2.	Duration of the program (including class hours)	36 hours, including 18 class hours
3.	Training options	Part-time with the use of distance learning technologies
4.	Type of issued document after completion of training	Persons who have successfully mastered the appropriate additional professional continuing education program in the specialty "Therapy" and have passed the final certification are issued a certificate of advanced training
5.	Requirements for the level and profile of previous vocational education of listeners	Certificate in the specialty "Therapy"
6.	Participants categories	Doctors with higher professional education in the specialty "General Medicine" and postgraduate and / or additional professional education and a certificate of a specialist in the specialty "Therapy" <sup>1</sup> <sup>1</sup> Order of the Ministry of Health of the Russian Federation of October 8, 2015 No. 707n "On the approval of the Qualification requirements for medical and pharmaceutical workers with higher education in the field of training medicine and healthcare". Additional specialties: endocrinology, family practitioner, geriatrics, cardiology.
7.	The structural unit implementing the program	Federal Budgetary Educational Institution of Higher Education "Bashkir State Medical University" of Ministry of Health of the Russian Federation, a case is formed in the Institute of Additional Vocational Education of the Ministry of Health of Russia, Department of Therapy and General Medical Practice with a course of geriatrics
8.	Contacts	G. Ufa. st. Lenina, 3, Department of Therapy and General Medical Practice with a course of geriatrics, Institute of Additional Vocational Education
9.	Start date	According to the training plan of Institute of Additional Vocational Education
10.	The main teaching staff	Farkhutdinova L.M Doctor of Medical Sciences, Professor
11.	Annotation	The relevance of the program is due to the need for doctors to

	The purpose and objectives of the program	improve theoretical knowledge and professional practical skills in the diagnosis and treatment of thyroid diseases and associated complications by doctors of various specialties. The modern ideas about the problem of thyroid pathology and the possibilities of its solution are highlighted. The acquisition and improvement of professional knowledge and practical skills in the diagnosis and treatment of thyroid diseases, which are necessary for professional activities and professional development within the existing qualifications of a general practitioner.
	Topics of the training program	Section 1. Thyroid dysfunction Theme 1. Diffuse toxic goiter, pathogenesis, clinical features, diagnosis, treatment. Theme 2. Hypofunction of the thyroid gland, pathogenesis, clinic, diagnosis, treatment. Theme 3. Central hypothyroidism, clinical features, diagnosis and treatment. Theme 2. Amiodarone-induced thyroidopathies. Section 2. Focal thyroid formations Theme 1. Nodular goiter. Theme 2. Highly differentiated thyroid cancer.
	The uniqueness of the program, its distinctive features, advantages	A specialist in the field of therapy and endocrinology is involved in the implementation of the program. Distance learning technologies are applied. The latest medical advances and modern approaches in the diagnosis, treatment and prevention of thyroid pathology are discussed.
[4.	Additional information	Web link for user details !!!!!!!!