

# REPORT

the External Expert Panel's assessment of conformity to standards of institutional accreditation of the Federal State Budgetary Educational Institution of Higher Professional Education "Kazan State Medical University" under the Ministry of healthcare of the Russian Federation ("Kazan State Medical University", Russian Ministry of health) for compliance with the Independent Agency for Accreditation and Rating accreditation standards criteria related to the international accreditation procedure of medical education organizations (WFME/AMSE based) for the period December 2-4, 2019, Kazan city

## INDEPENDENT ACCREDITATION AND RATING AGENCY

External Expert Panel

To the Accreditation

Council of the IAAR



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Kazakn city «December 4, 2019

#### (I) LIST OF SYMBOLS AND ABBREVIATIONS

ADSL – Asymmetric Digital Subscriber Line

ASAS - Assessment of SpondyloArthritis International Society

ERP - Enterprise Resource Planning

IFMSA – International Federation of Medical Students Associations

KSMU - Kazan State Medical University

PEST analysis – A method of strategic planning (Political, Economic, Social, and Technological aspects)

SWOT analysis – A method of strategic planning (Strengths, Weaknesses, Opportunities, Threats)

TAMSA – Tatarstan of Medical Students Association

ABIS - Automated library information system

Unfulfilled Program Requirements – UPR\_

AMS – Administrative and managerial staff

AED – Administrative and Economic Division

GRS – Grade-rating System

HAC – Higher Accreditation Commission

IBD – Inflammatory Bowel Diseases

HTMC - A High - tech Medical Care

HE – Higher education

WHO – World Health Organization

University – Higher education institution

SAU – State Autonomous Healthcare Institution

SAS – State academic scholarship

SFC – State final certification

SRI - State research institution

SCS – State social scholarship

SEC – State Examination Commission

Dr. Biol. Sc. – Doctor of Biological Sciences

Dr. Med. Sc. - Doctor of Medical Sciences

Dr. Ped. Sc. – Doctor of Pedagogical Sciences

Dr. Polit. Sc. – Doctor of Political Sciences

Dr. Philol. Sc. - Doctor of Philology

Dr. Chem. Sc. – Doctor of Chemical Sciences

Dr. Econ. Sc. – Doctor of Economic Sciences

CPE – Continuing Professional Education

CPP – Continuing Professional program

USE – Unified State Exam

CU - Credit Units

MN – Malignant neoplasms

Ph.D in Biol. Sc. – Ph.D. in Biological Sciences

Ph.D. in Med. Sc. – Ph.D. in Medical Sciences

Ph.D. in Ped. Sc. – Ph.D. in Pedagogical Sciences

Ph.D. in Phys., Math Sc. - Ph.D. in Physical and Mathematical Sciences

Ph.D. in Physch. Sc. – Ph.D. in Psychological Sciences

Ph.D. in Phil. Sc. - Ph.D. in Philological Sciences

LR – Local regulations

MPI – Medical and preventive institutions

MH – Ministry of health

MEO – Medical Education Organization

MHI – Municipal health care institution

IFMSA - International Federation of Medical Students' Associations

RL – Research laboratory

R&D - Research work

RC – Research center

CME – Continuing medical (pharmaceutical) education

IAEQ - Independent Assessment of the Education Quality

SPW – Scientific and pedagogical worker

HL – Health Limitations

DPE - Department of pre-University education

PPEP – Principle professional educational program

OSCE – Objective structured clinical examination

HSC – Health and sports center

IC – Interim Certification

ISAS – Increased state academic scholarship

PE – Postgraduate education

SMC – Specialized methodological commissions

PHC - Primary health care

TS - Teaching Staff

PFEO – Plan of financial and economic operations

RAS – Russian Academy of Sciences

RSCI - Russian Science Citation Index

RCH – Republican clinical hospital

RMACPE – Russian Medical Academy of Continuing Professional Education

CWP – Course Working Program (modules, practices)

RSFSR – Russian Soviet Federative Socialist Republic

RT – Republic of Tatarstan

RF – Russian Federation

SSC - Student scientific club

SSS – Student scientific society

QMS – Quality Management System

SVE – Secondary vocational education

SRW – Independent student's work

SSC – Student Sports Club

TAMS – Tatarstan Association of Medical Students

TCMIF – Territorial Compulsory Medical Insurance Fund

TSS – Training and support staff

ASCAG – Augmented specialties and course areas groups

SG – Study Guide

EMM – Educational and methodological management

University – Kazan State Medical University of the Ministry of health of the Russian Federation

AC – Academic Curriculum

FSBI – Federal State-Funded Educational Institution

FSES – Federal State Educational Standard

FL - Federal Law

AFF – Appraisal Facilities Fund

ATPTF – Faculty of advanced training and professional retraining of specialists

FEMA – Federal Educational and Methodological Association

CND - Chronic non-communicable diseases

CMER - Center for Medical Education Research

CRL - Central Research Laboratory

CPS – Center of Practical Skills

ECG - Electrocardiography

ESP - E-Student Portfolio

UNESCO - United Nations Educational, Scientific and Cultural Organization

#### (II) INTRODUCTION

Under the IAAR order No. 113-19-OD dated 25.10.2019, the Kazan State Medical University of the Ministry of health of the Russian Federation (Kazan, Russian Federation) engaged in higher, postgraduate education was visited by an External Expert Panel (EEP) during the period of **December 2-4, 2019.** The **IAAR** conducted institutional accreditation procedure. The panel's composition:

- 1. Panel's Chair **Janis Zalkalns**, Ph.D. in Medicine, Professor, Riga Stradins University (Riga, Republic of Latvia)
- 2. Expert **Valentina Markova**, Ph. D., Associate Professor, Saint Petersburg State University of Chemical and Pharmaceutical Sciences, Ministry of health of Russia (Saint Petersburg, Russian Federation);
- 3. Expert **Bauyrzhan Omarkulov**, PhD, Associate Professor, NJSC "Medical University of Karaganda" (Karaganda, Republic of Kazakhstan);
- 4. Employer **Gulnaz Badrutdinova**, Autonomous Public Health Care Institution "City Clinical Hospital No. 7 of Kazan" (Kazan, Russian Federation);
  - 5. Student **Elvira Kadyrova**, Kazan State Medical Academy (Kazan, Russian Federation);
- 6. Observer from the Agency **Aigerim Aymurzieva**, Head of medical projects of the Agency (Nur-Sultan, Republic of Kazakhstan).

#### (III) INTRODUCTION TO EDUCATIONAL ORGANIZATION

Under the Charter approved by order of the Ministry of health of the Russian Federation No. 401 dated 23.06.2016, Federal State-Funded Educational Institution of Higher Education (FSEIHE) Kazan State Medical University is a Federal state budgetary educational institution of higher education that implements study programs of higher, secondary general, secondary vocational education, additional educational programs, as well as the main professional educational programs of postgraduate medical and pharmaceutical education.

The establishment date of the University is May 14, 1814, when the first meeting of the Council of the Medical Department, Imperial Kazan University took place.

By resolution of the Council of People's Commissars of the RSFSR dated 05/11/1930, No. 132, the educational institution receives the status of an independent institute with medical and sanitary-hygienic faculties. Later faculties were opened: pediatrics (1932), dentistry (1956), pharmacy (1975), postgraduate education (1993), social work (1991) and management and higher nursing education (1994), work with international students (2014) and biomedical (2014). In 2011, the Kazan Medical and Pharmaceutical College was added to the University.

Currently, the University implements educational programs of higher education: bachelor's degree - 3 programs; specialty - 7 programs; master's degree - 1 program; training of highly qualified personnel for residency programs - 44 programs; training of highly qualified personnel in postgraduate studies – 39 programs; secondary vocational education – 5 programs; secondary general education (pre-University training); additional educational programs (professional retraining, advanced training).

The University operates in accordance with the principles of the Bologna system: 1) two-tier system of education – graduate studies (6 years of study), bachelor (4 years), residency (2 years), postgraduate (3 years), master (2 years); 2) uses a credit system (credit points – c.p.) of workload – the complexity of the specialist program, in general, is 360 c.p. including 60 s.e. for one academic year; 3) has a "Rating system of students performance" based on accounting both final summative and formative (during learning) assessments.

In 2013, the educational program "Medical care" (060101.65) was successfully accredited under the public and professional accreditation procedure of the National Accreditation Council "National center for public and professional accreditation".

In 2017 the University received institutional accreditation from the Royal College of physicians and surgeons of Canada, and in 2019 – accreditation of the residency program "Internal diseases". EP "Medical care" received a certificate of state accreditation No. 3112 dated May 15, 2019.

FSEIHE Kazan State Medical University of the Ministry of health of Russia is an open University: every fifth student is a foreign citizen; every fourth student is from the regions of Russia. The University educates citizens of 50 countries and students from more than 40 regions of the Russian Federation. The University's Student Association is a member of the International Association of medical students (IFMSA), a participant in the Global health program.

The University is proactively involved in the international system of medical education. International cooperation is one of the priorities of strategic development. Currently, the HEI has cooperation agreements with 40 foreign partners, and joint projects are being continuously implemented with leading universities in the USA, France, Japan, Great Britain, and Ireland, as well CIS countries. During the reporting period, new cooperation agreements were signed with Trinity College Dublin (Ireland), Niigata University Medical School (Japan), University of Nebraska Medical Center (USA), Tashkent Medical Academy, Tashkent Pediatric Medical Institute, and Andijan State Medical Institute (Uzbekistan).

Kazan State Medical University of the Ministry of health of the Russian Federation is the leading scientific school in Russia and engaged in current research. The University has 58 research schools.

The University is the founder of two journals reviewed by the HAC: "Kazan Medical Journal", "Neurological Bulletin". The impact factor of the Kazan Medical Journal in the RSCI database increased to 0.401; the Neurological Bulletin - to 0.248. The University has 3 dissertation councils for the defense of dissertations for the degree of Ph.D. and doctor of science.

Only in 2017-2018, 1126 scientific articles were published in peer-reviewed journals, 398 - in journals of the international citation databases Scopus and Web of Science, in HAC recommended

journals - 525, which is significantly higher than in previous years. The citation rate of University staff publications has significantly increased, and the h-index according to the RSCI scientometric database has risen to 67 (in 2017 - 58). Hirsch indices of international databases Web of Science - 26, Scopus - 40.

According to the rating results of the Russian HEIs conducted by the European scientific and industrial chamber ARES-2018, the University occupies 31<sup>st</sup> position among Russian HEIs, the fourth – among medical HEIs in Russia, and the second among higher educational institutions of the Republic of Tatarstan.

According to the rating conducted by the Public Chamber of the Russian Federation in cooperation with the SRI "Higher School of Economics", the University ranks 21-28 among all HEIs in the Russian Federation and first among HEIs in the Republic of Tatarstan.

The University took the 49th position among Russian HEIs according to the third international rating "Three missions of the University" Rating Review. This year, the rating includes 1200 educational institutions from 79 countries.

In November 2010 the quality management system (QMS) of the University has passed the certification procedure for compliance with the GOST R ISO 9001-2008 standard. The certification body - the Academy of standardization, metrology and certification - issued a Certificate (reg. no. ROSS RU. IS65.K00085, date of certification 19/11/2010), which certifies: the quality management system for educational, and scientific activities meets the requirements of GOST R ISO 9001-2008 (ISO 9001:2008).

The University is a member of the International Federation of medical students' associations (IFMSA), a participant of the international program "Global Health" in partnership with the University of Vermont and the Western Connecticut Health Network (USA).

The University is a proactive participant in international medical education. The share of international students is 21.46%. The University implements the "Internal Diseases" residency program in accordance with the standards of the Royal College of physicians and surgeons of Canada based on the CanMEDs competencies.

In September 2018 signed an Agreement on joint activities in the field of information-methodical and analytical coverage of health development of the Republic of Tatarstan between the University, the Ministry of health of the Republic of Tatarstan, TFOMS RT, Roszdravnadzor Republic of Tatarstan and Kazan State Medical Academy, (a branch of Federal State Budgetary Educational Institution of Additional Professional Education "Russian Medical Academy of Continuous Professional Education"). Within the framework of the Agreement, a Project office for the development of healthcare in the region was created.

The University sees itself as a University that "provides continuous professional training of specialists in the field of medicine and pharmacy, competitive both in the domestic and international labor markets, able to ... effectively solve issues of its professional self-development".

Federal State Budgetary Educational Institution of Higher Education "Kazan State Medical University" under the Ministry of health of the Russian Federation is located at the address: 49 Butlerova Street, Kazan, 420012, Russian Federation, Republic of Tatarstan.

KSMU operates under the following constituent documents:

- ➤ Charter of KSMU, approved by order of the Ministry of health of the Russian Federation No. 401 dated 23.06.2016;
- Licenses for the right to conduct educational activities issued by the Federal service for supervision of education and science (registration no. 2426 dated 06.10.2016, series 90L01 no. 0009496);
- ➤ Certificate of state accreditation issued by the Federal service for supervision of education and science (registration no. 3112 dated 15.05.2019, series 90A01 no. 0003272).

Table 1. Brief description of the EP

Code and program title	31.05.01 Medical Care
Level	Specialist's Degree Program
Duration, years	6
Quantity, c.p.	360
Mode of study	Full-time
Introduction to educational	The history of the faculty of medicine begins in 1814 since the
organization	formation of the medical faculty of Kazan Imperial University,
	the faculty has trained medical doctors.
	In 1930, by the decision of the Council of People's Commissars
	of the RSFSR as of 05/11/1930, No. 1321, the medical faculty
	was transformed into an independent Kazan State Medical
	Institute, where a medical faculty appeared.
Program Accreditation	Certificate of state accreditation No. 3112 dated May 15, 2019
Requirements for applicants	Document on secondary general education / document on
	secondary professional education / document on higher
	education
Opportunities for further	Residency, post-graduate, master's degree
education	
Qualification	Medical doctor
Hard CED	
Head of EP	Andrey Zefirov, doctor of medical Sciences, Professor,
	corresponding member of the Russian Academy of Sciences, Dean of the faculty of medicine, head of the Department of
	normal physiology
Main regulatory documents	Federal law of 29.12.2012 №273-F3 "On education in the
for the EP preparation	Russian Federation";
for the Er preparation	- Order of the Ministry of education and science of the Russian
	Federation dated 05/04/2017 No. 301" on approval of the Order
	of organization and implementation of educational activities for
_	higher education educational programs – bachelor's programs,
	specialty programs, master's programs";
	- Methodological recommendations for the development of basic
	professional educational programs and additional professional
	programs, taking into account the relevant professional
	standards, approved by the Ministry of education and science of
	the Russian Federation dated 22.01.2015 no. DL-1/05 VN;
	- University Charter;
	<ul> <li>Local regulations of the University</li> </ul>
Main principles of building	<ul> <li>Logical sequence of disciplines in the curriculum;</li> </ul>
EP	- Orientation to achieve the final learning outcomes;
The University infrastru	— Competence approach.

The University infrastructure includes buildings and structures located in Kazan and consists of educational buildings, study simulation dental clinics, simulation center "Educational pharmacy", center of practical skills, simulation center at the Department of obstetrics and gynecology named after Prof. Gruzdeva, training center "Lean technology in health care", dental clinic of the University, the scientific library, the Central scientific research laboratory, Institute of pharmacy, Institute of neuroscience, research and testing center Pharmexpert, the University Museum, recreational sports center, sports camp "Medic" and clinical databases.

The total area of buildings and structures vested in the University on the right of operational management and gratuitous use, used for the organization and conduct of the learning process, accounts for 132,877 m<sup>2</sup>, of which the area of educational and laboratory buildings accounts for 103,587 m<sup>2</sup>.

The total area of educational and research facilities per 1 student (based on the given students' population) vested in the University on the right of operational management and free use equals to 9.26 m<sup>2</sup>.

The total area of the study premises, per student, accounts for 20.08 m<sup>2</sup>.

The total area of the University campus is  $132,877 \text{ m}^2$ , including the teaching and laboratory area of  $103,587 \text{ m}^2$ , living area (dormitories)  $-26,098 \text{ m}^2$ . The total area of 52 clinical bases used in the learning process is  $55,836 \text{ m}^2$ .

The academic buildings and clinical bases of the University have 19 lecture halls equipped with multimedia equipment and other property necessary for educational activities.

An electronic information and educational environment has been created, including an E-library system and an electronic catalog ABIS "IRBIS", external library systems, an educational portal, and an automated information system for managing an educational institution based on 1C:University, educument management system "Practice", testing system EXAM 5.0, official website of the University, reference and legal system "Consultant Plus".

The Library Fund of the scientific library is equipped with printed publications at the rate of at least 50 copies of each of the publications of the main literature and at least 25 additional copies per 100 students in the educational program. The e-library provides simultaneous access to at least 25% of students in the program. Students are provided with full unlimited access (24/7) to the resources of the study portal.

Financial support for the implementation of the course program is rendered in the amount at least equal to the established by the Ministry of education and science of the Russian Federation.

The share of scientific and pedagogical workers engaged in the implementation of an educational program and have an education in the discipline profile is at least 70% of the total number of academic staff with a scientific degree is at least 65%, the share of employees from among the managers and employees of an organization whose activities are related to the course area of the program being implemented is at least 10%.

Available University infrastructure allows to provide all types of educational, laboratory, practical, clinical and research work of students in updated conditions under the requirements of the Federal state budget. One of the University Development Strategy priorities is internationalization. Currently, every fifth student at the University is an international citizen, and every fourth student is from the regions of Russia. The University educates citizens of 50 countries and students from more than 40 regions of the Russian Federation. The share of international students is 21.46%.

As of 01/10/2019, the total number of teaching staff reached 708 people, corresponding to 537.2 wage rates, of which 409 people are main employees, 299 people are external part-time employees. KSMU employs 54 heads of departments, 76 professors, 219 associate professors, 39 senior teachers and 306 assistants. Of the total number of the teaching staff, 149 tutors have Dr. Sc. degree, while 363 are holders of Ph.D.; 98 tutors are holders of the Professor title and 162 are holders of the academic title of Associate Professor.

The University also employs 4 corresponding members of the Academy of Sciences of the Republic of Tatarstan, 3 Academician of the Republic of Tatarstan Academy of Sciences, 1 academician of the Russian Academy of Sciences, 1 corresponding member of the Russian Academy of Sciences.

The teaching staff as of 01/10/2019 was represented by 423 women (59.7%) and 285 men (40.3%). The average age of the teaching staff for the 2018-2019 academic year corresponds to 50.5 years.

The training and support staff (TSS) totaled 289 people.

Representatives of the University faculty are members or experts in various councils and commissions established by the Ministry of health of the Russian Federation, the Ministry of health of the Republic of Tatarstan, the Ministry of education and science of the Republic of Tatarstan (Public Council, Council of Rectors, profile commissions, specialized commissions, certification commissions, etc.), etc.

The University has teaching staff for all course specialties and languages of instruction.

#### Research projects

The University conducts research in the field of basic and applied medicine, including clinical trials, both at the national and international scopes. Research and teaching staff in 19 scientific

laboratories, Central research institutes and institutes of Neuroscience and Pharmacy, as well as at departments, within the framework of national and international projects are engaged in research. Scientific research in the field of medicine is also a priority for KSMU in accordance with the provisions of the University's development Strategy for the period up to 2020 and Programs for the development of medical and pharmaceutical education in the Republic of Tatarstan for the period 2009-2020.

The University is the only Russian participant in the Global health program, implemented jointly with the University of Vermont, the Western Connecticut Health Network (USA), Makerere University (Uganda) and the University of Iberoamerica (Dominican Republic). Within the framework of this program, foreign clinical internships of students and employees of the University, educational programs of Professor M. Sadig on biostatistics and tropical medicine at the University are held annually. Over the past 5 years, 17 young clinicians and students have received a scholarship to complete a 6-week clinical internship in Uganda and the Dominican Republic. Every year, several students of medical schools in the United States (Ross University, University of Vermont) undergo 6-week clinical electives at the University. In general, over the past 5 years, 48 people from among students, teachers, young scientists and representatives of the administration took part in exchanges under this program between the University and international partners.

Every year, employees and students of the University become grant holders under the Republic of Tatarstan State Government program "Algarysh". Over the past 5 years, 45 representatives of the University have completed internships and training at the leading medical schools and clinics in the USA, Canada, Germany, France, Great Britain, and Russia. In addition, during the same period, the University received 10 grants for the implementation of innovative educational programs led by leading international scientists from the United States, France, Ireland, Poland, and Great Britain.

In 2014-2016 the University, supported by the grant under the Republic of Tatarstan President, held a competition for the development of innovative medical, scientific, and pedagogical technologies in leading scientific and educational medical centers. The winners of this competition were 22 young scientists and University teachers who have undertaken internships in the United States, Great Britain, Israel, Sweden and other countries.

The University implements joint research projects with international partners, in particular: a) with the University of Salerno and the University of Reading ("Development of controlled methods of drug delivery"); b) in cooperation with the Medical University of Karaganda ("Clinical and physiological justification for the role of serotonin in the development of pulmonary hypertension in young children"); C) with the scientific and medical center "Asklepios-Med" ("Study of the mechanisms of pathogenesis and developing treatments for neurodegenerative diseases"); d) with the National Institute of Occupational Safety and Health of the United States ("Study of the toxicity of carbon nanotubes"); e) with the Niigata University ("Gene-cell therapy for Alzheimer's disease); e) with the University of Pittsburgh and the University of Nevada ("New molecular targets for the development of cancer therapy"); g) with the Stanford University ("Study of the linguistic features of hallucination formation in patients with mental illness").

The results of the University and international research are implemented in medical education by including them in the University curriculum and teaching materials used in the learning process (textbooks, manuals, collections, national clinical protocols, etc.).

#### (IV) DESCRIPTION OF THE EEP VISIT

The EEP work was implemented based on the Program of the expert panel visit on institutional accreditation of educational programs to KSMU during the period from **December 2-4, 2019.** 

Under the visit program special interview meetings with the Rector, Vice-rector for educational activities, scientific and innovative work, regional health development, educational programs of residency and postgraduate studies, general issues, deans of the faculties of medicine, pediatrics, preventive medicine, public health, dentistry, pharmacy, medical biochemistry; medical biophysics, social work, higher nursing education and faculty of international students, postgraduate education, heads of structural divisions, heads of departments, teachers, students, graduates and employers were organized to collect objective and adequate information about the quality of educational programs and the entire infrastructure of the University, as well as to clarify the content of self-assessment reports. A

total of 314 people was involved in the meetings.

Based on the anonymous online survey results, both teachers and students are satisfied with the working and learning conditions at this HEI. 104 people from the KSMU faculty staff and 115 students took part in the anonymous survey.

Table 2. Information about the categories of meetings participants

Category of participants	Quantity
Rector	1
Pro-rectors	5
Deans	8
Heads of structural divisions	25
Head of departments	59
Teachers	63
Students, residents, postgraduates, resident physicians,	111
doctoral students	
Graduates	21
Employers	21
Total	314

In the process, the EEP conducted a visual inspection of the University infrastructure: the Museum of history of the Kazan State Medical University, simulation - accreditation center of obstetrics and gynecology, center of practical skills, the elements of an accessible environment in the laboratory building 1, auditorium ("Volunteers"), training rooms ("Lean technology"), computer labs, research library (E-library system, reading room), dining room, and dormitories. The documentation at the University departments was also studied.

The practical training premises and departments were visited:

- State Autonomous Healthcare Institution "Republican Clinical Hospital" under the Ministry of health of the Republic of Tatarstan, Department of hospital therapy, Head of the Department: Professor Abdulganieyva D.I. Based on discussions with the Deputy Chief Physician for medical work Guslyakova R.P., positive feedback about the teaching staff and students, as well as the Department residents was received.
- State Autonomous Healthcare Institution "Children's Republican Clinical Hospital" under the Ministry of health of the Republic of Tatarstan, Department of Hospital Pediatrics, Head of the Department, Professor Sadykova D.I.
- City polyclinic No. 21, Department of polyclinic therapy and General medical practice, Head of the Department, Associate Professor Sineglazova A.V.
- State Autonomous Healthcare Institution "Interregional clinical and diagnostic center", Department of cardiovascular and endovascular surgery, Head of the Department Jorjikia Roin; Deputy Director General, Muharyamov M.N.

Interviews were conducted with 12 teaching staff of clinical departments and 8 employees of clinics. During the conversation, it was confirmed that employers are proactively engaged in the development of educational programs and were involved as reviewers. Employees of departments work intensively in clinics as residents, heads of departments, and heads of departments are the chiefs of specialized clinics.

There is a close relationship between the University and medical organizations. Social partnership in the field of medical education is aimed at bringing the level of training of medical personnel closer to the needs of employers. In order to strengthen and develop social partnership with medical organizations and the University, joint work is being carried out to train qualified specialists with subsequent orientation for training in residency.

When visiting the above-mentioned clinical bases experts got acquainted with infrastructure of MOs, visited the administrative block, departments in which the students take clinical and professional

practice.

Members of the EEP met with the Directors of clinics, heads of the Departments who explained the requirements for students and the process of practical training. It should be noted that clinical bases provide effective and high-quality professional practice, take an active part in the assessment of students' knowledge, skills and abilities.

The activities of clinical departments are implemented in accordance with cooperation agreements with all clinical bases, according to which the University undertakes the following obligations: daily morning conferences with hospital staff to discuss patients in serious conditions; the organization of clinical, morphological conferences; analysis of case histories of patients in serious conditions or passed away; weekly clinical patients round for advice, regardless of the availability of correspondent requests; mobilization of employees of the Department for the full performance of their medical functions, including urgent care in other institutions; organization by the head of the clinic and teachers of patient visits in the hospital.

Heads of clinical departments are the chiefs (heads) of clinics of the main clinical bases of the University. Representatives of the teaching staff are the main outsourced experts of the Volga Federal district for seven specialties (endocrinology, cardiology pediatric, adult cardiology, obstetrics and gynaecology, hygiene of children and adolescents, infectious diseases, neurology); in 23 disciplines are the main outsourced experts at the Ministry of Health of the Republic of Tatarstan. The main functions of the chief outsourced experts are to analyze and evaluate service activities, determine the development strategy for the service, improve procedures and standards of medical care, participate in the development of clinical recommendations for the profile specialty, expert work, methodological and practical assistance in the relevant areas, etc.

The departments have in their possession teaching guides for disciplines, journals, work plans of SRS and scientific papers (monographs, guidelines, etc.) of the teaching staff of departments. Interviews were conducted with students of medical, pediatric, dental, pharmaceutical, medical and biological faculties. Students' feedbacks about teachers, clinical bases, and teaching methods are positive.

Based on the results of the study and audit of the submitted documentation that meets the criteria of the Standard, it should be concluded that the clinical and industrial work placements of students are conducted at sufficiently high level. The latter is also supported by the availability of the following documents: The Regulations on the students work placements, including agreement templates, a sample non-reimbursable work placements no-objection statements from the head of a medical or pharmaceutical organization addressed to a rector.

The University has submitted for review the Agreement no. 28R dated 07.12.2016. "On the organization of practical training of students, to be concluded between an educational or scientific organization engaged in production and manufacture of drugs, a company engaged in manufacturing of medical products, pharmaceutical organization, forensic institution, or other organization carrying out activities in the field of health" between KSMU (Vice-rector Shulayev A. V.) and State Autonomous Republic of Tatarstan Institution of health "Regional clinical hospital under the Republic of Tatarstan Ministry of Health" (chief doctor Garifullin R.F.). The Agreement lists the course titles by level of education, number of students, name of the responsible tutors of clinical departments with the mentioned specialty, the date of expiry of the specialist certificate, the list of medical equipment used by the parties (for instance, ultrasound machine, doppler, angiography, etc.). In agreements with clinical bases not only the venues and spaces that will be used for the learning process are listed, but also the necessary medical and laboratory equipment, tools and devices. The University, in cooperation with the clinical bases, works to ensure that the equipment and material procurement for the educational process at the clinical bases meets the requirements of the Federal State Educational Standards.

The following have also been submitted for review:

- The Agreement no. 1\01 dated 24.05.2018 "On the organization and conduct of industrial (training) work placements of KSMU students" between KSMU and SCH -7 (Delyan A.M.).
- The Agreement no. 2\01 dated 15.05.2018 "On the organization and conduct of industrial

- (training) work placements of KSMU students" between KSMU and SCH -12 (Akhmetov R.N).
- The Agreement no. 5\01 dated 05.06.2018 "On the organization and conduct of industrial (training) work placements of KSMU students" between KSMU and RCH (Shavaliev R.F.).
- The Agreement no. 7\01 dated 26.02.2018 "On the organization and conduct of industrial (training) work placements of KSMU students" between KSMU and RSOC (Khairullina I.I.).
- The Agreement no. 10\01 dated 19.04.2019 "On the organization and conduct of industrial (training) work placements of KSMU students" between KSMU and Bugulminskaya Central District Hospital (Vildanova I.Kh.)

Related to the industrial work placements the following documents were submitted: a diary (report), a record book of skills and abilities, and a letter of recommendation. Completion: interim assessment: pass, pass with the assessment. Certification is carried out by a Commission, the composition is approved by the rector of the HEI, consisting of the heads of the basic institution, heads of work placement from the institution and the HEIs' faculty.

The University has submitted a diary on the clinical practice "Doctor Assistant at children's clinic for students of the 5th year of study at the pedagogical faculty" (Department of Hospital Pediatrics) Nuriyeva Damira, group 2506. Venue: Yoshkor-Olinskaya Children's Municipal Hospital named after L.I. Soyulova DP #3 (Zeytulaeva Yu.V.). Head of work placement from the clinical base - Ivanova V.V. Head from the HEI - Solovyova N. A. The Diary "Physician Assistant pediatric clinic for students of the 5<sup>th</sup> year of study at the Pedagogic faculty" reflected the following topics: diary compilation rules, journaling, coaching for safety, a list of questions to the concluding pretest, the list of mandatory practical skills, the characteristics of the industrial base, indicators of preventive work of the doctorpediatrician of the district (the completeness of coverage of screening tests, an overall clinical examination of the child population, the coverage of the patronage of the children of the first year of life, the proportion of children breastfed for 3 to 6 months.\ and from 6 months to 1 year), the completeness of children's vaccinations, the distribution of children on groups of health), the report of the daily work in the clinic with an indication of the examined children, health and educational work, the progress report, informed consent form, algorithm for the design of primary inspection of the acutely ill in the history of the development of the child, the referral for hospitalization, informed refusal template on hospitalization, prenatal care, primary nursing of a newborn, the shape of the case history, the form of disabled sheet, prescription form, letter of reference from instructors, evaluation of the work placement results by modules and evaluation criteria. Final rating: excellent.

Also the University presented the diary of a student work placement at the faculty of dentistry in the position of an "Assistant dental hygienist", that belongs to the 3rd year student, group No. 4305, Volkov L. A. Placement was at the Kirov Clinical Dental Center, work placement period - 10.06 - 24.06.2019. The diary provides information on the record of the initial safety briefing on the workplace, a summary statement of account for the work of the dental hygienist, consolidated progress report, diary of work, indicating the practical skills, list of master skills gained at the work placement (teaching patients with oral hygiene, the standard method of tooth brushing, preparation of individual program of oral hygiene control, oral hygiene, vital staining of carious spots in the initial form of dental caries, carious polishing out spots in the initial form of caries, the caries system index (CSI), the index definition of hygiene under the Y.A. Fedor - V.V. Volodkina, determination of the Green-Vermillion hygiene index), and finally a letter of recommendation. Final assessment: with distinction.

The diaries provide information about the electronic diary, which is posted on the educational portal (http://www.kgmu.kcn.ru) and the algorithm for filling in the electronic diary.

During a visit to practical bases, and a meeting with the heads of medical organizations and students, the institution has provided evidence of clinical and practical training.

#### (IV) REVIEW OF STRENGTHS/BEST PRACTICES FOR EACH STANDARD

## 6.1. Standard "Mission and outcomes"

- ✓ The development Strategy of KSMU for 2009-2020 was developed and implemented with the engagement of international experts, including World Bank experts.
- ✓ The exact mission statement of the University has been defined, taking into account the history and tradition, aimed at further development of scientific schools, careful and respectful attitude to the heritage. The mission defines a wide range of actions of the University in the 21st century.
- ✓ The vertical of doctor's education and postgraduate lifelong learning is organically harmonized and all conditions are created for continuous lifelong training, both in terms of professional growth and in terms of personal development.
- ✓ The mission reflects all activities of the University: educational, scientific, clinical and promotion of national values.
- ✓ The University provides multi-level educational activities: specialty, internship, residency, doctorate, post-graduate, doctoral and lifelong learning, focused on the final learning results.
- ✓ University education guarantees the training of highly qualified specialists in the field of biomedical, clinical, behavioral and social sciences.
- ✓ Taking into account scientific schools and a number of internationally recognized professors, new approaches to the study of important medical issues are continuously introduced into the educational process.

# 6.2. Standard "Educational program"

- ✓ The content of educational programs (EP) of the University contributes to the development of professional competencies of students and the achievement of learning goals;
- ✓ The University provides both vertical and horizontal harmonization in the learning design;
- ✓ EP uses information technology (Moodle) in the teaching-learning-evaluation process;
- ✓ EP includes achievements in basic biomedical sciences, behavioral, social, clinical sciences, and medical ethics;
- ✓ EP is regularly updated and renewed with new developments that are consistent with medical practice and the health care system;
- ✓ Close contact of the University with clinical bases ensures the availability of direct work with the patient;
- ✓ Students' scientific circles are intensively working at the University, almost all departments conduct scientific research of teachers together with students, and publish joint papers.

## 6.3. Standard "Student Assessment"

- ✓ The existence of internal laws and regulations governing policies and procedures for students' performance evaluation at all levels;
- ✓ Students are guaranteed to receive their assessment results as soon as possible, ensuring constructive and fair feedback.
- ✓ Engaging external examiners, in particular practitioners, for final exams.
- ✓ Systematic survey of students' satisfaction with the assessment system.
- ✓ Annual implementation of innovative educational programs in neurophysiology, nanomedicine and biostatistics.

#### 6.4. Standard "Students"

- ✓ The University has all the necessary conditions and resources for personal development and education of students (dormitories, equipped gyms, amateur clubs, student government).
- ✓ The University runs student support programs (psychological support service, tutors and curators), transfers of successful students who are studying on a paid basis to study at the expense of the Federal budget, and financial support for orphaned students and students left without parental care).
- ✓ There is a continuity of all stages of training, starting from the pre-University stage.
- ✓ The policy of students' representation in the management bodies of the University is

- implemented. Regular assessment of the learning process by students (after completion of the training cycle) directly affects the rating of the teaching staff. Educational programs are adjusted taking into account students' opinion.
- ✓ There is a transparent procedure for students' admission, assessment of academic achievements, including the possibility of appeal, at all stages of students training.

#### 6.5. Standard "Academic staff/Tutors"

- ✓ An effective human resources policy aimed at encouraging and rewarding tutors to develop their experience in education.
- ✓ The availability of strong science schools.
- ✓ A high number of candidates and doctors of science among the teaching staff, an immense teaching experience of the teaching staff.
- ✓ Creation of conditions for continuous professional growth of the teaching staff.
- ✓ Corporate spirit and patriotism of tutors and employees.
- ✓ Involvement of highly qualified experts in practical health care in training.
- ✓ Development of employees, support for their training, ensuring their further professional development (Department of evidence-based medicine, Department of continuous professional development).

## 6.6. Standard "Educational resources"

- ✓ High level of equipment for educational and clinical bases with modern materials and resources.
- ✓ The University provides opportunities for independent training of students, access to educational resources of the educational and clinical center, the library and the Internet.
- ✓ The availability of modern simulation centers at the University allows to eliminate the problems associated with the current lack of training of future doctors as internships.
- ✓ Students are proactively involved in the scientific research work of departments.
- ✓ Sufficient and constantly updated library resources.

## 6.7. Standard "Evaluation of the educational program"

- ✓ KSMU has an academic policy, mechanisms for evaluating the effectiveness and monitoring of the educational program, including all stakeholders, as well as the quality control system that takes into account the requirements for achieving the final results of training and mastering the competencies of graduates and is aimed at the student's progress;
- ✓ Functioning of the medical education research Center, which organizes applied research in the field of education and conducts expert analysis of programs.
- ✓ Sufficient number of research projects (19) in the field of medical education.

## 6.8. Standard "Management and administration"

- ✓ KSMU proactively implements a policy of students' representation and their appropriate participation in all matters related to students.
- ✓ Transparency and competitiveness of KSMU makes it attractive for students, including international students.
- ✓ Professionals and competent managers who are in demand on the labor market and have academic degrees and titles that combine the trinity of science, practice and education.

## 6.9. Standard "Continuous improvement"

- ✓ The mission and final results are adapted to the scientific, socio-economic and cultural development of the society;
- ✓ Availability of the faculty of advanced training and continuous professional growth of teaching staff and employees;
- ✓ The University has received institutional accreditation from the Royal College of physicians and surgeons of Canada;
- ✓ Completion of the specialized accreditation of the "Internal diseases" residency program at the Royal College of physicians and surgeons of Canada in 2019;

- ✓ More than 40 partnerships and cooperation agreements with foreign universities and existing joint educational programs;
- ✓ The University is connected to the largest electronic resources "Cochrane library", "Medicine and healthcare in Russia", Polpred.com, SpringerLink, ELSEVIERSciVerseScienceDirect, SciVerseScopus, Reaxys, EMBASE, EngineeringVillage; BMJ, "ClinicalKey", etc.

## (IV) REVIEW RECOMMENDATIONS FOR QUALITY IMPROVEMENT

#### 6.1. Standard "Mission and results"

✓ Recommendations are unavailable.

## 6.2. Standard "Educational program"

- 1. Develop the Regulations for the formation, selection, and study of elective disciplines (modules) and elective subjects in higher education programs.
- 2. Develop a plan for the development of joint educational programs with international partner universities and ensure its implementation.

# **Area for improvement:**

✓ The curriculum of the EP is subject to dynamic development and introduction of achievements of clinical science and practice.

## 6.3. Standard "Student Assessment"

1. Systematize the use of effective pedagogical technologies in medical education at the departments, such as: problem-oriented training (PBL), team-oriented training (TBL), case-based training (CBL), integrated training, etc.

## 6.4. Standard "Students"

Recommendations are unavailable.

## 6.5. Standard "Academic staff/Tutors"

- 1. Intensify the publication activity of teaching staff in journals indexed in the Web of Science and Scopus database.
  - 2. Continue the practice of improving differentiated remuneration.

## **Area for improvement:**

✓ On a regular basis conduct staff training about the methodology of active teaching methods.

## 6.6 Standard "Educational resources"

1. For further development of the academic mobility of administrative and managerial staff, faculty and students of the University, to develop a program and ensure its implementation via international exchange (training for one academic period in a partner HEI, internships for all these groups).

#### **Area for improvement:**

✓ Contribute to the development of the legislative and regulatory framework, as well as apply to the Government of the Republic of Tatarstan and the Ministry of health of the Russian Federation to create University owned multidisciplinary clinic.

#### 6.7. Standard "Evaluation of the educational program"

- 1. Constantly monitor the labor market, employers' requests and take into account its results when updating and developing educational programs.
- 2. Systematize across all courses and departments the use of innovative teaching methods such as active methods.

# **6.8. Standard "Management and administration" Area for improvement:**

- To increase the competitiveness and efficiency of financial management, it is necessary to achieve sufficient autonomy.

## 6.9 Standard "Continuous improvement"

1. Extension of the infrastructure by establishing the University owned clinic.

## **Area for improvement:**

✓ In order to improve the process of monitoring and evaluation of the educational program, ensure transparency of the examination of the educational program by stakeholders via publication of information on the official website (possibly in a separate section - questions to the questionnaire, suggestions from all participants in the discussion, including independent organizations, and the results of decisions made based on the analysis).

# (III) REVIEW OF RECOMMENDATIONS FOR THE DEVELOPMENT OF EDUCATIONAL ORGANIZATIONS

1. Extension of the infrastructure by establishing the University owned clinic.

Appendix 1

**Conclusion of the self-assessment panel**