

ASSESSMENT REPORT

**Postgraduate Clinical Residency Programme
"General Practice (Family Medicine)"**

at
**I.M. Sechenov
First Moscow State
Medical University,
Russian Federation**

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Foundation under public law
M 7, 9a-10, 68161 Mannheim; Germany
www.evalag.de

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1. I.M. Sechenov First Moscow State Medical University

I.M. Sechenov First Moscow State Medical University (MSMU) was founded in 1758 as medical faculty of Imperial Moscow University. It is considered the oldest medical university in Russia. Today the clinical campus is situated in the Khamovniki district in central Moscow. MSMU offers training, certification and post-graduate studies to (future) physicians and pharmacists promoting thus further advance of medical science and healthcare domestically and on a global scale. The university covers three main areas: education, research, and healthcare. It has one of the biggest scientific medical libraries in Europe, two clinical simulation centres and its own botanic garden.

More than 2,500 academic staff members at ten faculties provide training in General Medicine, Pharmacy, Dentistry, Preventive Medicine, Paediatrics, Biotechnology, Bioengineering & Bioinformatics, Social Work, Clinical Psychology, Public Health, Healthcare Economics & Management, Materials Science and Technology, etc. for more than 15,000 undergraduate students and more than 15,000 specialists at postgraduate level. 85 % of academic staff have a scientific degree.

The University Research Center consists of seven research institutes, more than 30 laboratories and research departments, the Research Coordination Council, and the Coordinating Department for Young Scientists. To integrate education and research, specialised departments and research subdivisions are combined into research complexes and centres.

19 diversified university hospitals (over 3,000 beds) with the Central Medical Diagnostic Laboratory, the Center of Restorative Medicine and Rehabilitation, the Department of Radiology with seven sub-departments, and 16 inter-clinical services annually provide care for about 50,000 inpatients and over 300,000 outpatients.

In 2015, MSMU joined the Russian academic excellence project “Project 5-100” which aims to promote at least five Russian universities into the top 100 of the world's best institutions of higher education.

2. The accreditation procedure

The assessment procedure was carried out in the form of an informed peer review on the basis of the self-evaluation report provided by MSMU, a two-day site visit of an international expert team, an assessment report by the expert team and the accreditation decision which is taken by **evalag**'s Accreditation Commission.

The procedure applies the fitness for purpose approach which assesses to what extent a programme complies with the criteria for programme accreditation. These are formulated in coherence with the European Standards and Guidelines (ESG).

These criteria focus, first of all, on the profile of the programme and its curriculum. Further, the criteria cover all aspects of the implementation of a study programme, its quality assurance and its resources. With regard to the criteria of programme profile and curriculum, **evalag** assesses also if the programme meets academic standards¹ that are accepted in Europe and internationally.

The following six criteria are used:

- Programme profile
- Curriculum
- Student assessment

¹ The experts are aware of the difficulty of defining medical international standards and the ongoing discussion on this matter in the international medical community. Therefore, they use standards in the sense of “established practices”.

- Organisation of the study programme
- Resources
- Quality assurance

Depending on the degree to which each programme meets the criteria, the programme will be accredited, accredited with conditions or not accredited.

As a first step of the procedure and as a preparation for the site visit, MSMU produced the self-evaluation report based on guidelines provided by **evalag**.

evalag formed an expert team consisting of four experts including one student expert:

- Prof. Dr. rer. nat. Peter Dieter, Professor of Biochemistry, Technical University of Dresden, Germany and President of the Association of Medical Schools in Europe (AMSE)
- Prof. Dr. med. Dr. med. dent. Ralf Smeets, Professor of Oral and Maxillofacial Surgery, University Medical Centre Hamburg-Eppendorf (UKE), Germany
- Prof. Dr. med. Dr. PH Timo Ulrichs, Professor of Health Care, Akkon University for Applied Science Berlin, Germany
- Kai-Thorben Selm, medical student, University of Munich (LMU), Germany

All experts declared to be free of any conflict of interest.

The site visit (Annex 1) took place on 13 and 14 March 2017 at MSMU. During the site visit the expert team met with the leadership of the university and the faculties, academic and administrative staff, and students and visited the facilities at the clinical campus.

The expert team produced an assessment report which was submitted for correction of potential factual errors to the university on 15 May 2017.

From **evalag**'s side, the accreditation was coordinated by Mr. Georg Seppmann with back office assistance of Ms. Julia Greger in Mannheim.

The experts thank Mr. Igor Lunkov from MSMU International Office for his excellent support in preparation and during the site visit.

The following assessment report is structured according to the six assessment criteria, which are the basis for the decision about the programme accreditation. Each chapter starts with a presentation of the current status regarding the criterion which is based on the information in the self-assessment report and the information gathered during the site visit. On this basis, the expert team assesses the compliance with the criterion and makes recommendations for further improvement.

3. Programme assessment

3.1 Programme profile

The profile and objectives of a study programme is an essential criterion for the assessment. The experts have to check, whether the objectives of the programme are in line with the profile and the strategic goals of the institution, whether the intended learning outcomes of the programme are well defined, publicly accessible and in correspondence to the type and level of qualification provided by the programme. They also reflect whether the intended learning outcomes are based on academic or professional requirements (standards), public needs and the demands of the labour market and if they contribute to the employability of the graduates. The experts have to check the programme's relation to research (procurement of scientific methods in theory and practice, research based teaching). The international dimension of the programme has to be looked at, too. The experts check whether the profile and objectives of the programme comply with internationally accepted standards. Last not least, it has to be verified, whether the qualification of the

academic staff is adequate in terms of the profile and the objectives of the programme.

Current status

Programme profile and objectives

The study programme “General Practice (Family Medicine)” is a 2-year postgraduate residency programme at MSMU. The programme qualifies general practitioners (“family doctors”) to work in primary health care and emergency medical care. Compared to other training programmes of the MSMU, this programme is small in numbers: since academic year 2011/12 16 students enrolled in the programme whereas ten students graduated.

According to the self-evaluation report, the programme provides post-graduate students

- with basic fundamental medical knowledge in the specialty;
- with clinical thinking and broad knowledge in pathology and related disciplines;
- with appropriate skills in the use of new medical technologies and techniques;
- with general practitioner (family doctor) competencies in the fields of preventive, diagnostic, medical, psychological and pedagogical, organisational and management activities.

After graduation, students shall possess cross-functional and professional competencies in medical treatment of patients in primary health care and emergency medical care conditions. Interim and final assessments should guarantee the programme’s success.

The study programme was developed by the university according to Russian federal law on the basis of federal and international standards.² It correlates with the other programmes offered by the university, by including the following disciplines as programme modules: Public Health and Healthcare Pedagogics; Medical Emergency; Pathology; Teaching Practice.

The programme’s aims and qualification objectives are described in official programme documents and published online³.

According to the university’s self-evaluation report, there is a great potential of development of general practice in Russia. At present time, many Russian territorial entities have set a target to fully transfer to general practice: e.g. city of Moscow, Moscow region, Belgorod region, etc. These recent developments were also mentioned during the site visit by the university’s leadership who sees a growing need for general practitioners in the Russian society that the university should meet.

The number of study places is regulated by the federal government as the programme is financed by federal budget resources. Students enrolled in the residency programme are mostly from Russia. Nevertheless, the programme is also open to international students who would have to pay tuition fees.⁴

Research

The study programme provides topics in evidence-based medicine which includes scientific methods in theory and their implementation in practice. The requirements to the list of skills and knowledge of general practitioners (family doctors) were formed in accordance to the results of the continuous research work by the university staff.

According to the interviews with university representatives, students of the programme sometimes also have the opportunity to join their academic teachers’ research projects and to publish together.

² E.g. Federal State Educational Standard of Higher Education, Educational Standard for Continuing Professional Development of Specialists: Specialty No. 040110 “General practice (family medicine)”, supported by the EU TACIS Programme.

³ Cf. <https://sechenov.ru/eng/education-study/postgraduate/residency/general-practice-family-medicine/> (accessed 26 April 2017)

⁴ Currently, there is one student from Canada enrolled in the programme.

Staff

Academic teaching staff currently are ten persons: Four of them are professors (one of them is a member of the Russian Academy of Science), two associate professors and four assistant professors. All teaching staff members have academic degree: four are holders of post-doctoral degree in medicine and six hold doctoral degree in medicine. The ratio between full-time and part-time academic staff is 2:3.

Staff recruiting is conducted upon applications of candidates for the announced vacancies which are published at the university press. The main criteria for staff recruiting are:

- academic degree,
- work experience in the taught discipline,
- participation in researches,
- publications.

In order to confirm their compliance to their positions academic teachers are assessed regularly.

The university also offers continuing professional education for staff by the professional retraining programme "Teacher of a higher school" and the continuing medical education programme "Psychologic and pedagogic fundamentals of the higher medical and pharmaceutical education". Teachers may also attend teaching simulations conducted at the centre of continuing professional education.

Assessment

Correspondence to the profile of the university

The expert group assesses the academic standards of the study programme as being met. The residency programme focuses on further training and qualifying graduate students to become general practitioners. This fully corresponds with MSMU's long educational tradition in providing medical training on a high level.

The university's strategy and mission as a centre of excellence in medical education and research is generally accepted by all university groups the experts could talk to during the site visit.

Learning outcomes

In the view of the experts, the intended learning outcomes described in each module description are concise, clear and aligned with content. There also is a strong connection between the programme's intentions and Russian public needs. Besides, the study programme is implemented in consideration of international practice. However, the learning outcomes of the programme could still be defined more concisely with regard to the level of higher education.

The defined outcomes correspond to the level of awarded qualification. Students' learning success is regularly assessed by using a variety of assessment methods.

The experts appreciate the interdisciplinary approach of the programme, especially the direct involvement of the Chair of Nursing Management.

Staff qualification and criteria for recruitment

By and large, the relation between full-time and half-time staff seems appropriate. The experts note that teaching is carried out by dynamic and motivated lecturers. The qualification of the teaching staff seems to be adequate. The experts recognise that there are explicit criteria for staff recruitment and that the recruitment process itself seems to be well developed.

Obviously, a variety of teaching methods is used. The experts appreciate that the university offers different opportunities to teaching staff for improving their teaching methods.

The experts note that there is a good connection between teaching and research at MSMU. Research is already subject in undergraduate studies. Scientific methods in theory and practice on a high level are provided. Research based training can be observed.

Areas for improvement

International marketing measures could be improved.

Research results out of the programme should be made more compatible with the international community by publishing in English language. Furthermore, the scientific reputation of general medicine/family medicine could become more visible by more internationally published research results.

Recommendations

The experts recommend to reconsider the defined learning outcomes with regard to a level more appropriate to higher academic education.

If the university wants to attract more applicants from abroad the programme's international visibility should be improved. One step could be building up a website with all relevant information on the programme in English language.

Due to the growing importance of general practitioners for society the number of study places should be remarkably increased.

3.2 Curriculum

The second criterion concerns the curriculum and the teaching and learning methods. The expert team checks, whether the curriculum of the programme is adequately structured to achieve the intended learning outcomes and whether the curriculum provides the necessary knowledge and methodological expertise of the relevant discipline(s). The experts also look at the organisation of learning, especially if there are appropriate student-centred teaching and learning methods, if students are encouraged to take an active role in creating the learning process and whether the diversity of students and their needs is taken into account.

Current status

The Postgraduate Clinical Residency Programme in General Practice (Family Medicine) was developed and approved by the Academic Council of the University in accordance with the Federal State Educational Standard of Higher Education. The university annually updates the programme on the basis of the development of science, technology, culture, economy, technology, and social sphere by means of their approval (reapproval) by the Academic Council of the University. Global achievements within a discipline are reflected in:

- changes of a module content;
- correction of the content of lectures and seminars covering the up-to-date progress in diagnostics, treatment and prevention issues;
- implementation of the up-to-date research data in clinical practice;
- updating assessment tests with the latest science achievements.

The programme "General Practice (Family Medicine)" consists of three units:

- disciplines (modules)
- practices
- final (state) assessment.

Both modules and practices divided into a mandatory part "basic component" and a "variable component".

To measure the student workload, credit units are used. One credit unit is equivalent to 36 academic hours (1 hour = 45 minutes). Teaching and learning methods include lectures, seminars, practical trainings, clinical practice.

No	Structural elements	Split by semesters		Credit units	STUDY HOURS														Split by years and semesters									
		Exams / Assessment of practical skills	Pass / Fail exams		Contact hours							Self-study	1st year				2nd year											
					TOTAL	Pre-exam consultations,	Examinations	Lectures	Laboratory classes	Practice	Clinical practice		Seminars	Lectures	Seminars	Credit units	Lectures	Seminars	Credit units	Lectures	Seminars	Credit units						
																							Lectures	Seminars	Credit units	Lectures	Seminars	Credit units
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26			
					Unit 1. Disciplines (Modules)																							
1 B Basic component																												
1.	B.1 General practice (family medicine)	4		28	1,008	654	6	56		336	256	354	14	154	7	14	154	7	14	154	7	14	154	7	14	130	7	
2.	B.2 Public health and healthcare		2		72	48		6		12	30	24				6	42	2										
3.	B.3 Pedagogics	1	2		72	48		6		24	18	24	6	42	2													
4.	B.4 Emergency medicine		3		72	48		6		24	18	24										6	42	2				
5.	B.5 Pathology		4		72	48		6		24	18	24												6	42	2		
	TOTAL			36	1,296	846	6	80		84	340	450	20	196	9	20	196	9	20	196	9	20	196	9	20	172	9	
2 V Variable component																												
Disciplines of the variable component																												
6.	V.1 Personalized medicine		2	3	108	72		6			30	36	4	32	1,5	2	34	1,5										
	TOTAL			3	108	72		6			30	36	4	32	1,5	2	34	1,5										
Elective disciplines of the variable component																												
7.	V.1 Hematology / Endocrinology		4	3	108	72		6		36	30	36										4	32	1,5	2	34	1,5	
	TOTAL			3	108	72		6		36	30	36										4	32	1,5	2	34	1,5	
	TOTAL			6	216	144		12		36	60	72	4	32	1,5	2	34	1,5				4	32	1,5	2	34	1,5	
	TOTAL Unit 1			42	1,512	990	6	92		120	372	400	522	24	228	10,5	22	230	10,5	24	228	10,5	22	206	10,5			

9,3%

Tab. 1: Modules (disciplines)

Modules

The modules are equivalent to 1,096 study hours (36 credit units) for the basic and 216 study hours (6 credit units) for the variable part.

The basic component modules are as follows:

1. General practice (family medicine)
2. Public health and healthcare
3. Pedagogics
4. Emergency medicine
5. Pathology

The variable component modules consist of the following modules:

6. Personalised medicine
7. Hematology / Endocrinology

The modules are equivalent to 1,096 study hours (36 credit units) for the basic and 216 study hours (6 credit units) for the variable part.

The basic component modules are as follows:

8. General practice (family medicine)
9. Public health and healthcare
10. Pedagogics
11. Emergency medicine
12. Pathology

The variable component modules consist of the following modules:

13. Personalised medicine
14. Hematology / Endocrinology

The modules' objectives are described as follows:

1. General Practice (Family Medicine), 28 credits:

The aim of the course is to provide students with the following knowledge and skills. After the course, students should **know**:

- the legislation of the Russian Federation related to the population's health protection and organising primary medical and sanitary care for population within the scope of general medical practice (family medicine);
- aetiology and pathogenesis of individual diseases and syndromes which are most frequent in general medical practice, their manifestations and pathogenic mechanisms, methods of their rational diagnostics, effective therapy and prevention;
- clinical symptoms and signs, pathogenesis of primary diseases of adults and children, their prevention, diagnostics, treatment, health care, clinical symptoms and signs of borderline cases;
- composition of a diagnosis, arrangement of preventive and remedial measures in general medical practice;
- basics of drug therapy, pharmacodynamics and pharmacokinetics of major drug groups used for rendering multi-field care for adults and children; side effects and complications caused by drug intake, their correction methods;
- basics of drug-free therapy, physical medicine, exercise therapy and medical supervision, indications and contraindications for sanatorium-resort therapy.
- organisation and equipment in general medical practice; cooperation with specialized doctors in outpatient departments and in-patient clinics;
- typical medical records in general medical practice;

- how to organise first aid and rescue emergency care to adults and children in general medical practice.

In the course students develop **skills** in:

- getting information on the disease from a patient, his/her relatives and legitimate representatives;
- determining the necessity of special diagnostic techniques (laboratory, radiological, functional, medico-genetic), arranging their implementation and interpreting their results;
- establishing differential diagnosis;
- assessing the cause and the degree of a patient's illness, and taking the necessary measures against;
- determining the scope and order of therapeutic and/or surgical and organisational measures (hospitalising, outpatient care, doctor's advice);
- substantiating care regimen, plan and surveillance strategy for a patient, indications and contra-indications to medications, operative therapy;
- developing management programme, identifying indications;
- solving the issues related to the possible continuation of the patient's professional activity, properly executing medical documentation;
- calculating and analysing the main medical and demographical factors of general medical practice;
- calculating and analysing the main factors characterizing activities of general medical practice;
- making use of basic methodological approaches to analysis, evaluation, medical aid quality expertise in order to choose adequate administrative solutions in general medical practice;
- building social interaction with the partakers of the diagnostic and treatment process based on taking into account ethnic, cultural, confessional and existential values;
- surgical section
- surgical pathologies, orthopaedics and traumatology

2. *Public health and healthcare, 2 credits:*

The aim of the course is to provide students with the following knowledge and skills. After the course, students should **know**:

- modern approaches to public health evaluation and analysis;
- basic principles of managing provision of preventive medical care;
- global and regional strategies of WHO in the sphere of prevention of non-communicable diseases;
- basic principles of managing provision of primary health care, urgent, emergency aid, specialized care, including high-technology medical care, medical aid for patients with socially significant and socially-conditioned diseases;
- organizational principles of treatment and diagnostic process in a medical organisation;
- modern approaches to medical care quality management;
- methods of expert evaluation of medical care quality;
- goals and objectives of utilizing standards, procedures of medical care, clinico-statistical groups (CSG) in health care; legal, organizational and economic aspects of using modern information technologies in health care.

In the course students develop **skills** in:

- calculating and analysing basic parameters of public health state;
- calculating and analysing basic parameters characterizing the activities of primary medical, emergency, urgent, specialized aid, including high-technology medical aid provided in out-patient clinics and hospitals;
- managing the provision of preventive medical aid against non-communicable diseases based on comprehensive intersectoral WHO approaches;
- organising operation of individual departments of a medical organization;
- determining types of specialised medical aid, including high-technology medical aid;
- utilising health care provision standards to calculate costs of a certain kind of medical aid in a given medical organization (health centre, hospital) or department (office, etc.);

- managing operation of paramedical personnel and medical attendants;
- utilising basic methodical approaches to medical aid quality analysis, evaluation and expertise in order to make adequate managerial decisions; organising the processing and protection of personal data in a medical organisation;
- working with special medical registers;
- providing general management of information system usage in a medical organisation;
- utilising information technologies to perform professional tasks;
- calculation and analysis of strategic parameters characterising public health state and health care system;
- analysis of activities of various departments of a medical organization;
- drawing up various reports, preparation of organisational and administrative documents;
- execution of official medical documents, keeping primary medical records;
- working with medical information resources and searching for professional information in the internet.

3. *Pedagogics, 2 credits:*

The aim of the course is to provide students with the following knowledge and skills. After the course, students should **know**:

- socially significant moral standards and foundations of moral behaviour;
- core values of professional pedagogical activity;
- key ethno-cultural and religious values of the educational process participants;
- system of pedagogical education in Russia and foreign countries;
- structure, goals, objectives of pedagogical education and the basic ways of improving its quality;
- requirements established by the state educational standards;
- pedagogical technologies;
- methods of organisation of independent work, development of creativity and professional thinking of students;
- methods of pedagogical diagnostics and programme material learning efficiency control;
- ways to improve the pedagogical skills of a teacher, methods of pedagogical research;
- methods of building up motivation with people, patients and their families, aimed at preserving and promoting their health and health of wider public.

Students should **be able** to:

- implement the basic laws of learning and education, modern didactic principles; plan the objectives and content of training in accordance with state educational standards, curriculum and programme;
- select the educational technologies (forms, methods and means of training and education) appropriate to the goals and content of education;
- use basic methods of pedagogical diagnostics and monitoring retention of programme material;
- conduct an independent search of the relevant literature, and use it to improve the quality of the educational process;
- prepare the educational materials for the course being taught;
- formulate the goals and objectives of the educational process using the innovative teaching strategies;
- train in the workplace;
- apply the rules of pedagogical relationships and professional educational activities in design and implementation of the educational process;
- analyse the professional pedagogical situations;
- create social interaction with members of the educational process by taking into account the ethnic, cultural and confessional values.

In the course students develop **skills** in:

- development of intellectual and cultural level, moral and physical development of one's own per-

- sonality; analysis of one's activity;
- organisation and implementation of design and course of the educational process;
- work with scientific and educational literature;
- methods of psychic self-regulation when teaching others;
- communication devoted to building up motivation with people, patients and their families, aimed at preserving and promoting their health and health of wider public;
- methods of reflection (awareness of one's successes and failures in the current educational process).

4. *Emergency medicine, 2 credits:*

The aim of the course is to provide students with the following knowledge and skills. After the course, students should **know**:

- legislation of the Russian Federation concerning the organisation of civil health service support during recovery after various emergencies;
- methodological and legal principles of managing medical aid in case of emergency situations, including medical evacuation;
- general characteristics and health care consequences of emergency situations;
- classification, definition and sources of emergency situations;
- civil protection organisation in case of radiation environment aggravation and emergency situations;
- basics of organizing and conducting sanitary and anti-epidemic (preventive) measures during emergencies in times of peace and in wartime;
- specifics of providing and managing therapeutic aid in case of emergencies and disasters, terrorist attacks and local armed conflicts;
- organisation of treating and evacuation activities, typical diagnostic and curative activities of primary health care;
- basics of organising emergency call service in disaster medicine, principles of sanitary aviation evacuation;
- typical medical records in medical institutions in case of emergency situations;
- specific features of medical supply for organisations and formations dealing with civil health care in various emergency situations;
- purpose and organisation principles of Russia's Unified State System as to Prevention and Response to Emergency Situations (RS ChS);
- purpose, operational structure and regulatory bodies of the All-Russian Agency for Disaster Medicine (VSMK).

In the course students develop **skills** in:

- applicable legislative acts concerning organisation of civil health care during emergency recovery, be able to use them in specific practical situations;
- organising primary medical care for people injured in centres of destruction during emergency situations.

Finally, student will gain experience in:

- basic medical diagnostic and curative activities aimed at providing primary medical care in case of life threatening conditions;
- organising sanitary and anti-epidemic (preventive) activities during natural and technogenic emergency situations in times of peace and in wartime;
- correct medical record keeping during emergency situations.

5. *Pathology, 2 credits:*

The aim of the course is to provide students with the following knowledge and skills. After the course, students should **know**:

- the methodology of the course, its potentialities and tasks;
- the role in integration as to the achievements of various sciences and solution of practical public health issues;
- the types and importance of pathogenic factors, the role of body reactivity in the occurrence, development, and outcome of various forms of human pathologies;
- the causes, mechanisms, and manifestations of the typical pathological processes, the patterns of their relationship, and importance in cases of various diseases;
- peculiarities of the origin, development, and completion of standard forms of pathology of organs and physiological systems;
- etiology and pathogenesis of certain diseases and syndromes, their manifestations and mechanisms of development, methods of rational diagnostics, effective treatment and prevention;
- adaptive reactions from the standpoint of the sanogenesis concept on the cell tissue, organ, and organism levels, the relationship of adaptive and pathogenic reactions and processes determining the nature and outcome of syndromes and diseases;
- the foundations of evidence-based medicine, modern scientific concepts of clinical pathology, principles of diagnostics, prevention and treatment of diseases;
- theoretical bases for establishing diagnosis, preventive and curative measures in cases of human diseases.

After the course students should be **capable of**:

- effectively solving a physician's professional problems;
- using the theoretical principles, concepts, facts and techniques when analysing data on etiology, pathogenesis and manifestations of human diseases;
- analysing the mechanisms and importance of adaptive reactions of the patient's body;
- assess the information content and appropriateness of the methods of modern diagnostics, effectiveness of prevention and treatment of human diseases;
- characterising the key theoretical principles of pathology, including a common etiology, pathogenesis, sanogenesis, disease doctrine etc.
- applying the acquired knowledge and skills in therapeutic and preventive work.

6. *Personalised medicine, 3 credits:*

The aim of the course is to provide students with the following knowledge and skills. After the course, students should **know**:

- the concept of personalisation covering the pharmacological agents and individual body responses to them;
- principles of molecular diagnostics, in particular determination of a polymorphism by single nucleotides;
- fundamentals of clinical integration of diagnostics and treatment of diseases;
- essence of the treatment monitoring;
- principles of pharmacogenomics, pharmacogenetics and pharmacoproteomics.

After the course students should be **able to**:

- carry out early detection of diseases and choose the appropriate treatment;
- choose medications considered safe and effective based on molecular diagnostics;
- integrate the diagnostics and treatment of diseases;
- monitor the treatment and formulate the patients' forecast.
- interpret molecular diagnostics methods;
- use appropriate algorithms of selecting a personalized treatment of diseases.

7. *Hematology / Endocrinology, 3 credits:*

The aim of the course is to provide students with the following knowledge and skills. After the course, stu-

dents should **know**:

- basic issues of normal and pathological anatomy, normal and pathological physiology of the hemopoietic system and levels of their regulation;
- clinical symptoms and pathogenesis of the main haematological diseases in adults and children, their prevention, diagnosis and treatment, as well as emergency aid methods;
- the fundamentals of pharmacotherapy, pharmacokinetics and pharmacodynamics of the main groups of drugs used to treat the hematological diseases.

After the course students should be **able to**:

- obtain information about the disease, apply the objective methods of the patient examination, identify the common and specific symptoms of the disease;
- interpret the data of laboratory and instrumental methods of hematological diseases;
- determine the indications for hospitalization and counselling of specialists;
- conduct differential diagnostics, substantiate clinical diagnosis, plan and tactics of the patient follow-up;
- prepare the medical records provided for by the healthcare legislation.

The course provides students with the following **skills**:

- examining a patient with hematological disease
- all kinds of injections (subcutaneous, intramuscular and intravenous)
- determining blood group and Rh factor using an express method
- determining individual and biological compatibility of blood
- determining blood suitability for transfusion
- blood transfusion
- drip and jet transfusion of medicines and blood substitutes

Practices

Taking into account that most of the students are mainly graduates of medical universities without any clinical experience, the emphasis in the programme is made on the acquisition of practical knowledge and skills in clinical sites. To develop practical skills in the practice programme (base component) a simulation course on cardiopulmonary resuscitation, urgent and emergency care, and methods of clinical examination is organised. The simulation course is carried out on the basis of the chair and the University Center of Continuing Professional Education.

8. *Clinical practice, 63 credits:*

After practical training, students should **know**:

- the laws of the Russian Federation on protection of public health and organisation of the primary health care to the population in the framework of a general practical training (family medicine);
- general issues of organization of a primary healthcare; organization of aid to adults and children in the general practice, emergency and first aid;
- etiology and pathogenesis of certain most common diseases and syndromes, their manifestations and mechanisms of development, methods of rational diagnostics, effective treatment and prevention;
- clinical symptoms and pathogenesis of the major diseases in adults and children, their prevention, diagnostics, treatment, aid, clinical symptoms and borderline conditions at the clinic;
- theoretical bases of constructing the diagnosis, preventive and curative measures for human diseases;
- fundamentals of pharmacotherapy, pharmacokinetics and pharmacodynamics of the main groups of drugs used for provision of multi-disciplinary care for adults and children; complications and side effects caused by use of drugs, methods of their correction;
- fundamentals of non-pharmacological therapy, physiotherapy, physical therapy and medical moni-

The students should be **able to**:

- obtain information about the disease from a patient, its relatives and legal representatives;
- identify the need for special methods of research (laboratory, radiation, functional, medical and genetic), organize their performance and be able to interpret their results;
- conduct differential diagnosis;
- assess the cause and severity of the patient's condition and take the required steps to withdraw the patient from this condition;
- determine the scope and sequence of therapeutic and/or surgical and organisational measures (hospitalization, outpatient care, consulting visit);
- justify the pattern, plan and tactics of the patient management, indications and contraindications to medications and surgical treatment;
- develop a plan to prepare the patient for treatment, identify the somatic contraindications;
- arrange the proper medical documentation;
- work with special medical registries;
- build social interaction with members of the diagnostic and treatment process by taking into account the ethnic and cultural, religious and existential values.

Students should also develop **skills** in several fields of medicine (e.g. anaesthesia, general surgical techniques and surgical interventions, transfusion of blood and blood products, techniques used in cases of injuries, ophthalmology, obstetrics-gynaecology ...) and therapy (e.g. internal diseases, laboratory diagnostics, dermatovenerology, neurology, paediatrics ...).

9. Pedagogic practice, 2 credits:

After practical pedagogic training, students should **be able to**:

- implement basic regularities of education and upbringing, as well as modern didactic principles in the subject taught;
- plan the goals and the content of education according to state educational standard, teaching plan and programme;
- select teaching techniques which conform to the goals and the content of education (forms, methods and means of education and upbringing);
- use basic methods of pedagogic diagnostics and monitoring retention of programme material;
- perform teaching activities within the system of preparation and professional development of nursing staff;
- plan educational process, perform methodological work, carryout controlling activities aimed at evaluating the results of teaching process.

They should have developed **skills** in:

- working out education materials for preparation and professional development of nursing staff;
- working with scientific pedagogical literature;
- psychic self-adjustment techniques in the process of teaching others;
- pedagogic communication techniques;
- using the best historical teaching methods available when performing the teaching process, as well as developing new pedagogical technologies.

9. *Optional additional clinical practice, 10 credits:*

There is an optional additional part of practical clinical training focused on

- urinary tract diseases
- hematology
- endocrinology

State final examination (cf. also criterion 3)

The final assessment counts 3 credits. It is conducted in three phases:

- Phase 1: Interdisciplinary testing (online);
- Phase 2: Practical skills assessment;
- Phase 3. Interview on individual case studies comprised of 3 questions.

Assessment

Structure and intended learning outcomes

The expert team assesses the curriculum as well structured and logical. The subjects and modules are well figured out and cover the relevant content and competences to meet the programme's defined objectives. In the view of the experts, the course arrangement generally considers the competences later needed. However, a systematic and continuous reviewing of the curriculum together with alumni and/or experts from outside the university would be helpful.

The experts welcome the implementation of emergency and disaster medical approaches but would recommend the separation into two modules.

The structure of the study programme is well organised and allows the students to follow a well-arranged schedule in their studies. The students' workload in the programme might be high but – according to the students the expert group could talk to – it seems to be manageable.

Learning experience

According to its tradition, MSMU considers excellent teaching on the basis of excellent research the university's main strength. The experts note that this is well met in the study programme "General Practice (Family Medicine)": By learning in small groups and in direct contact to teachers the university makes efforts to enhance a successful learning experience of their students.

The experts especially appreciate the simulation course as an extraordinary example of practical learning.

Students expressed their satisfaction with the study environment in the programme and at MSMU as a whole. They strongly appreciate the good learning atmosphere and a staff always open to consultation and help.

Areas for improvement

In the experts view, the student workload is rather high and should be reconsidered to encourage students to play a more active role in learning and research.

The university should also consider the study period to become more flexible. The experts think that the programme could win if there would be the possibility of an extension from two to three years with additional elective subjects.

Conditions

The students' workload has to be reviewed to give students more free space for specialisation and research activities.

The university has to ensure research to be conducted by students. The experts appreciate the observed student research initiatives and the supporting response by the university. The university has to strengthen these activities and should make research a component of successful study assessment.

Recommendations

Alumni and more general practitioners from the field should become involved in curriculum design so that their practical experience would become considered. Furthermore, alumni could show possible future fields of work to applicants and new students.

The university should identify and explicitly name soft skills developed on the programme as these are of importance for medical practitioners.

3.3 Student assessment

The third criterion focuses on the organisation of student assessments. The expert team has to check how the assessment of intended learning outcomes is organised and whether the amount and requirements of assessments are adequate. They have to decide whether the requirements of the thesis reflect the level of the degree.

Overall, it is looked at whether the assessment criteria are transparent and used in a consistent way. It is also checked if the staff undertaking assessments is adequately qualified. Last not least it should be verified that examination regulations exist and that they provide clear and fair regulations for student absence, illness and other mitigating conditions.

Current status

Organisation of student performance evaluation

In the study programme "General Practice (Family Medicine)" assessment occurs as current, interim and final (state) knowledge assessment. Interim assessment is conducted in the form of a pass-fail exam upon finishing a discipline (module) and practice. Final (state) assessment is conducted in the form of a state examination upon finishing the whole programme.

For each assessment exists:

- a list of competencies with indication of the stages of their development;
- a description of indicators, assessment scales and the criteria of competences assessment at their various stages
- typical evaluation tasks that would characterise the level of competences formation;
- a methodology for defining assessment procedures for knowledge, skills and work experience.

A variety of tests is used, depending on the learning outcome. As theoretical framework Miller's pyramid is used with its distinction between "know/know how", "show how" and "does":

- knowledge assessment on the "know how" level is done by multiple-choice tests, clinical cases and interviews;
- skills assessment on the "show how" level is conducted by students' demonstration of skills on simulators or simulated patients/dummies;
- practical skills assessment at the "does" level is done by direct observation of a student's clinical work under real-life conditions.

The final examination at the end of the residency programme is conducted as follows:

1. Multiple choice tests with 100 questions
2. Ten case studies
3. One interview with an examiner
4. Three demonstrations of skills on a dummy
5. Three attendances of a stereotype patient
6. The final report on a chosen topic

For the final report, a student can choose any topic included in the study programme. The topic can be chosen either out of a list of 80 existing or can be formulated by the student. One of the chair staff members acts as supervisor during the writing period.

All assessment results in modules and practices of the programme are provided in the diploma supplement.

During the programme, knowledge assessment is conducted according to a plan in specially allocated premises in pre-arranged time. The interim assessment is conducted both in paper form and as a centralized computer exam. Practical skills assessment is conducted in the Center of Continuing Professional Education or at the chair in a specially equipped simulation room. Interviews are conducted in classrooms. Supervision of clinical work and its assessment are conducted by teachers at clinical bases.

Assessment criteria

The assessment criteria are published on the university website as follows:

- Testing: The “pass” result is given upon not less than 70 % of correct answers;
- Practical skills: A student shall demonstrate not less than 3 skills from the programme basic (mandatory) list of practical skills. The “pass” result is given if all demonstrated skills are assessed positively on the basis of pre-defined assessment scales;
- interviews are assessed by the answers to questions on a 5-point scale. The “pass” result is given when there are at least 3 points.

Student regulations

The regulation documents are published at the university website. For valid reasons it is possible to postpone or repeat parts of the examination.

Assessment

The expert team appreciates the organisation and transparency of assessment in the programme. The amount and requirements of assessments with regard to the intended learning outcomes seem to be appropriate. They are fully in-line with international practice.

Defined assessment criteria exist and are transparent for students as well as for staff.

The students the experts talked with were well aware of the assessment criteria, they know what is expected and they know whom to contact in the case of problems or questions.

According to the experts, the staff undertaking the assessments is adequately qualified.

All examination regulations are available online. There are clear and objective regulations for student absence, illness and other mitigating circumstances.

A wide range of assessment tasks is used.

Areas for improvement

The university should ensure regular anonymous student evaluation of processes related to the study programme: examination as well as administration, teaching staff etc.

The feedback quality on assessment during the study should be monitored and continuously improved. Similar to the offered further teaching qualification to staff, the university could build up offers for qualifying for assessment.

Recommendations

The amount of exams and evaluation should be reconsidered.

The university should consider regular measures to improve staff qualification in assessment.

3.4 Organisation of the study programme

Furthermore, the implementation of the programme has to be looked at. The expert team checks the appropriateness of entry qualifications and the regulations for the recognition of qualifications (i.e. Lisbon Convention). It has to be reviewed whether the organisation of the study process allows the programme to be carried out in such a way that the intended learning outcomes will be achieved and whether the organisation of the study process also takes the diversity of students and their needs into account. It is looked at how the implementation of the programme is managed (roles and responsibilities) and even whether the workload of the programme is adequate with respect to the necessity to reach the intended learning outcomes in the scheduled time frame. The organisation of the student life cycle (i.e. all (organisational) relationships between the student and the institution from enrolment to graduation) is also part of this criterion. The experts check whether the care services and student advisory services are suitable and – in case of a cooperation with internal and external partners – how the cooperation is organised.

Current status

Entry qualifications

Over the last years, the university provided a maximum of five study places a year in the residency programme “General Practice (Family Medicine)”. For enrolment applicants have to submit their diploma of higher education in general medicine or paediatrics and to take part in an admission test. The Admission Committee of the University⁵ then decides on the basis of all test results whom to admit to the study programme. Tests take place every academic year in summer and are conducted computer-based.

All information for applicants is published at the university website. Applicants can submit additional information about their individual achievements to be considered (e.g. recommendations of other universities or scientific organisations, publications, inventions).

Prior learning is recognised. According to their prior experience or qualification (e.g. secondary professional or higher degree), students can apply for an individual curriculum, including the opportunity of accelerated education.

⁵ Chair of the Admission Committee is the University Rector. The Admission Committee may also include representatives of the state authorities of the Russian Federation, medical organisations, professional public organisations.

Study organisation

The academic year starts on 1 September. The study process is organised by different types of classes that are defined by the curriculum (see also criterion 2): Students learn by lectures, seminars, practical trainings, and self-studies. Distance learning and e-learning elements are also implemented.

The group size depends on the number of students; maximum group size is 25 students. The university tries not to exceed group size of 10 students. For laboratory classes and other types of practical studies, groups often are divided into several sub-groups.

Students of different residency programmes are learning together in the same seminar groups.

The students' workload is 54 hours per week:

- 12 hours classroom studies (lectures, seminars, hands-on trainings);
- 24 hours practice;
- 18 hours self-study.

At university level, the education process is organized by the Academic Department and the Department of Residency and Internship. At the chair level the process is organized by the Head of the Chair, the Curriculum Director, a chair staff member responsible for residency and the teachers. Currently, there are 28 persons involved in the organisational management of the programme.

There are elected student representatives at the university who offer consultation and support to students. The representatives may also communicate problems identified in study programmes to the university administration.

The MSMU annually reconsiders the education programme according to recent developments in science and technology. Any changings or updates have to be approved by the Academic Council. The programme cooperates with external medical organisations and internal university departments (clinical centre, university hospitals) which provide bases for clinical practical studies of the programme students.

Assessment

According to the expert team, the study process is well organised and clear. The roles and responsibilities in the management are clearly and appropriately structured, people involved the experts could talk to are highly motivated and professional.

In the view of the experts, the admission regulations are sensible. Having heard the students, the expert team believes that the workload of the programmes is manageable but high and should be continuously and carefully observed.

The experts appreciate the opportunity of an individual student curriculum that takes into account students' diversity.

The experts note that there is excellent communication between students and teachers: learning groups are small, there seem to be lots of formal as well as informal contacts between teachers and students. The students the expert team could interview were very positive against the good organisation and atmosphere of the study process – even noting that the workload and the density of assessment are high. In this context students mentioned that they would like to have more flexibility for own research activity.

Students are held to cooperate and work together in the programme. The experts got the impression that most would like to stay in contact with each other and with the university even after graduation.

Areas for improvement

The possibility of an individual student curriculum should be further improved and become implemented into the quality process of the programme.

Recommendations

The workload should be reconsidered and clearly defined.

The university should support students' wishes for staying in contact after graduation. This could be realised by building up an alumni network and by offering further education or scientific events especially for alumni of the residency programme. This could also become a nucleus for a new network between general practitioners, students and scientists. In further perspective, a career center for graduates could be installed.

3.5 Resources

Central to the criterion "resources" is whether there are appropriate resource endowment and deployment in the involved faculties. The experts check the existence of sustainable funding and financial management, whether the staff are adequate in qualification and number to ensure the intended learning outcomes, which strategies and processes for the staff recruiting and staff development are used and whether amount and quality of facilities and equipment allow the provision of the programme (library, laboratories, teaching rooms, IT equipment), facilities and equipment are in accordance with the institutional strategy. It is looked at whether the amount and quality of the resources provided are adequate to reach the objectives of each programme.

Current status

Funding and financial management

The study programme "General Practice (Family Medicine)" is mainly financed out of federal budget resources by direct governmental payments. International students have to pay tuition fees, currently 353,000 RUB (about 5,800 EUR) in the first year, 263,000 RUB (about 4,300 EUR) in the second year.

Adequacy of staff and hiring process

As already described in criterion 1, there are ten academic staff members teaching in the programme, three of them part-time. Two staff members are part-time internal employees and one is a part-time external employee. All staff members provide clinical training for physicians.

The work is coordinated by the head of the chair. All staff members participate in research activities in their fields of knowledge and link it with teaching. Besides, further qualification and improvement of teaching methods play an important role at MSMU.

Facilities

The chair has two lecture halls, a room for practicing skills, teachers' room as well as back offices for storing teaching equipment and archives. Some classes are conducted at the centre of continuing professional education with the use of simulation equipment. The chair provides personal computers, projectors and internet equipment for studies. Practical skills are trained with the use of simulation (dummies, full-height dummies, etc.) and diagnostic equipment (e.g. portable otoscopes, ophthalmoscopes, tables for determining visual acuity, colour vision, a portable ECG machine, lung tester, peak flow meter etc.).

Library

The university library consists of three million copies (more than 1.5 million items) of national and international medical literature (including research works, translations, theses, abstracts, deposited manuscripts, etc.). The library maintains an electronic database of medical data and health called "Russian Medicine" which covers more than 80 % of all published and unpublished materials in the field.

The database is fully accessible via the Internet. In cooperation with the US National Medical Library, MSMU Library is implementing a Russian-English version of the thesaurus indexing medical publications, used as information retrieval language in the "Russian Medicine" database.

Assessment

Financial management and funding

Since the university directly gets financed by the government there seem to be no financial difficulties. In the view of the experts, the financial management is professional.

Adequacy of staff and hiring process

The staff involved in the study programmes is, according to the expert team, appropriate to provide high quality education to its students and to develop research. The administrative staff is very professional. Altogether, the experts appreciated the dynamic and motivated staff members, both academic and administrative.

In the view of the experts, number and qualification of academic staff (full-time and part-time) are adequate to ensure the intended learning outcomes.

The search and tenure procedures of the university also seem to the expert team to fulfil by and large academic standards and ensure the selection of academics based on an academic decision. The experts appreciate the opportunities provided to staff to improve their teaching skills.

Facilities

The facilities of the university are appropriate for sustaining the teaching and the research activities needed. The equipment the experts saw during the site visit was all modern and up-to-date.

The technical equipment, which the experts saw during the site visit, allows a high quality of teaching. The library provides access to relevant literature and journals. The experts appreciate the high level of digitalisation in the library.

Areas for improvement

The staff recruitment procedure happens without involvement of students. In the view of the experts there would be no harm in trying to involve the student union (which is active already at MSMU) so that students' views and learning experiences could become considered, too.

Recommendations

In the view of the experts, the staff recruitment procedure should be made transparent in the quality management system.

3.6 Quality assurance

The criterion "quality assurance" focuses on the internal and external mechanisms used by the institution to monitor and improve the quality of the study programme: how the study programme is designed and implemented and how its improvement is organised.

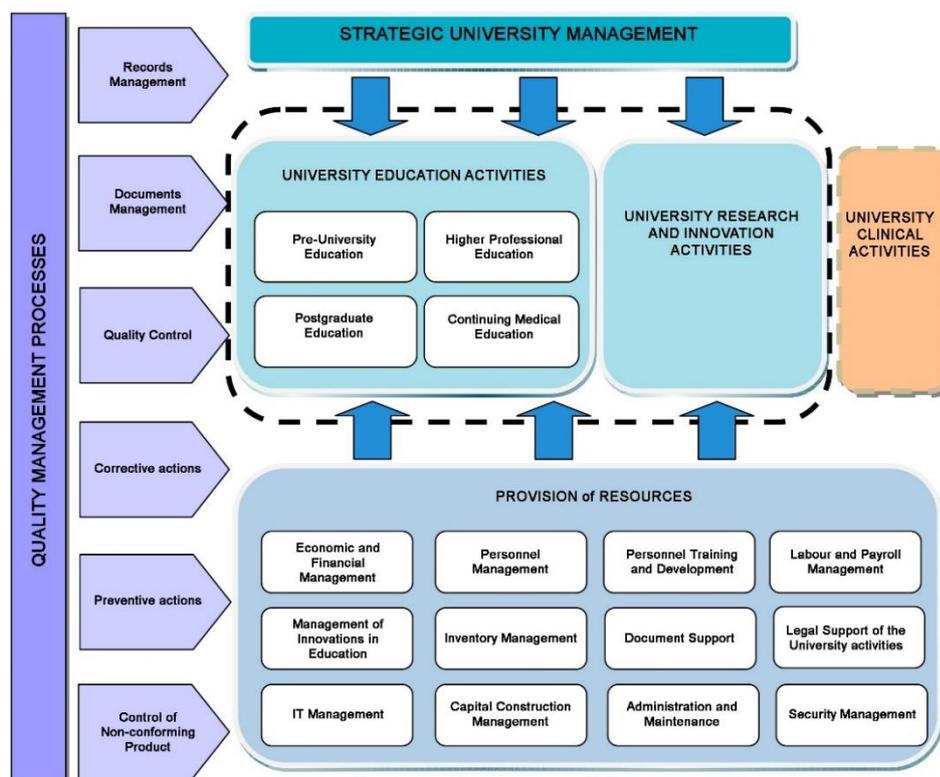
The experts check the quality assurance concept of the programme and what kind of quality assurance processes and instruments for programmes are implemented, which indicators are used to monitor the progress in achieving its objectives and how the institution collects, analyses and uses relevant information about its activities. Moreover, the experts look at whether quality assurance is used regularly and systemat-

ically for quality enhancement, whether the quality feedback loops are closed and how the persons responsible for the programme systematically collect, analyse and use relevant information. It is also checked how stakeholders (students, teachers, administration, employers) are involved in quality assurance and whether relevant programme information for students and prospective students is provided.

Current status

University quality assurance and management

Since 2007, the university quality management system has repeatedly passed external audit processes. In August 2016 the university's ISO certification (ISO 9001:2008 "Quality Management System. Requirements") was reconfirmed.



Tab. 4: Role of quality management in the university system (Source: MSMU)

To ensure high quality of its study programmes the university has built up a hierarchy of responsible persons ("management hierarchy"):

- each university department has a quality representative. They report regularly to the head of the department and to the First Vice-rector – Vice-rector for Innovation and International Affairs who is the university's quality management representative;
- the quality management representative reports directly to the university management;
- the university management (consisting of the Rector, the Academic Council and the Vice-Rectors) take all reports on quality into account and decide about necessary changings.

All university institutions are held not only to improve continuously the competence, qualifications and training of students but also to improve constantly the methodological, methodical, material, technical and information bases of the university itself. According to this aim, all university departments prepare annual progress reports on their improvement. These reports are reviewed during the extended Rector's meeting on the analysis of the quality management system of the university.

Besides, there are scheduled internal (March-April, November-December) and unscheduled internal audits of the university departments during the year.

The basic principles of the quality management system are written down and published (in Russian):

- "The University Policy"
- "The objectives of the quality of education, research, innovation and medical activities at the university in the years 2014-2016"
- "Indicators of quality processes in the years 2014-2016"
- "Plan to achieve the quality objectives of the educational activities, research, innovation and medical activities at the university in the years 2014-2016"
- "University quality guide"

The university tries to involve all participants of the education process, as well as external experts and employers by means of surveys (questioning), independent expert evaluation of the education programme, and inclusion of employers' representatives in the commission of the final (state) examination.

Quality assurance instruments

The university regularly conducts surveys among students, employees and external clients. Besides, a monitoring research system allows to obtain objective data on the dynamics of educational processes, etc. This annually updated data shall create an information basis for the improvement and adjustment of educational, research and medical diagnostic activities of the university. On department level, surveys among students are conducted at least once per semester.

On course level, each course is evaluated by the students at the end of semester in the form of a survey.

The university monitors students' success as one element in judging the appropriateness of teaching methods.

Measures taken

Necessary changes, updates or adjustments of parts of the study programme can be made on the basis of evaluation surveys as well as under consideration of individual assessment of knowledge and achievements. All Changes have to be approved by the university management.

Assessment

The expert team observed a rigorous quality assurance system on the basis of formalised processes. The quality assurance concept seems to be appropriate to assure that the learning outcomes of the study programme are achieved and students graduate. Since there are no drop-outs the system seems to work.

The experts note that the university quality system is documented only in Russian language. Since MSMU conducts the postgraduate programme in English language, all relevant documents should be translated into English. This would also strengthen the internationality of the study programme and help targeting new students from abroad.

In the view of the experts, effectiveness, regularity and systematic character of the quality assurance system cannot be denied. The monitoring system obviously has effects on improving the quality of teaching. Nevertheless, the system appears as basically top-down and hierarchy oriented. The experts would welcome a more participative approach that would bring different views together to improve the system as a whole.

The university monitors its processes by collecting and analysing data widely and constantly. The anonymity of collected data is not in all cases assured. Here the experts would welcome more consciousness in the handling of personal data.

In the view of the experts there are no real feedback loops: students seem unaware of any concrete measures the university or the faculty has taken on the basis of the analysis of feedback surveys on courses.

Areas for improvement

Surveys' results could be more discussed than reported. Students and graduates could be better involved into the programme development process.

Conditions

All relevant documents about the programme quality management have to be translated into English and published online.

Recommendations

The experts recommend the university to bring in more participative elements into the quality management process. E.g. each report given to a responsible unit should be reported back

Especially, students' involvement into quality assurance processes should be improved. A first step could be to invent real feedback loops to student surveys. Due to the small numbers of students it could also be considered to offer feedback discussions to students at the end of each course and each semester in order to give students a clear signal that their opinions are taken into consideration seriously. To guarantee a free and collegial atmosphere these discussions should be explicitly have no consequences either on teacher contracts or students' assessment rates.

4. Assessment

Overall assessment

In the experts' view, the postgraduate clinical residency programme "General Practice (Family Medicine)" shows a clearly defined profile. The programme considers public needs and the special conditions of the Russian health system. The objectives as well as the learning outcomes are described in detail. The intended learning outcomes are concise, clear and aligned with content. They fully correspond to the level of awarded qualification.

The expert group assesses the academic standards of the study programme as being met. The curriculum and the study process are clearly structured and appropriate to reach the intended learning outcomes. The experts appreciate the interdisciplinary approach of the programme, especially the implementation of emergency and disaster medical approaches and the direct involvement of the Chair of Nursing Management.

The study is well organised and clear, and students are offered several support services. The roles and responsibilities in the management are clearly and appropriately structured, staff involved are highly motivated and professional. Nevertheless, the student workload is rather high and should be reconsidered to encourage students to play a more active role in learning and research. In this context, the university should also consider the study period to become more flexible. The experts think that the programme could win if there would be the possibility of an extension from two to three years.

The experts appreciate that the university offers different opportunities to teaching staff to improve teaching methods. Obviously, a variety of teaching methods is used successfully.

The experts note that there is a good connection between teaching and research at MSMU. Scientific methods in theory and practice are provided on a high level, research based training can be observed.

All examination regulations are available online. There are clear and objective regulations for student absence, illness and other mitigating circumstances.

The expert team appreciates the organisation and transparency of assessment in the programme. A wide range of assessment tasks is used, defined assessment criteria exist and are transparent for students as well as for staff. In the view of the experts, the amount and requirements of assessments with regard to the intended learning outcomes are appropriate. They are fully in-line with international practice. According to the experts, the staff undertaking the assessments is also adequately qualified.

The experts appreciate the opportunity of an individual student curriculum that takes into account students' diversity. Besides, the experts note that there is excellent communication between students and teachers: learning groups are small, there seem to be lots of formal as well as in-formal contacts between teachers and students. The students the expert team could interview were very positive against the good organisation and atmosphere at MSMU.

Since the university gets financed directly by the Russian government there seem to be no financial difficulties. In the view of the experts, financial management is professional.

The facilities of the university are appropriate for sustaining sufficient teaching and research activities. The technical equipment, which the experts saw during the site visit, allows high quality of teaching. The library provides access to relevant literature and journals. The experts appreciate the high level of digitalisation in the library.

The expert team observe a rigorous quality assurance system on the basis of formalised processes. The quality assurance concept seems to be appropriate to assure that the learning outcomes of the study programme are achieved and students graduate. Since there are no drop-outs the system seems to work. Nevertheless, there should be invented more participative elements into the process of quality assurance. The experts experienced that – besides the official reports and surveys – staff as well as student have a lot of experience and ideas for the further improvement to tell that is worth to listen to.

Overall, the expert team assesses the Postgraduate Clinical Residency Programme in General Practice (Family Medicine) as solid. The academic standards of the study programme are met.

Results of the assessment

Assessment grades

No	Assessment criteria	Assessment
1	Programme profile	A
2	Curriculum <i>Conditions:</i> The students' workload should be reviewed to give students more free space for specialisation and research activities. MSMU should strengthen student research activities to ensure research to be conducted by students. Research should become a component of successful study assessment.	B
3	Student assessment	A
4	Organisation of the study programme	A
5	Resources	A
6	Quality assurance <i>Condition:</i> All relevant documents about the programme quality management have to be translated into English and published online.	B

Assessment levels

Level	Assessment	Description
A	Passed.	The programme fulfils or exceeds all criteria. All activities are in line with the profile and objectives of the programme and provided at a high academic level.
B	Passed subject to conditions	The programme does not fulfil some relevant criteria. However, the institution should be able to remedy the shortcomings within nine months after the assessment.
C	Suspension of the accreditation procedure	The programme does not fulfil relevant criteria, but it is likely, that it will be able to remedy the shortcomings within 18 months after the assessment. The HEI may apply for a resumption of the accreditation procedure.
D	Failed	The programme does not fulfil relevant criteria, and is not expected to be able to meet all assessment criteria within 18 months' time.

5. Statement of the university to the recommendations and conditions

1. Programme profile

Recommendation: The experts recommend to reconsider the defined learning outcomes with regard to a level more appropriate to higher academic education.

At the present time, the Ministry of Health of the Russian Federation is revising the existing Federal State Education Standards for Higher Education (FSESHE). The revised part of the FSESHE contains:

- enhanced requirements to the learning outcomes of a residency program specifically pertaining to professional competences based on relevant professional standards depending on a qualification level;
- an extended list of soft skills in the fields of systems and critical thinking, development and implementation of projects, team work and leadership, communication, self-organization and self-development (incl. own health protection);
- a new list of general professional competences for preventive, management and pedagogic activities.

The Basic component of the “Unit 1. Disciplines (Modules)” of the Program Curriculum will include modules in communicative skills, acute management, palliative care.

Beyond that, the FSESHE draft provides for the education period increase for some specialties up to 3-5 years.

Recommendation: If the university wants to attract more applicants from abroad the programme’s international visibility should be improved. One step could be building up a website with all relevant information on the programme in English language.

For the purpose of improving the Program’s international visibility and attracting more students from abroad, the University will continue to develop the English-language version of its website and program-dedicated webpages in particular.

Recommendation: Due to the growing importance of general practitioners for society the number of study places should be remarkably increased.

Upon **evalag** recommendations and due to the growing importance of general practitioners for society, the University is planning to increase the number of study places up to 12 in 2017, and up to 25 in 2018.

2. Curriculum

Recommendation: Alumni and more general practitioners from the field should become involved in curriculum design so that their practical experience would become considered. Furthermore, alumni could show possible future fields of work to applicants and new students.

With regard to the recommendations of the expert group, the University plans to organize participation of students in curriculum formation within sections of the “Unit 1. Disciplines (Modules)” and “Unit 2. Practices” via their participation in the meetings of the University Educational and Methodological Council which reviews contents of the program and its curriculum. The program curriculum design also involves members of medical societies and professional organizations of the relevant profile, including members of the Association of General Practitioners and the University alumni.

Recommendation: The university should identify and explicitly name soft skills developed on the programme as these are of importance for medical practitioners.

Please, see the first paragraph concerning the soft skills. The University also plans to introduce a mandato-

ry discipline “Communicative skills” to the “Unit 1. Disciplines (Modules)” which will result in development of a soft skill in the field of communication – ability to build professional interaction adjusted for social and cultural peculiarities of colleagues and patients with the following skills:

1. Ability to use modern communicative technologies in both native and foreign languages for academic and professional interaction;
2. When communicating with colleagues:
 - ability to defuse conflicts,
 - ability to keep positive thinking,
 - orientation towards a result,
 - ability for efficient team-work,
 - stress-resistance, stress management techniques,
 - politeness, kindness,
 - ability to competently express your opinion in oral and written forms,
 - ability for business writing and official documentation;
3. When communicating with patients:
 - ability for empathy, congruence, delicacy,
 - ability to form an atmosphere of trust and good feeling,
 - honesty, tact,
 - attentiveness to patients’ personal data,
 - emotional stability,
 - ability to inform patients about any required medical data in a clear manner,
 - ability for awareness-raising work with patients;
4. When communicating with patients’ relatives:
 - - firmness, delicacy,
 - - possession of ethic and deontological principles of communication,
 - - ability to organize and conduct classes with parents of pediatric patients.

Condition: The students’ workload has to be reviewed to give students more free space for specialisation and research activities.

The workload will be reviewed as it is described below in the Organisation of the study programme Section.

Condition: The university has to ensure research to be conducted by students. The experts appreciate the observed student research initiatives and the supporting response by the university. The university has to strengthen these activities and should make research a component of successful study assessment.

To strengthen students’ research activities, it is planned to include not less than 10-credit research work to the “Unit 2. Practice” of the Program curriculum. It will be assessed based on references used, publications in medical journals, and presentations at research conferences.

5. Student assessment

Recommendation: The amount of exams and evaluation should be reconsidered.

At the present time, a system of independent knowledge assessment is being implemented at the University. University management highly appreciates the results of the **evalag** expert assessment of the Program considering number of exams and evaluation and plans to take the recommendations into account within future curriculum reviews.

Recommendation: The university should consider regular measures to improve staff qualification in assessment.

Improvement of faculty qualification is done as often as required for their participation in a competitive selection. Documents of qualification improvement are provided to the University Recruitment Department.

The University Recruitment Department annually coordinates and controls compliance with the plan of faculty qualification improvement.

Currently, preparations are being made for the transition to the accreditation system of the University academic staff.

6. Organisation of the study programme

Recommendation: The workload should be reconsidered and clearly defined.

Upon experts' recommendations, there will be changes in the Program curriculum improving student's workload: amount of classwork will be reduced, and number of hours for research and self-studies will be increased. Total workload per week will be:

Workload, hours per week		Class-work (teacher-assisted)	General workload, hours per week
Classroom studies (lectures, seminars, hands-on trainings)	6	27	54
Practice	21		
Self-study	27		

Recommendation: The university should support students' wishes for staying in contact after graduation. This could be realised by building up an alumni network and by offering further education or scientific events especially for alumni of the residency programme. This could also become a nucleus for a new network between general practitioners, students and scientists. In further perspective, a career center for graduates could be installed.

In 2014 the University established a regional public organization "Association of Alumni of the Sechenov University". Today members of the Association number 215. The Association has held 12 events aimed at further attraction of alumni, development and management of personal and corporate relations, assistance in professional and self-development, efficient use of alumni potential for the purpose of strengthening of the University profile in Russia and abroad. Information about the Association is available at the University website in the Russian language: <https://www.sechenov.ru/univers/structure/other/assotsiatsiya-vypusknikov/>. Soon, it will be also translated into English.

Besides, University students and alumni have complete access to all research and educational events conducted by the University. As of 2016, they are also allowed to additional education programs, including CME programs (<http://edu.rosminzdrav.ru/> - in Russian).

7. Resources

Recommendation: In the view of the experts, the staff recruitment procedure should be mirrored into the quality management system.

Nowadays the University within its quality management system develops procedures of staff recruitment by means of establishing an International recruitment platform (<http://ir-sechenov.ru/>). Portal for career development and employment assistance for medical and pharmaceutical alumni is also at the stage of adaption and testing. It will let potential job seekers form their professional portfolio, become aware of supply and demand at the labor market and will provide opportunity to confirm competences and other.

8. Quality assurance

Recommendation: The experts recommend the university to bring in more participative elements into the quality management process. E.g. each report given to a responsible unit should be reported back.

Education quality management process involves University departments (chairs, institutes). Annually each department prepares its action plan and action report, holds education and methodical conferences/meetings. Action results of each department are included into the General report on QMS analysis by the University management.

Students' opinion on education quality is very important for the University management (rector, vice-rectors, deans of faculties, directors of institutes). The University has implemented and regularly improves a multi-level system for education quality management: peer review of educational materials by external experts, centralized testing, education quality assessment by students, residents, trainees.

Such regular events as the University meetings with students, meetings of student representatives from all faculties, meetings of the University student council result in gathering and considering of opinions and considerations, including those on education process. Comments of the University student council is mandatorily taken into account when approving university local acts.

Taking into account the recommendations of the expert group the University will continue to improve QMS bringing in more participative elements and participants, such as members of professional associations, representatives of employers, University alumni providing wider feedback loops on the results of their work.

Recommendation: Especially, students' involvement into quality assurance processes should be improved. A first step could be to establish real feedback loops to student surveys. Due to the small numbers of students it could also be considered to offer feed-back discussions to students at the end of each course and each semester in order to give students a clear signal that their opinions are taken into consideration seriously. To guarantee a free and collegial atmosphere these discussions should be explicitly have no consequences either on teacher contracts or students' assessment rates.

Each semester University departments conduct survey of each category of students (according to the Decree of the Vice-rector for academic affairs No. 039/P dd. 30.08.2013 "On monitoring of the level of satisfaction of consumers of educational services at the departments"). Results of the surveys are discussed at education and methodical meetings of the departments. In case of considerations or propositions collegial decisions are made. To avoid consequences such surveys are made anonymously after completion of an exam period.

Feedback loops at the University level are conducted according to the article 8.2.1 of the Quality regulations. According to the annual Rector's order "On the study of requirements and satisfaction of consumers of educational, medical services and research works of the University" University consumers are asked to complete relevant questionnaires.

Suggestion of the expert team to conduct discussions with students each year or semester seems very useful and will be discussed by the University management.

Condition: All relevant documents about the programme quality management have to be translated into English and published online.

At the present time QMS documents are in the process of translation into English, and in the future will be published at the English version of the University website.

As long as the University is entitled to develop and approve residency programs independently on the basis of the FSESHE, the institution will be implementing changes to the "General Practitioner (Family Medicine)" residency program in accordance with the standards taking into account the **evalag** recommendations which are much like those standards considered above.

6. Accreditation recommendation of the expert group to the Accreditation Commission of evalag

According to the expert team, the Postgraduate Clinical Residency Programme in General Practice (Family Medicine) meets **evalag**'s criteria for international programme accreditation. Therefore, the team recommends it for accreditation and recommends awarding the **evalag** label for international programme accreditation.

The team recommends the I.M. Sechenov First Moscow State Medical University to consider and implement the following conditions (C) and recommendations (R) in this report to further improve the study programmes.

Programme profile

- R 1** MSMU should reconsider the defined learning outcomes with regard to a level more appropriate to higher academic education.
- R 2** If the university wants to attract more applicants from abroad the programme's international visibility should be improved. One step could be building up a website with all relevant information on the programme in English language.
- R 3** Due to the growing importance of general practitioners for society the number of study places should be remarkably increased.

Curriculum

- C 1** The students' workload has to be reviewed to give students more free space for specialisation and research activities.
- C 2** MSMU has to strengthen student research activities to ensure research to be conducted by students. Research should become a component of successful study assessment.
- R 4** Alumni and more general practitioners from the field should become involved in curriculum design so that their practical experience would become considered. Furthermore, alumni could show possible future fields of work to applicants and new students.
- R 5** MSMU should identify and explicitly name soft skills developed on the programme as these are of importance for medical practitioners.

Student assessment

- R 6** The amount of exams and evaluation should be reconsidered.
- R 7** MSMU should consider regular measures to improve staff qualification in assessment.

Organisation of the study programme

- R 8** The workload should be reconsidered and clearly defined.
- R 9** MSMU should support students' wishes for staying in contact after graduation. This could be realised by building up an alumni network and by offering further education or scientific events especially for alumni of the residency programme. This could also become a nucleus for a new network between general practitioners, students and scientists. In further perspective, a career centre for graduates could be installed.

Quality assurance

- C 3** All relevant documents about the programme quality management have to be translated into English and published online.
- R 10** The staff recruitment procedure should be made transparent in the quality management system.
- R 11** MSMU should bring in more participative elements into the quality management process. E.g. each report given to a responsible unit should be reported back.
- R 12** Students' involvement into quality assurance processes should be improved. A first step could be to establish real feedback loops to student surveys. Due to the small numbers of students it could also be considered to offer feed-back discussions to students at the end of each course and each semester in order to give students a clear signal that their opinions are taken into consideration seriously. To guarantee a free and collegial atmosphere these discussions should be explicitly have no consequences either on teacher contracts or students' assessment rates.

7. Accreditation decision of the evalag Accreditation Commission

7.1 Decision

At its meeting on 27 June 2017, the **evalag** Accreditation Commission decides with one abstention to accredit the Postgraduate Clinical Residency Programme in General Practice (Family Medicine) at I.M. Sechenov First Moscow State Medical University with the conditions (C) and recommendations (R) mentioned in Chapter 6.

7.2 Compliance with the conditions

I.M. Sechenov First Moscow State Medical University submitted the documents in due time to prove compliance with the conditions. These were forwarded to the expert team with a request for comments. Thereafter, according to the experts' recommendation, the **evalag** Accreditation Commission considers all requirements fulfilled (as from 14 July 2018).

C 1 The students' workload has to be reviewed to give students more free space for specialisation and research activities.

Students' workload has been reviewed increasing a share of self-studies from 33% to 50% of the total workload due to decreasing the number of contact hours (lectures, seminars and practices). The above has given students more free time for specialization and collecting information for their research activity.

Fulfilled.

C 2 MSMU has to strengthen student research activities to ensure research to be conducted by students. Research should become a component of successful study assessment.

To strengthen student research activities, the *variable practice* of the unit 2 "Practices" of the curriculum was replaced with the *research activity* in the amount of 9 credits which allows students to conduct research appropriately (Annex 2). The research activity part results in a final assessment in the form of a scientific report.

Fulfilled.

C 3 All relevant documents about the programme quality management have to be translated into English and published online.

All relevant documents about the programme quality management have been translated into the English language and published online: https://www.sechenov.ru/eng/regulatory-documents/?clear_cache=Y

Fulfilled.

Annex 1: Site visit schedule

Sunday 12th of March - Arrival of expert panel and preparations

18:00	Internal meeting of expert panel, review of site visit plan
20:00	Dinner

Monday 13th of March - First day of site visit

8:20-8:45	Meeting at the hotel reception Going from the hotel to the university campus
8:45-9:00	Welcoming by representatives of the MSMU
9:00-10:00	Meeting with First Vice-Rector Vice-Rector for Innovation and International Affairs
10:00-11:00	Meeting with Vice-Rector for Academic Affairs
11:00-12:00	Meeting with Dean of the Faculty of Medicine, Dean of the Faculty of Nursing and Psychosocial Work, Director of the Institute of Professional Education, Director of the Institute of Leadership in Healthcare Management
12:00-12:30	Meeting with Head of Study Programme
12:30-13:30	Lunch
13:30-15:00	Campus Tour
15:00-16:15	Meeting with faculty members (teachers)
16:15-18:00	Internal meeting of expert panel: review of first day
18:30	Dinner

Tuesday 14th of March - Second day of site visit

9:00-10:15	Meeting with students
10:15-10:30	Break
10:30-11:15	Meeting with student administration and support services
11:15-12:00	Meeting with Vice-Rector for Academic Affairs and Head of Quality Management
12:00-13:00	Internal meeting of expert panel
13:00-14:00	Lunch
14:00-14:30	Internal meeting of expert panel
14:30-15:00	Closing meeting with the representatives of MSMU and of the study programme
15:00-19:00	Internal meeting of expert panel
19:00	Dinner

Wednesday 15th of March

9:00	Departure of expert panel
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Disciplines of the variable component

7. V.1 Personalized medicine		1,2	3	108	54		4		28	22	54
8. V.2 Неотложная помощь		4	2	72	36		4	32			36
TOTAL			5	180	90		8	32	28	22	90
TOTAL Unit 1			8	288	144		12	60	28	44	144
			42	1 512	756		28	124	260	274	756

10,2%

Unit 2. Practices (in credit units)

1 B Basic component											
9. B.1 Clinical practice	4		63	2 268	1 134		4				1134
TOTAL			63	2 268	1 134		4				1134

2 V Variable component

10. V.1 Research activity	4		9	324	162		4				162
11. V.2 Pedagogic practice	2		3	108	54						54
TOTAL			12	432	216		4				216
TOTAL Unit 2			75	2 700	1 350		8				1350

Unit 3. Final (state) assessment (in credit units)

1 B Basic component											
12. B.1 Final (state) assessment			3	108	6		6				102
TOTAL			3	108	6		6				102
TOTAL Unit 3			3	108	6		6				102
TOTAL			120	4 320	2 112		42	124	260	274	2 208
Years											
Semesters											
Exams											
Pass / Fail exams	2										
Assessment of practical skills	3										
Contact hours per week											
Hours per week											