ASIIN Seal & AMSE Seal

Accreditation Report

Integrated Academic Studies of Medicine

Faculty of Medicine, University of Belgrade

Version: 20 September 2019

Introduction

This pilot accreditation procedure conducted at the Faculty of Medicine at the University of Belgrade on January 29-30th is one of altogether 5 pilot procedures in various European countries, organized in cooperation between the Association of Medical Schools in Europe (AMSE) and the internationally recognized German Accreditation Agency ASIIN in the period January –June 2019.

The purpose of this common ASIIN-AMSE procedure is to ensure a consistent high quality standard (based on the WFME standard) for Medical Schools and Medical Education in WHO-Europe. This also ensures a good uniform cross-border practice by medical doctors and guarantees a high level of patient safety. In the US, a similar initiative was launched, which differs in that WFME recognizes accreditation agencies that are accredited by Medical Schools according to the WFME criteria. From 2023 on, only graduates in the US can apply for ECFMG certification and practice in the US if they have been trained in a Medical School accredited by such a recognized accreditation agency.

It is before this background that ASIIN has been commissioned by AMSE to conduct this and another four European pilot accreditation procedure, testing the WFME Standards in the process. WFME is using altogether nine criteria in its standards for basic medical education. The rubrics of fulfilment of these criteria foresee so-called “basic standards” as a minimum requirement as well as more challenging “quality development standard” signalling best practice. The experts, who were jointly selected by AMSE and ASIIN have jointly come a conclusion after the onsite visit whether and at which level these nine criteria (and their subsets) have been attained by the applicant program. After completion of this procedure, ASIIN will hand over this accreditation report to AMSE. Its outcomes will be discussed by the AMSE executive commission and a final decision reached, whether the basic and quality development standards of WFME have been met.

It is furthermore subsequently envisaged, that ASIIN in the near future will establish its own Field Committee for medical study programs in which AMSE and other important stakeholders in the medical field will be represented. It is planned that the Standards of WFME at this moment are formally endorsed and used by ASIIN/AMSE audit teams in the future and that an ASIIN label would be delivered in conjunction with the AMSE certificate. This would form a prerequisite to also list accredited medical programs in the “European database of external quality assurance results” (DEQAR).

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A About the Accreditation Procedure

General Data

Website of the Medical School	http//www.mfug.bg.ac.rs/
Faculty/Department offering the Degree Programme	Faculty of Medicine
Name of the degree programme (in original language	Интегрисане академске студије медицине (ИАСМ) за стицање академског назива доктор медицине
(Official) English translation of the name	Integrated academic studies of medicine (IASM) for achieving the academic title Doctor of Medicine

Submission of the final version of the self-assessment report: 11.01.2019 **Date of the onsite visit:** 29-30. January 2019 **at: University of Belgrade, Faculty of Medicine**
Prof. Dr. Dr. Oliver Müller, University of Applied Sciences Kaiserslautern PD. Dr. Alois Palmetshofer, Würzburg University Dr. Thomas Shiozawa-Bayer, Tübingen University Salome Adam, PhD student, University of Zurich
Representative of the ASIIN headquarter: Dr. Iring Wasser
Responsible decision-making committee: AMSE Executive Committee
Criteria used: European Standards and Guidelines as of 15.05.2015 WFME Global Standards for Quality Improvement: Basic Medical Education 2015

B Characteristics of the Degree Program

a) Name	Final degree (original/English translation)	b) Areas of Specialization	c) Corresponding level of the EQF[1]	d) Mode of Study	e) Double/Joint Degree	f) Duration	g) Credit points/unit	h) Intake rhythm & First time of offer
Integrated Academic Studies of Medicine – M.D.	Integrated Academic Studies of Medicine (IAMS)			Full time	No	12 Semesters	360 ECTS	Once per year(offered as MD since 1920)

For the Integrated Academic Studies of Medicine Program (IAMS) at the University of Belgrade, the Faculty of Medicine has presented the following profile in its Self-Assessment Report:

The basic study program goal of the integrated academic studies of medicine (IASM) and prerequisite is to train medical doctors in the implementation of scientific and professional achievements in preventing, diagnosing and treating diseases, as well as promoting a healthy lifestyle, legal and moral values, in accordance with the principles of good scientific and clinical practice.

It includes the basics of measuring biological functions, established facts and data analysis, as well as an adequate knowledge of clinical disciplines and practice that ensures students a coherent picture of medicine and health care from the aspect of preserving and improving health, disease prevention and control, early detection and early treatment of illness, rehabilitation and human reproduction.

The objectives of the study programs are in line with the learning outcomes associated with the Dublin descriptors and are based on the Law on the National Qualification Framework of the Republic of Serbia [Закон о националном оквиру квалификација Републике Србије] (Official Gazette RS 27/2018), which is fully in line with the European Qualifications Framework (EQF). Learning outcomes of IASM enable knowledge, skills and attitudes in various categories such as the integration of basic sciences in medicine, integration of clinical knowledge and skills in patient care, interpersonal relationships and communication skills, professionalism, organization and systematic approach to medicine and continuing education.

[1] EQF = The European Qualifications Framework for lifelong learning

C Analysis and Findings of Peers

1. Mission and Outcomes

Criterion 1.1 Statements of purpose and outcome

The mission of the degree program is described in a brief and concise way. It is well anchored, binding and easily accessible to the public, i.e. to students, teaching staff and anyone else interested. The medical school defines its mission and makes it known to its constituency and the health sector. The mission encompasses the health needs of the community, the needs of the health care system, and other aspects of social accountability. It should take medical research and aspects of global health into account.

The mission statement outlines the aims and the educational strategy resulting in a medical doctor who is competent at a basic level, has an appropriate foundation for a future career in any branch of medicine, is prepared and ready for postgraduate medical training, and committed to lifelong learning.

Evidence

- Mission and Vision Statement
- Rulebook on Organization of Teaching Courses of Integrated Academic Studies of Medicine

Preliminary Assessment and analysis of peers

The Faculty of Medicine (FMUB) in the University of Belgrade is a state institution with a long tradition in education, research, clinical practice and public health. It educates around 70% of all medical doctors in Serbia. Next year it will celebrate its 100th anniversary. FMUB has a mission and vision statement in place, which has last been renewed and endorsed by the General Council of the faculty in spring of 2016.

The **Mission Statement** reads as follows: FMUB accordingly is

“Committed to provide outstanding education, training, research and clinical practice to prepare the future generations of health professionals and support continuing professional development of current workforce for health improvement, accountable health care, applied research and sustainable development of communities.”

With regard to its **Vision Statement,** the faculty aspires to be “a leading Faculty of Medicine in the region, capable for innovation in education and scientific work that are accepted in the international academic area, especially at European universities.” It strives to be “a na-

tionally responsible Faculty of Medicine characterized by a significant contribution to the education of health workforce and to scientific work in Serbia with efficient response to the change and health challenges". Furthermore, it seeks to be "an independent Faculty of Medicine in academic activities, within the autonomy of the University, ensuring stability of conditions for education and scientific work, democratic, responsible and transparent decision-making and implementation made in accordance with the interests of the Faculty's development."

After their discussions and interviews during the onsite visit, the experts concur that the mission and vision statements have been formulated with the input of principal and other stakeholders and is a fair account of the status and aspirations of the faculty.

As medical research and aspects of global health are integral part of the vision and mission statement, the quality development standard of WMFE is fulfilled.

Criterion 1.2 Participation in the formulation of mission and outcomes

The relevant stakeholders were included in the process of formulating and further developing the mission and learning outcomes.

Guiding Questions

- How have the objectives and learning outcomes been developed (regarding launch of the process, procedure, participants?
- Have the learning outcomes of the degree programme been verified within the last few years? If so, for what reasons were adjustments made?

Evidence

- Diploma Supplement with curriculum and the description of learning outcomes
- Module Descriptions available to students at the web site, students' guides and institution' documents (The Statute, Rulebooks)
- Standards from National Accreditation of FMUB
- The Statute of FMBU Articles 109-114

Preliminary Assessment and analysis of peers

The Faculty of Medicine has – in addition to above cited mission and vision statement - also developed a comprehensive list of learning outcomes for IAMS that are presented in the so called "Rulebook on Organization of Teaching Courses of integrated academic Studies of Medicine (IAMS)" in its Article 3, in its yearly "Teaching guides" as well as on the webpage of the faculty. These Learning Outcomes have been discussed and endorsed by the Teaching-

Scientific Council before the first accreditation of the program back in 2009 and since then discussed and renewed, with the latest improvements being implemented in 2016. Adjustments were effectuated to follow WFME standards and provide broader participation in the process.

Concerning the current competence profile of a FMUB graduate/physician after completion the IAMS program, he is capable to:

“apply knowledge of the basic anatomical, histological and functional characteristics of a healthy and diseased organism; apply knowledge about the characteristics of the most important infectious disease agents, as well as the epidemiological characteristics and risk factors of the most significant infectious and non-communicable diseases and conditions; correctly take anamnesis and performs a clinical examination of the patients; recognize and timely reveal the most common and most significant diseases, clinical syndromes and patients' conditions to be managed by the health system; provide help to the patient in urgent condition; apply and/or direct patients to appropriate diagnostic procedures (laboratory and/or clinical) in order to set differential diagnosis; correctly interpret the results of laboratory and clinical trials, as well as the methods of visualization in medicine; determine the therapy and/or referral of patients to the appropriate therapeutic procedure; recommend and manage temporary seek leaves; adequately approach and provide assistance to the patient in the terminal phase of the disease; monitor the state of health and participate in the treatment of acutely and chronically ill patients as part of the team; identify a fatal outcome and write a report; constantly promote health, healthy lifestyle and immunization; recognize and quantify risk factors from living and working environment, which are important for health and provide advice in order to correct risk factors and bad habits; responsibly approach his work in accordance with the medical doctrine; adhere to the principles of decent and adequate communication with both professional colleagues and patients and their families; know and respect ethical and legal principles relevant to medical practice; participate in the activities of the team that forms the basis of modern medical practice, cooperate with other healthcare workers and healthcare associates, as well as with relevant state authorities; participate in the organization of work in health institutions; constantly work on improving his/her competences through continuing medical education and professional development; follow relevant medical and other literature and interpret professional and statistical data; contribute to the continuous improvement of the health care system by giving a critical review of the practice and proposing measures for improvement; last but not least give an example by his/her personality and behaviour, in own personal and professional environment.

Based on these learning outcomes, each compulsory and elective course has its own specific learning outcomes[2]. The representatives of the faculty maintain that the objectives of the study programs are in line with the learning outcomes associated with the Dublin descriptors, the EQF, and the National Qualifications Framework, and accepted by international professional associations like the World Federation of Medical Education (WFME) and the European Association for Medical Education (AMEE).

The experts take note of these intended learning outcomes for IAMS and see them in line with the WFME criteria. The experts at the same time critically note that the learning outcomes as of now have not been empirically tested, as there has not been a consistent and systematic monitoring of the success of graduates on the job market in place. Attempts to establish an alumni database have been made several times in the past without permanent success. Before this background the experts ask that information concerning graduate's qualification profiles and careers path are systematically collected and analysed in order to draw appropriate conclusions as to the qualification profile of the program and the underlying learning outcomes and competence profiles. This is all the more important as the job market for medical doctors in Serbia is currently difficult with many doctors going abroad to find suitable occupation.

Criterion 1.3 Institutional autonomy and academic freedom

The medical school has institutional autonomy to formulate and implement policies for which its faculty/academic staff and administration are responsible, especially regarding design of the curriculum and use of the allocated resources necessary for implementation of the curriculum.

Guiding Questions

- How does the medical school ensure academic freedom for its staff and students?
- In what way is it possible to incorporate new research results into the curriculum?

Evidence

- Extracts from Law on Higher Education and The Statute of FMUB defining institutional autonomy and academic freedom

Preliminary Assessment and analysis of peers

[2] For details, see Catalogue in English: http://147.91.120.118/subjects_catalogue/#p=329

The Self-Assessment Report states that the Medical School at the University of Belgrade has "full institutional autonomy to formulate and implement policies for which academic staff and administration are responsible".

During the on-site visit and during discussion with the faculty leadership, it becomes apparent to the peers, that there are limitations to the validity of this statement. The Serbian system of higher education does not foresee a high degree of autonomy of its universities in the true sense of the world with financial independence and a high degree of self-regulation. Due to state regulations, changes in the curriculum cannot exceed a range of 10%, in order to comply with the national accreditation requirements by the Commission of Accreditation and Quality Assurance (CAQA), the national accreditation body in Serbia. In that case FMUB has to inform CAQA. The accreditation period is 7 years- At the same time, there is a limit defined minimum of the ECTS points (60 ECTS points and 600 contact hours per year) under the state credit ceilings. The interviewed partners at the faculty maintain that academic freedom (e.g. to introduce even new elective courses) is nevertheless given.

Final assessment of the peers after the comment of the Higher Education Institution regarding criterion 1:

The peers thank the University for pointing out that there is routine monitoring of graduates in all fields by the Statistical Office of the Republic of Serbia and results are published in annual reports – statistical yearbooks.

The peers consider criterion1 to be mostly fulfilled.

2. Educational Programme

Criterion 2.1 Curriculum model and instructional methods

The medical school has defined a study plan and the instructional and learning methods employed. The curriculum ensures that students are prepared for lifelong learning. It is delivered in accordance with principles of equality.

Guiding Questions

- Where is the curriculum published?
- How can students and stakeholders access the module descriptions?
- What didactical instruments and methods does the teaching staff use? Are the instructional methods suitable for achieving the intended learning outcomes of the degree programme?
- How does the curriculum and instructional/learning methods stimulate, prepare, and

support students to take responsibility for their learning process?

Evidence

- Diploma Supplement with curriculum and the description of learning outcomes
- Module Descriptions available to students at the web site, students' guides and institution' documents (The Statute, Rulebooks)
- Outcomes of the Study Programme
- Students' Success Statistics
- Commission for Accreditation - extract from the Rulebook of organization of teaching courses at IASM
- The Rulebook of Studies in English

Preliminary Assessment and analysis of peers

The structure and all relevant information with regard to the integrated academic studies program of medicine (IASM) curriculum are published in the so-called "Rulebook". Detailed Information is furthermore provided in "Teaching Guidebooks", which are published for each academic year and provided to students and other stakeholders on request. The Guides contains detailed information about each single module offered in an academic year, including learning outcomes, the course structure and its organization, a weekly class overview, outline of the seminars, and information pertaining to final test questions and the exam forms and assess rubrics, finally suggested reading and information about the professors and assistants responsible.

The experts commend the faculty on the quality of these "Teaching Guidebooks" and qualify them as good practice.

As to the instructional and learning methods employed**,** the experts learn that there has been a gradual change in the teaching philosophy initiated by the university and faculty leadership in the past couple of years. This change in instructional style is commonly associated with notions of student-centred (as opposed to teacher centred), problem-based learning formats including examples of online- or blending learning.

During the interview, it becomes apparent, that this change in teaching philosophy as of now has not permeated through the entire staff body. The younger teacher generation has embraced these new notions to a greater extent whereas some of the professors close to retirement have not adapted as readily and easily. This is confirmed by the interviews with student representatives. During the audit, the experts witness promising examples of new instructional methods and interactive communication between students and teachers. The possibility to establish small groups for exercises in basic subjects (20 students per group) and clinical subjects (5 students per group with laboratory and clinical skills being performed independently or through demonstrations) supports these didactical changes. The FMUB also provided the conditions for conducting distance education on some subjects as auxiliary learning methods.

There is a Centre for Quality Control and Enhancement of Teaching in place, whose purpose it is to develop the methodology for advancement of all forms of teaching at the FMUB, the methodology of control and quality provision in particular. To this regard, the Centre collects and evaluates performance in the fields of teaching methodology development, provides directives for advancement of certain segments of teaching activities and furthers international cooperation with related faculties in advancing the teaching activities.

The peers are convinced that the curriculum is delivered in accordance with principles of equality and have no doubt that it also prepares the students for lifelong learning. The new learning methods must however consistently be applied to transform teaching more from the "sage at the stage" to the "guide at the side", to encourage a self-directed, student-centred learning process.

Criterion 2.2 Scientific method

The curriculum includes principles of scientific method, promote analytical and critical thinking, introduce medical research methods, and encompass evidence-based medicine.

Guiding Questions

- In what way are scientific methods and evidence-based medicine represented in the curriculum?
- Is a research project part of the curriculum? What scope does it have? How are the results presented?

Evidence

- Diploma Supplement with curriculum and the description of learning outcomes
- Module Descriptions available to students at the web site, students' guides and institution' documents (The Statute, Rulebooks)

Preliminary Assessment and analysis of peers

In line with the findings in 2.1., the peers acknowledge that the curriculum familiarizes the students with the principles of scientific methods and instils analytical and critical thinking capabilities. New research findings are integrated in the educational program by approval of the faculty commission for internal accreditation, examples to that regard were presented in the area of microbiology and infectious diseases.

A considerable number of students is engaged in various research projects throughout their academic career, a feature of the study programs, which the experts appreciate. There is a so-called Scientific Students Research Centre (CSNIRS) in place that supports students in their research endeavours. An assigned mentor guides students in their scientific work and assists them in the publication of research results. The FMUB promotes the scientific re-

search work of the students through the journal "*Medicinski podmladak – Medical Youth*" (YU ISSN 3069-1527), in which every year 10-15 original works and 3-5 editorials are printed. The practical problems of publishing in renowned international journals for students as well as professors are discussed in subsequent sections of this report.

In summary, the experts find that students are actively engaged in research projects, and the Humboldtian idea of research based education is implemented in the faculty. Students are familiarised with the basis for scientific work not only during their regular courses but also in a number of electives such as “Science and Medicine” and “Critical appraisal of literature”. A self-directed research project is however not mandatory for all students. The program under review also includes elements of original and advanced research.

Criterion 2.3 – 2.5 Structure of the Curriculum

The curriculum incorporates the contributions of the basic biomedical sciences to create understanding of scientific knowledge and introduce concepts and methods fundamental to acquiring and applying clinical science. In addition, scientific, technological, and clinical developments in the area of biomedical sciences as well as the current and anticipated needs of the society and the health care system are taken into account.

Students acquire sufficient knowledge and clinical and professional skills to assume appropriate responsibility after graduation. They spend a reasonable part of the programme in planned contact with patients in relevant clinical settings and gain experience in health promotion and preventive medicine.

The curriculum specifies the amount of time spent in training in major clinical disciplines and includes organised clinical training with appropriate attention to patient safety.

Contributions of the clinical sciences to the scientific, technological and clinical developments and the current and anticipated needs of the society and the health care system should be taken into account. In addition, the curriculum ensures that every student has early patient contact gradually including participation in patient care and that the different components of clinical skills training are structured according to the stage of the study programme.

Guiding Questions

- What courses deal with biomedical sciences, behavioural and social sciences and medical ethics as well as clinical sciences and skills?
- In what way are new developments in these areas taken into account?
- How are concepts and methods of the clinical sciences introduced?

- How are the practicals organized?

Evidence

- Curriculum overview of the Integrated Academic Studies of Medicine program
- Subject benchmark statements www.qaa.ac.uk
- Module descriptions

Preliminary Assessment and analysis of peers

The Integrated academic studies of medicine program (IASM) is structured in the following way:

In the first year, basic courses in Anatomy, Histology and Embryology and Human Genetics are on offer. In addition, students enrol in Basic Clinical Practice I and First Aid. Then there are courses in Medicine and Society (with components of Sociology. Medical Ethics and Social Medicine) plus Medical English. Finally, the Student can choose two elective courses. In terms of practical experience, the students undertake compulsory pre-examination practicals and consultations and work in corresponding health care institution of the areas mentioned with a workload of 120 hours.

In the **second year,** the educational offerings include Medical Biochemistry and Chemistry, Medical Physiology (Biophysics and Chemistry), Microbiology, Immunology and Epidemiology. In addition, students enrol is Basic Clinical Practice II, a course in Medical English plus two elective modules. Compulsory pre-examination practicals and consultations have a duration of 40 hours.

The **third year** witnesses courses in Pathology, Pathological Physiology, Pharmacology and Toxicology and Radiology. Furthermore, there is a Clinical Propaedeutic (Internal as well as Paediatrics), Medical Statistics and Informatics plus two elective courses. Compulsory pre-examination practicals, consultations and work are of an order of 80 hours.

In the **fourth year** the focus is on Internal Medicine (Physical Medicine, Occupational Medicine, Special Epidemiology), on Clinical Microbiology, Infections Diseases, Dermatovenerology, Neurology as well as Clinical Biochemistry plus Psychiatry and 2 elective courses. The workload in compulsory pre examination practical and consultations has a workload of 60 hours.

In the **fifth year**, students enrol in the following courses: Surgery, Paediatrics, Gynaecology and Obstetrics, Nuclear and Social Medicines plus two electives. The workload for the pre-examination practicals is again 60 hours.

In the **final sixth year**, students take classes in Ophthalmology, Otorhinolaryngology with maxillofacial surgery, Hygiene, Occupational and Forensic Medicine, Clinical Pharmacology. Clinical Oncology, Physical Medicine and Rehabilitation plus special study modules. In addition, students have to successfully master a clinical Internship with 435 hours duration, including stations in Surgery, Paediatrics, Gynaecology and Obstetrics plus general Medicine – Primary Health Care. The thesis completes the sixth semester.

It is worth noting, that there are two different tracks within the study program, one geared towards International Students (frequently the children of Serbian expats), conducted in English, and the other one addressed to Serbian students. The experts do mark differences on a number of aspects with regard to these two tracks (see further below).

The experts see a well-rounded curriculum containing all required components of a modern medical study program. New developments in the field are regularly introduced into the curriculum. There is a marked focus on ethical questions, even plans in the future to develop a new separate Master program in Bioethics. There are furthermore enough possibilities to apply the theoretical knowledge acquired in the first years of the program during the pre-examination practical courses and in subsequent phases of clinical practice in renowned clinics. Students as early as the second year (in clinical practice II) are assigned their first patient whom they follow up during a certain period, which constitutes a chance to acquaint them with the functioning of the Serbian health system and to perform basic diagnostic and therapeutic procedures.

Criterion 2.6 Curriculum structure composition and duration

The curriculum includes an introduction to behavioural sciences, social sciences, medical ethics, and medical jurisprudence. It is also reflected in the curriculum, how these areas contribute to scientific, technological and clinical developments, to changing demographic and cultural contexts, and to current and anticipated needs of the society and the health care system.

The medical school has designed a study plan, which describes the content, extent and sequencing of courses and other curricular elements. It ensures appropriate coordination between basic biomedical, behavioural, social, and clinical subjects. In addition, the curriculum should ensure horizontal integration of associated sciences, disciplines, and subjects as well as vertical integration of the clinical sciences with the basic biomedical and the behavioural and social sciences. Furthermore, the curriculum allows for optional (elective) content, defines the balance between the core and optional content, and describes the interface with complementary medicine.

Guiding Questions

- Is the curriculum structured in such a way as to allow students to complete the degree without exceeding the regular duration?
- In what way have the courses been adapted to the requirements of the study programme?
- How is the mission supported by the courses' learning outcomes?
- Does the curriculum include electives? To what extent?

Evidence

- Module descriptions as they are available to students and the teaching staff
- Student progression statistics

Preliminary Assessment and analysis of peers

The integrated academic Studies of medicine (IASM) program, submitted for this pilot accreditation, consists of 12 semesters with 360 ECTS workload. The six-year program comprises altogether 5500 hours of theoretical and practical studies and has been benchmarked against international subject benchmark statements. An internship of 19 ECTS duration is part of the curriculum. Furthermore, the curriculum allows for some optional elective content. The IAMS program disposes of a group of more than 40 elective courses per each academic year, as student is obliged to elect only 2 electives, each holding 2 points of ECTS.

As to the Standard Period of Study, Students study on average 7,8 years with bottlenecks existing in the successful completion of basic science courses in the first two systems. The real problem however seems to be beyond the control of the Faculty, as in the Serbian system failing students are kept in the system for financial reasons without a possibility of exmatriculation.

The experts confirm that the medical school has designed a study plan, which describes the content, extent and sequencing of courses and other curricular elements. It ensures appropriate coordination between basic biomedical, behavioural, social, and clinical subjects. The distribution of disciplines within the curriculum differs from most medical curricula. Disciplines like urology, geriatrics and anaesthesia, which are distinct research fields and are usually discrete and self-contained disciplines in most medical curricula, are integrated in other disciplines. Urology for example is distributed on surgery and internal medicine, aesthesia is part of surgery, and geriatrics is part of internal medicine.

Criterion 2.7 Program management

A curriculum committee is in place with the responsibility and authority for planning and im-

plementing the curriculum to secure its intended educational outcomes. It also plans and implements innovations in the curriculum. Under the governance of the academic leadership (the dean), the curriculum committee includes staff members, students and possibly representatives of other relevant stakeholders.

Guiding Questions

- How does the curriculum committee verify the effectiveness of the curriculum?
- Who are the members of the curriculum committee? How are they appointed or selected?
- How often does the curriculum committee meet?

Evidence

- Competences of the Accreditation Committee – extract from the Rulebook of organization of IAS
- The Statute of FMUB – article 12

Preliminary Assessment and analysis of peers

There is a comprehensive system of instruments and bodies in place to continuously monitor and further develop the program under review. The curriculum control is effectuated on three levels, mainly the assessment of the program itself (workload, critical assessment of mandated literature), the quality control of the curriculum performance (control of teaching activity and methods) and the control of students achieved learning outcomes.

As to the instruments to verify the effectiveness of the curriculum, the Faculty relies on regularly conducted self-assessment through questionnaires filled by students, regular visits during teaching, regular reviewing and control of each subject documents. As described above, the Centre for Quality Control and Enhancement of Teaching is also instrumental in reviewing the quality of teaching and learning. In its so-called program board, the President of the Commission for Quality Control and Enhancement of Teaching, the President of the Commission for Internal Accreditation, the President of the Central Testing Commission as well as the Vice Deans for general courses, postgraduate courses as well as for continuing education meet regularly to discuss where improvements and adjustments are needed.

Criterion 2.8 Linkage with medical practise and the health sector

The medical school ensures operational linkage between the degree programme and the subsequent stages of training or practice after graduation. The curriculum committee should seek input from the environment in which graduates are expected to work, modify the pro-

gramme accordingly, and consider program modification in response to opinions in the community and society.

Guiding Questions

- How are external stakeholders involved in designing and further developing the curriculum?
- In what way has the curriculum been adjusted according to the input from community and society?
- What are the linkages between the degree program and subsequent medical training?

Evidence

- Competences of the Accreditation Committee – extract from the Rulebook of organization of IAS
- The Statute of FMUB – article 12

Preliminary Assessment and analysis of peers

As mentioned above, external stakeholders have been involved in designing the curriculum under review. This has not been done as systematically as the experts could envisage, mainly due to the fact that the expertise of the important group of graduates and alumni is not tapped in. As the interlinkage between the degree program and subsequent medical training, this is one of the strengths of this program. Students in the interviews appraised the hands-on education they receive. A stronger cooperation with the primary health care sector was on the wish list of the interviewed groups.

Final assessment of the peers after the comment of the Higher Education Institution regarding criterion 2:

The peers thank FMUB for pointing out that since 2018 both to junior and senior faculties have the opportunity for training in pedagogic skills, instructional methods and application of problem-based learning in cooperation with Faculty of Philosophy Belgrade University.

FMUB explains that urology, geriatrics and anaesthesia are well established disciplines and have a long tradition as separate subjects integrated in already mentioned bigger modules (surgery and internal medicine).

The peers consider criterion 2 to be mostly fulfilled.

3. Assessment of Students

Criterion 3.1 Assessment methods

The medical school defines, states, and publishes the principles, methods, and practices used for assessment of its students, including the criteria for setting pass marks, grade boundaries and number of allowed retakes.

It needs to be ensured that assessments cover knowledge, skills, and attitudes by using a wide range of suitable assessment methods and formats. In addition, methods and results of assessments avoid conflicts of interest and assessments are open to scrutiny by external expertise.

The reliability and validity of assessment methods are documented and evaluated. There is the possibility to incorporate new assessment methods where appropriate and a system for appeal of assessment results is in use.

Guiding Questions

- What assessment methods does the teaching staff use?
- Has a form of assessment (including suitable alternatives) been defined for each course? Describe the used forms of assessment.
- How are students informed in time about the assessment methods and the criteria for passing a course?
- What rules for re-sits and appeals have been defined?
- What mechanisms are in place, which ensure that exams marked by different examiners are comparable?

Evidence

- Average length of studies
- Example of exam schedule
- Graduate Students' Survey of Study Programme
- Module Descriptions available to students at the web site, students' guides and institution' documents (The Statute, Rulebooks)
- Number and percentage of graduate students, students success rate
- Ordinance on the organization and implementation of integrated academic studies for obtaining the title of Doctor of Medicine

Preliminary Assessment and analysis of peers

There is a comprehensive assessment system in place at the Faculty of Medicine. For each of the courses, a set of exams is designed which the Faculty claims, is in alignment with the expected learning outcomes and competencies. The general rules applying for this procedure are laid down in the "Ordinance on the organization and implementation of integrated academic studies for obtaining the title of Doctor of Medicine".

Assessment methods and exam questions for each course also listed in the guidebooks for each academic year and are equally available on the FMUB website. The FMUB Statute defines the obligation of the students in relation to obligatory attendance and active participation in all aspects of teaching. Students at the beginning of each semester are fully informed about the dates and various forms of assessment.

The Faculty is pursuing a system of examination, which regularly challenges the students to pass a certain number of pre-examination obligations. By fulfilling pre-exam obligations and taking exams the student gains a maximum of 100 points. During the assessment, teachers adhere to the criteria stipulated by the decision of the department and the corresponding rules (Rulebook). In the framework of pre-examination obligations, a student can earn 30% of the total number of points, and the rest up to 100% at the final exam. An appeal system for students is in place. Students can issue an appeal within 24 hours after the exam has been taken. Students also have the possibility to quit during an exam and retake it.

The Centre for Quality Control and Enhancement of Teaching is in charge to continuously monitoring students' performance in all aspects (e.g. practical skills, presentation of seminar works and activities during interactive classes while attending lectures on each subject). The Centre also critically reviews student´s passing rates. If the passing result of exams drops below 30%, an analysis will be conducted and if needed, corrective measures taken. Students on their part also have to evaluate the organization of teaching and the objectivity of assessment in regularly conducted questionnaires. The data obtained by interviewing completed students on the quality of the curriculum of the corresponding study program will be communicated to the respective staff.

Continuous assessment of knowledge and assessment of students' activities on theoretical and practical teaching is done through colloquia which in-depth reviews the knowledge from the appropriate thematic section. The final exams are conducted through oral exams or written test. Oral exams take place in the presence of the public, and teachers use rubrics in assessing various elements of knowledge (e.g. knowledge and connection of facts, content of answers and style of expression).

Each of the departments conducts an internal teaching evaluation. The department is obliged to perform an evaluation of the student achievement after a completed colloquium and to critically perceive possible problems with student achievement at the colloquiums,

duly notifying both the Commission and the Centre. According to the new regulation on colloquiums, if less than 20% of the students pass the colloquium, it is annulled and a new one is organized.

Student exam achievement is expressed in grades ranging from Grade 10 (exceptional) 95-100 points achieved to Grade 5 (failed the exam) 0-54 points achieved. There is no system of external examiners known at the University of Belgrade and the Faculty.

The peers acknowledge the existence of a faculty wide system of exam regulations. Most of the relevant (pass/fail) exams are oral, although it should be noted that there is a big difference between the Serbian and the English track of the medical studies, as in the latter the finals exams are written. After the interviews with students and staff, they conclude that the examination system in place gives on the one hand a lot of flexibility and possibilities for students. There are regulations in place that allow students to repeat exams as often as they want. On the other side of the medal, this feature puts a lot of extra work on staff. In the exam week, professors are totally occupied with delivering the exams. Furthermore, as the oral exams are in no way standardized, they are not objective. This is attenuated due to the fact, that students can choose among five different “examination weeks” and theoretically endless re-takes. A system of external examiners and more objective, reliable and valid examination should be considered in the future.

Criterion 3.2 Relation between assessment and learning

Assessment principles, methods, and practices are clearly compatible with intended educational outcomes and instructional methods. The used assessment methods ensure that the intended educational outcomes are met by the students and promote student learning. There is an appropriate balance of formative and summative assessment to guide both learning and decisions about academic progress.

The medical school adjusts the number and nature of examinations of curricular elements to encourage both acquisition of the knowledge base and integrated learning. In addition, there is a timely, specific, constructive and fair feedback to students on basis of assessment results.

Guiding Questions

- How are the used methods of examination suited to verify the achieved learning outcomes?
- In what way do the used methods of examination offer students’ a continuous feedback on their progress in developing competences?
- How does the amount and distribution of exams ensure that both the exam load and preparation times are adequate?

- Are all exams are organised in a way, which avoids delays to student progression caused by deadlines or exam correction times? How is it verified?

Evidence

- Module Descriptions available to students at the web site, students' guides and institution' documents (The Statute, Rulebooks)

Preliminary Assessment and analysis of peers

The Faculty claims to conduct systematic monitoring of relationship between the assessment and learning through the evaluation of pedagogical, scientific and professional results of each teacher and associate and that parameters such as passing students through exams at the level of the course, or year, is also evaluated. Further feedback on the alignment between course content and the exam form is gathered via student surveys.

In addition, the Faculty conducts a voluntary knowledge retention test twice during the course of the study programs that is for the students of the fourth and sixth academic year. The test is conducted anonymously but nevertheless enables the student to perceive the knowledge gaps in certain subjects (self- assessment).

Unfortunately, there are different exam traditions for the international student and the Serbian student cohorts. Whereas the former are generally examined by written exams, the latter are assessed by oral exams. The experts learn, that teaching staff questioned this fact themselves with faculty leaders last year, so far without a response. The experts do not question the validity of either exam, though the argument could be made that oral examinations are more prawn to personal bias. Again, professors themselves are in favour of further standardizing oral examinations to avoid potential bias in grading schemes. In summary, the experts commend the faculty on various aspects of the examination schemes while requesting, that the different treatment of international and Serbian students is to be reviewed and that efforts should be made that oral examinations are further standardized to guarantee fair grading systems.

Final assessment of the peers after the comment of the Higher Education Institution regarding criterion 3:

The peers appreciate that FMUB agrees with their assessment and is planning to establish guidelines to standardise oral examinations.

The peers consider criterion 3 to be mostly fulfilled.

4. Students

Criterion 4.1 Admission policy and selection

The medical school formulates and implements an admission policy based on principles of objectivity, including a clear statement on the process of selection of students. There is an implemented policy for admitting disabled students and for transfer students from other programmes and institutions.

There is a relationship between student selection, mission of the school, the educational programme, and desired qualities of graduates. The medical school periodically reviews the admission policy, based on relevant societal and professional data, to comply with the health needs of the community and society. A system for appeal of admission decisions is in place.

Guiding Questions

- Where are the admission regulations defined? Are they published?
- Are the admission requirements and procedures binding, transparent, and equal for all applicants?
- In what way are the admission requirements suitable for supporting the students in achieving the learning outcomes?

Evidence

- Admission regulations
- Competition for Admission available at the web site
- The Statute of FMUB – Article 51

Preliminary Assessment and analysis of peers

FMUB has clearly prescribed enrolment procedures for the IASM program. All relevant information on the conditions and deadlines for enrolment can be checked on the bulletin boards and the website of the Faculty.

As to the admission requirements, there are two components which are decisive: one being the grades achieved in secondary schools (one must have completed four years of education in comprehensive or medical high school, the other one being the results obtained in entrance examination (Chemistry and Biology) organized by the Faculty. To be successful, the student must answer correctly 50% plus 1 question in each subject. The entrance exam is organized in cooperation with other medical schools in the country on the same day and at the same time, as per the decision of the Union of Serbian Schools of Medicine. The candidate ranking list for enrolment into the first year of studies is thus determined according to

the average score achieved during high school education and the results of the entrance exam. The average score achieved during high school is the sum of all the grade averages of each high school year multiplied by two. The successful candidate can enrol in the study program in the status of a budget financed or self-financing student according to the total number of points gained, the attained place on the ranking list and the total number of candidates to be enrolled.

Serbian citizens that have completed their high school education abroad, enrol according to a special ranking list within the quota of 2 percent of the established number of students to be enlisted as budget financed, or self-financing students respectively. There is also a special quote and policy for the admission for the Roma population and for disabled students in place as well as a policy for transfer of students/recognition of credit points from other programs and institutions.

The experts positively note that applicants receive a manual containing the program of the materials for the entrance exam and details of its realization and tests from the previous year as a standard procedure.

In conclusion, the experts find an admission and selection policies in place, which are fair and transparent. The selection criteria also to a certain degree make sure that mostly qualified students are admitted.

Criterion 4.2 Student intake

The medical school defines the size of student intake and relates it to its capacity at all stages of the programme. In addition, size and nature of student intake are reviewed periodically in consultation with other relevant stakeholders and regulated to meet the health needs of the community and society.

Guiding Questions

- Who defines the number of possible intakes? Have there been changes in the recent years?
- How high is the demand? Where do the applicants come from?

Evidence

- Admission regulations
- Information about the admission requirements for the degree programme on websites, in student guides etc.
- Information about the number and composition of applicants and admitted students

Preliminary Assessment and analysis of peers

The number of students enrolled in the first year of this study program as well as the number of students by years of study whose education is financed from the budget, is determined by the Government of the Republic of Serbia, nominally on proposal of the Faculty. Whereas around the turn of the century, around 1000 students were admitted each year, this number has dropped to around 500 students enrolling in the IASM program in recent years, not least to before the background that there are a considerable number of unemployed doctors in the countries.

As mentioned above there is a separate admission track for international students who enrol in the integrated academic studies of medicine program exclusively in English language, for foreign students, who come from European and non-European countries, all over the world. There is a total of currently close to 300 students from all across the world who are enrolled in this programme. Whereas the quality of international students in the past was sometimes an area of concern, the current student intake is much better, according to the interviewed staff.

After the discussions during the on-site visit, the experts come to the conclusion that the admission numbers are not so much geared to the necessities of the national economy and the market potential, but rather a politically influenced figure. This finding is further supported by the fact, that the admission numbers/student numbers are related to funding decision which influences the nominal proposal right of the faculty and has detrimental effects (such as keeping failing students in the system).

Criterion 4.3 Student counselling and support

There is a system for academic counselling of students in place. It offers support with respect to social, financial, and personal needs. Enough resources for student support and counselling are available and confidentiality is ensured. The students receive academic counselling that is based on monitoring academic achievements and includes career guidance and planning.

Guiding Questions

- What resources are available to provide individual assistance, advice and support for all students?
- How effective are the existing advice and support offers? What offers are missed by students?

Evidence

- Graduate Students' Survey of Study Program

Preliminary Assessment and analysis of peers

The experts during the on-site visit learn that there is a comprehensive system of student counselling and support in place. Students are not assigned a personal advisor but every student can arrange a meeting with Faculty's personnel at any time and ask for support. They also can address their Students' Parliament for any personal and social problem related to their adjustment in Faculty environment. In terms of monitoring of students' academic success and progress, there are support systems in place and academic counselling is provided where needed; there are however no sanctions available, as failing students always have a chance to remain enrolled in the program (see above).

As to financial student support, a significant number of students at FMUB is said to receive scholarship from the Republic Fund for the Development of Scientific and Artistic Youth as well as the Fund for Young Talents in their final years of studies, sponsored by the Ministry of Youth and Sports of the Republic of Serbia. The department itself disposes only of very limited resources to support talented students. There are however some other privately financed resources available, such as the "Dr Miša Simković","Prof. Dr.Zivojin Sudarov" stipends and the fund "Ruzica S. Ovcin" and "Prof. Dr Vesna Starčević" awards, the latter being awarded to the most successful student in the field of medical science and medical physiology, as well as the special award "Ass. dr Zorana Penezić ". Other non-financial acknowledgements comprise the award of best graduated FMUB student in the past academic year chosen on the basis of the highest average grade, the shortest time of study and significant participation in extracurricular activities.

As to assistance in the transition to the labour market, there is no specific offer in place at the level of the faculty. Students can however address to the "Centre for Career Development" on the University level.

In summary, the experts see a functioning system of student counselling and support in place. There is a very good chemistry between self-confident and motivated students and committed teaching staff, a productive corporate spirit within the faculty. Faculty members are very accessible (office hours) – but there is no *independent* counselling office (e.g. deanery of students). The faculty staff may potentially be biased (especially from the students' viewpoint), because they are also examiners. This is especially problematic, as the predominant assessment method employed is oral exams. As mentioned before, students are also supported in their research work. More could be done in the area of career guidance and planning.

Criterion 4.4 Student representation

The medical school has formulated and implemented a policy ensuring participation of student representatives and appropriate participation in the design, management, and evaluation of the curriculum, and in other matters relevant to students. In addition, students activities should be encouraged and facilitated and student organisations promoted.

Guiding Questions

- What are the tasks and rights of the student council?
- Are there student members represented in the different panels of the medical school?
- How does the medical school support extra-curricular activities?

Evidence

- The Rulebook of Students' Parliament

Preliminary Assessment and analysis of peers

The founding of the Students' Parliament in FMUB dates back to the year 2000 and was one of the first organizations of its kind at the University of Belgrade. The general mission of the Students Parliament is to achieve better study conditions and to assist students in exercising their rights and protect their interests during their studies. In cooperation with the Dean's Board and other professional bodies, FMUB consequently works on improving student standards, advocates improving conditions for studying, discussing issues and conducting activities related to improving the quality of teaching and reforming study programs and actively involving students in decision-making process at the FMUB. The Students' Parliament in addition promotes a special incentive for individual improvement by improving the mobility and scientific-research work of students.

The composition, method of election and jurisdiction of the Students' Parliament are defined in Articles 130 and 131 of the Statute of the FMUB. Student'. The Students' Parliament is composed of student representatives from all years of studies which are elected every year. They meet with the Vice-Dean once a week on a regular basis.

Students are furthermore represented in all faculty panels and bodies that concern students' rights and duties. Student representatives have right to vote on decisions related to their studies and rights, and they have right to propose new regulations as well as to oppose those which do not suit them.

The experts see a very strong system of student representation on all levels and commend the representatives of the medical faculty for this accomplishment. They consider this to be a very strong point of the program.

Final assessment of the peers after the comment of the Higher Education Institution regarding criterion 4:

The peers see that a counselling office exists at the Belgrade University „Centre for Career Development“, which the medical students are fully eligible to use. Nevertheless, the peers think that is it useful to establish of an independent counselling office for the Medical Faculty.

The peers consider criterion 4 to be fulfilled.

5. Academic Staff/Faculty

Criterion 5.1 Recruitment and selection policy

The medical school has formulated and implemented a staff recruitment and selection policy, which outlines the type, responsibilities, and balance of the academic staff/faculty of the basic biomedical sciences, the behavioural and social sciences, and the clinical sciences required to adequately delivering the curriculum.

This includes a balance between medical and non-medical, full-time and part-time, academic and non- academic, internal and external staff.

The staff recruitment and selection policy addresses criteria for scientific, educational and clinical merit, including a balance between teaching, research, and service activities. It also should take into account criteria such as relationship to its mission, including significant local issues, and economic considerations. In addition, the medical school specifies and monitors the responsibilities of its staff.

Guiding Questions

- What is the policy on staff recruitment and selection described?
- Who is responsible for staff recruitment and selection?
- In what way Is the composition, scientific orientation and qualification of the staff adequate?
- Are the available resources for teaching, supervision, and administration sufficient? Are there any bottlenecks?

Evidence

- Staff handbook
- Statute of the FMUB and Rulebook on the procedure for the selection of teachers and associates at the University of Belgrade

Preliminary Assessment and analysis of peers

The FMUB staff body counts a total of 978 members of academic staff, of which 210 are full professors, 218 associate professors, 154 assistant professors, 68 teaching assistants, 34 associates in teaching, and 294 clinical assistants. All teachers and associates are employed full-time, except clinical assistants who are employed part-time. Full professors are hired for an indefinite period, all others with contracts which have to be renewed after a pre-defined period of time. With roughly 4500 students, the staff-student ratio is about 1:8 and thus very favourable. The rights and obligations of teachers and associates are defined in the appropriate Articles of the FMUB Statute, and all data on teachers and associates and heads of departments can be found on the Faculty website.

Teachers and associates of the Faculty of Medicine University of Belgrade (FMUB) are selected according to clearly defined criteria, which are summarized in the "Statute of the FMUB and Rulebook on the procedure for the selection of teachers and associates at the University of Belgrade." The FMUB has also defined its own standards for the selection of its teaching personnel that are reported to be continuously reviewed. The conditions for the selection of teachers and associates can be accessed by the professional and general public (available on website of FMUB, albeit in Serbian language).

In case of renewal or contracts (usually every 5 years), the respective teachers qualifications are reviewed at several levels (Chair, Selection Committee, Electoral Council of the FMUB, Professional Board for Medical Sciences of the UB). The appointment is effectuated by public competition and on the proposal of the special commission, at least one member of which must be employed in another higher education institution outside the University of Belgrade. The proposal is subsequently endorsed by voting at the Electoral Council of the FMUB. The selection to the title is based on the scientific, professional and pedagogical qualities of the candidates. During the election process, the complete election material and references of the proposed candidates are available to the public through the Faculty website for a month, with possibility of objection. The Professional Board of the UB decides on the election of assistant professors and associate professors at the proposal of the Electoral Council of the FMUB and gives its opinion to the University Senate on the proposal of the Electoral Council for the election of full professors.

In order to plan for the necessary rejuvenation the FMUB for decades, a quality selection of young doctors has been institutionalized on the level of the university as well as the faculty. It is carried out in a systematic manner. Promising students and graduates are targeted early one to qualify them for future teaching positions.

Although the teacher selection procedure is clearly defined, the FMUB according to its own internal evaluation does currently not have a document related to the teacher development program made not only on the basis of needs analysis for teachers and associates, but also on the expressed burden and the age structure of the teaching staff on all subjects. However, plans to develop such a teacher development program is part of the next Action Plan.

The experts, after reviewing the documents and conducting discussions during the on-site visit, conclude that the quality of the staff and the underlying recruitment and selection processes are generally suitable to execute the program under review and to reach the self-defined learning outcomes. They however criticize that almost all staff teaching in the Faculty of Medicine have been recruited among its own students and graduates. This “in-house” recruitment policy in a certain way prevents the influx of new ideas and teaching philosophies in spite of the fact that many of the own personnel are sent to universities abroad to study and do research. As to guest professors, they are usually invited for a very short time and they do not receive remuneration for their services.

Criterion 5.2 Staff activity and development policy

The medical school has formulated and implemented a staff activity and development policy, which allows a balance between teaching, research and service activities. It also ensures recognition of meritorious academic activities, with appropriate emphasis on teaching, research and service qualifications. Clinical service functions and research are used in teaching and learning, while taking into account teacher-student ratios relevant to the various curricular components. Teacher training, development, support, and appraisal are part of the policy; a staff promotion policy should be formulated and implemented.

Guiding Questions

- What offers and support mechanisms are available for staff members who wish to further develop their professional and teaching skills?
- Who is responsible for staff development?
- How do the responsible persons recognize that professional development measures are wanted or necessary?

Evidence

- List of publications of teaching staff 2018
- Rulebook on Organization and Implementation of Continuing Medical Education

Preliminary Assessment and analysis of peers

The Self-Assessment Report informs the experts, that FMUB has formulated and implemented a staff activity and development policy, which allows a balance between teaching, research and service activities. Clinical service functions and research are used in teaching and learning, while taking into account teacher-student ratios relevant to the various curricular components. Teacher training, development, support, and appraisal are part of the policy at FMUB. Since 2006, the most successful teachers at the FMUB has been awarded with a special prize for teaching improvement. The experts are told, that national regulations prevents the faculty from using financial incentives to honour good teaching.

The quality control of the pedagogical and scientific research work of the teachers and associates is conducted within the “Centre for Quality Control and Enhancement of Teaching”. The quality control of the pedagogical work is continually carried out using a polling questionnaire filled out by students. The quality control of the scientific research and professional work is carried out with the evaluation of publications within the previous electoral period and with the participation of the candidates in international and domestic projects.

As to continuous improvement of teaching and research capabilities, FMUB reports to encourage the acquisition of active competences of teachers and associates, enabling participation in scientific and professional meetings, on domestic and international projects. In addition, within TEMPUS projects in which the FMUB was the project leader or a partner, a significant number of teachers and associates had the opportunity to participate actively in conferences and seminars on pedagogical competences and modern learning methods. The FMUB in cooperation with the Faculty of Philosophy University of Belgrade organized periodical seminars related to teacher competences. These seminars have to be attended by newly elected assistant professors. In accordance with Rulebook of the Scientific Title ‘’Doctor of Medical Sciences’’, FMUB organises a course for potential supervisors for PhD thesis two times per year for all newly elected assistant professors. In October 2015, the Medical Education Symposium was held in cooperation with the American-Austrian Foundation and the Children's Hospital in Philadelphia, with the goal of continuing education of teachers of the Faculty of Medicine in the field of professional development. During this course, special attention is paid on mentor-candidate relationships. In the period February-September 2018 teachers from the FMUB participated in a project "Improvement of teaching and supervising competencies in education of healthcare workers in Serbia", co-funded by the Erasmus+ Programme (European Union).

Bearing in mind the need for continuous education of teachers and associates, the FMUB has established the “Centre for Continuing Medical Education” (CME) in 2003, whose activity is regulated in the Rulebook on Organization and Implementation of Continuing Medical Education at the FMUB. Within the framework of its mission of providing quality education, FMUB enables CME of healthcare workers and associates to follow professional and scien-

tific development of medical and other sciences. The CME Centre creates and offers a profile of inventive and current knowledge that meets the requirements and needs of the modern medical profession and science, careful selection of topics, selecting lecturers and controlling participants' satisfaction. All CME programs at the FMUB are accredited by the Health Council of Serbia. Since establishment in 2003, 865 courses of CME were attended by 60,779 registered participants, and 8,894 lecturers who performed training (over 800 lecturers from abroad) according to the information provided.

FMUB in the discussions with the peers announces, that it will pay special attention to strengthening pedagogical and methodological training of assistants and young teachers. In order to improve teaching staff, FMUB commits itself to encourage cooperation with other educational and scientific institutions in the country and abroad in order to re-examine the possibilities for mobility of teachers and associates.

The experts are overall of the opinion that there is a favourable student-staff ratio in place. There are measures of staff development in place in spite of the fact that financial restrictions impede more support for staff in their quest to publish their work in renowned scientific journals.

Final assessment of the peers after the comment of the Higher Education Institution regarding criterion 5:

The peers acknowledge that FMUB publicly announces job opportunities and that sometimes graduates from FMUB are more qualified than other candidates are. Nevertheless, the peers think that it is very useful to also hiring staff members that have not graduated from FMUB.

The peers consider criterion 5 to be fulfilled.

6. Educational Resources

Criterion 6.1 Physical facilities

There are be sufficient physical facilities for staff and students available to ensure that the curriculum can be delivered adequately. The learning environment is safe for staff, students, patients, and their caretakers.

The medical school improves the learning environment by regularly updating and modifying or extending the physical facilities to match developments in educational practices.

Guiding Questions

- In what way are the available physical resources sufficient for adequately teaching the students?
- Who decides on the allocation of physical resources and funds?
- Are students and staff satisfied with the available physical facilities? Are there any bottlenecks?

Evidence

- Financial plan
- Number and type of library units
- Space and equipment

Preliminary Assessment and analysis of peers

The Faculty of Medicine University of Belgrade (FMUB) occupies a total area of 66,632 square meters. The space for performing classes consists of amphitheatres, classrooms, stores, laboratories, libraries and student reading rooms, computer classrooms. There are numerous institutes in the FMUB, namely the Institute of Anatomy, Pathology, Pharmacology, Clinical Pharmacology and Toxicology, Microbiology and Immunology, Pathological Physiology, for Histology and Embryology, Biophysics in Medicine, Epidemiology, Chemistry in Medicine, Human Genetics, Medical and Clinical Biochemistry, Social Medicine and Medical Statistics and Informatics, Forensic Medicine, Hygiene and finally Medical Ecology. According to the Faculties own evaluation, the spatial capacities and corresponding equipment are satisfactory for the basic teaching needs of all study programs, but in the coming period there is a self-identified need to invest in their renewal and construction of new capacities.

After doing a guided tour through the premises of the faculty, the experts come to the conclusion that there are currently sufficient resources to ensure that the program under review can be delivered adequately in a nurturing learning environment. The FMUB does its best with the existing resources. There is a huge investment gap, which is however indebted by the government, as the faculty has no proprietary budget for construction. Especially the lab equipment needs to be upgraded to meet international safety standards.

Criterion 6.2 Clinical training resources

Sufficient resources for giving the students adequate clinical experience are available. This includes sufficient numbers and categories of patients, clinical training facilities, and supervision of students' clinical practice.

The facilities for clinical training are regularly evaluated, adapted, and improved to meet the needs of the community.

Guiding Questions

- In what way are the available clinical training resources sufficient for adequately teaching the students?
- Are students and staff satisfied with the available clinical training resources? Are there any bottlenecks?

Evidence

- List of Clinical facilities

Preliminary Assessment and analysis of peers

Teaching from clinical subjects takes place in FMUB teaching bases. The FMUB has specially concluded contracts with 15 institutions that are teaching bases and which make available their space and equipment for carrying out theoretical and practical classes in clinical subjects. The largest teaching base of the FMUB is the Clinical Centre of Serbia, where over 90% of teachers and associates in clinical subjects are involved in healthcare activity and who work at FMUB on a full-time basis. Within the FMUB teaching bases, ambulances and sick rooms, as well as various types of specialized laboratories, are used for practical teaching. In addition, the Faculty of Medicine uses classes for the teaching of clinical courses in amphitheatres, auditoriums, laboratories, sick rooms, offices and other premises in the institutions of the Faculty of Medicine, based on the agreements concluded between the Faculty and the teaching bases. Among the Faculty's teaching bases feature the Clinical Centre of Serbia, the Institute for Mental Health, the Institute for Neurology and Psychiatry for Children and Youth, the Institute for Rehabilitation "Dr M. Zotović ", KBC "Zemun", "Zvezdara", the University Children's Clinic, the Institute of health protection of mother and child of Serbia "Dr Vukan Cupic", GAK "Narodni front", the Institute of Rheumatology, KBC "Dr Dragisa Misovic" - Dedinje, KBC "Bežanijska kosa", Institute for Cardiovascular Diseases "Dedinje", the Institute of Orthopaedic and Surgical Diseases "Banjica" and finally the Institute of Oncology and Radiology of Serbia, all located in Belgrade.

For the needs of the Clinical Practice Assessment and First Aid Assessment, phantoms are available for students and are aimed at acquiring practical skills in these subjects. In 2019, the new simulation centre for clinical skills will start its operations at FMUB. The facilities for clinical training are regularly evaluated, adapted, and improved.

During the on-site visit it becomes apparent that more investments are needed. The audit team could visit only one clinical facility (Dept. of Endocrinology), which was not in the best shape. The governmental investment lag is likewise present. There are punctual improve-

ments (single labs, e.g. national reference centers), but they seem to be too dependent on external sponsors (e.g. donations). In terms of health and safety standards in the process of conducting study programs, there is also room for improvement.

In summary, the clinical training resources available satisfy the experts. They find that there are also sufficient numbers and categories of patients available and that the supervision of students' clinical practice is very good. The faculty uses her limited opportunities for adapting and improving the facilities for clinical training, e.g. in building a new Skills Lab.

Criterion 6.3 Information technology

The medical school has formulated and implemented a policy, which addresses effective use and evaluation of appropriate information and communication technology in the educational program. This enables students and staff to use existing and exploit appropriate new information and communication technology for independent learning, accessing information, managing patients, and working in health care delivery systems.

Guiding Questions

- Is there an electronic learning platform? How does it work?
- How are students and staff making use of the electronic platform?
- Are there courses on using e-learning elements in teaching?

Evidence

- Inventory of IT resources
- http://moodle.med.bg.ac.rs

Preliminary Assessment and analysis of peers

The Faculty continuously provides technical equipment for conducting study programs that includes computer classrooms, video-beams, and phonemes for performing practical classes, equipped laboratories, microscopes and other technical equipment. The FMUB currently has 1,225 computers, which are arranged as follows: teachers, associates and non-teaching staff use 1,040 computers; of that number of 183 computers are located in clinical and hospital centres and institutes-teaching faculties of the faculty, and in computer classrooms there are 159 computers.

Most of the courses at the FMUB are held in 10 buildings, which are interconnected with gigabit optical links within the project LOCAL Network of the Faculty of Medicine (LOMED). All computers have Internet access enabled. The entire outbound and incoming traffic is filtered through a firewall. Apps used by employees and students support nine server machines. The Faculty has two video conferencing systems. The FMUB has an electronic Moo-

dle LMS learning platform, which is however not widely used according to the interviewed stakeholders (http://moodle.med.bg.ac.rs).

There are a few courses using e-learning elements in teaching at all level of studies (from integrated academic studies to PhD studies). An example in case is the courses in Statistics and Medical Informatics are adapted to e-learning.

The website of the faculty is currently undergoing reconstruction.

The experts find the IT equipment to be satisfactory. There is however no proof of a written policy on the effective use and evaluation of information and communication technology in the educational program. The faculty should be advised to enunciate which aims and goals she has for the use of technology enhanced learning in the curriculum, and which structural and financial measures are needed to attain these goals.

Criterion 6.4 Medical research and scholarship

The medical school uses medical research and science as a basis for delivering the educational curriculum. A policy fostering the relationship between medical research and education has been formulated and implemented. This includes a description of research projects and priorities at the medical school. In addition, there is interaction between medical research and education by influencing current teaching and encouraging and preparing students to engage in medical research activities.

Guiding Questions

- What courses promote the students' independent scientific work?
- Are research activities in line with the mission?
- How does current research influence the delivery of the programme?
- How become students familiarised with the principles of scientific work and writing?

Evidence

- Journal Medical Youth (http://www.FMUB.bg.ac.rs/sr/studenti/sekcije_stud_parlamenta/stud_casopis_med_podmladak/)

Preliminary Assessment and analysis of peers

The experts, after conducting the interviews and visiting the facilities, are convinced that FMUB uses medical research and science as a basis for delivering the educational curriculum. Already at the founding of the faculty almost one hundred years ago, the Humboldtian ideal of research based teaching was at the centre of the educational aspirations. This is also laid

down in a policy paper elaborating on the interlinkage between medical research and education. More important is the fact that the experts find evidence that current research is affecting teaching and that student are actively engaged in medical research activities. Students of FMUB are reported to annually present about 250 papers at congresses of students of biomedical science of Serbia, and that among them about 10% of awarded works, by fields.

The FMUB promotes the scientific research work of the students through the journal Medical Youth ("*Medicinski podmladak*") (YU ISSN 3069-1527), established in 1949, in which every year 10-15 original works and 3-5 editorials are printed.

The peers also note that students can choose the elective module “Science and Medicine” in their second and third year, where they are familiarized with research methodology, research ethics and publication skills.

The experts commend the Faculty especially on their proactive approach in encouraging students to engage in research work. Unfortunately, there is not enough financial means available for support students and staff alike to publish in renowned international journals.

Criterion 6.5 Educational expertise

The medical school has access to educational expertise, has formulated and implemented a policy on the use of educational expertise in curriculum development and in development of teaching and assessment methods.

In-house or external educational expertise are used in staff development, while paying attention to educational evaluation and medical education. Staff is encouraged to pursue educational research interests.

Guiding Questions

- Are students satisfied with the staff’s educational expertise? How is it verified?
- In what way can staff members attend courses for further developing their educational expertise?

Preliminary Assessment and analysis of peers

The self-assessment report states, that FMUB “has access to educational expertise, has formulated and implemented a policy on the use of educational expertise in curriculum development and in development of teaching and assessment methods. In-house or external educational expertise is used in staff development, while paying attention to educational evaluation and medical education.” The site visit, however, reveals that this cannot be proven. There has been a cooperation with the philosophical faculty, which seems to have dwindled

away. Only a very small number of teaching staff has received a teacher training. The three papers listed as evidence are not convincing.

The faculty needs a strategy to qualify faculty members and teaching staff for educational expertise in curriculum development, and teaching and assessment methodology. This endeavour does not necessarily need experts on-site, there are online programmes like ESME or FAIMER which can easily help to attain these goals. This would be the premise for meeting the basic standard, which requires the faculty to formulate how this expertise is used.

The experts are not aware that a policy on the educational expertise in curriculum development exists. They also do not see evidence that there are specialists for didactics in medical education employed at the faculty.

Criterion 6.6 Educational exchanges

The medical school has formulated and implemented a policy for establishing national and international collaboration with other educational institutions and regulations for the transfer of educational credits.

Regional and international exchange of staff and students are facilitated by providing appropriate resources. In addition, the medical school should ensure that exchange is purposefully organised, taking into account the needs of staff and students, and respecting ethical principles.

Guiding Questions

- What international exchange programmes and windows of mobility exist?
- How many students spend some time abroad? Are there incoming international students?
- What are the rules for recognising achievements and competences acquired outside the medical school?
- In what way can staff members spent time abroad e.g. for participating at research activities or attending workshops and conferences?

Preliminary Assessment and analysis of peers

In the past couple of years, there has been a small number of international projects being implemented at the FMUB (2 TEMPUS projects, 2 NIH - Fogarty International Centre projects, IMI, 1 IAEA, 3 FP7, 2 Horizon2020, 2 ERASMUS MUNDUS and 2 ERASMUS + KA2 projects). The faculty is involved in several ERASMUS+ KA1 mobility actions implemented through the University of Belgrade, as well as 6 COST projects. There are 3 bilateral projects with China, Italy and Hungary, while four in cooperation with Portugal, Germany and Slovenia have been

completed. In the period 2013-2018, 1607 teachers and associates of FMUB participated in congresses and symposiums abroad, 287 teachers held lectures and had working visits to foreign institutions, while 29 teachers and associates stayed abroad for a period of 1-6 months. Up to now, certain number of students of master and PhD level of education spent time abroad within ERASMUS+ project. Additionally, certain number of international students was at FMUB through international exchange. The faculty cites as an example of good practice the cooperation with academic staff of the Northwestern University (Chicago, USA), which for the past three years have their elective course in Global Health performed by academic staff at the FMUB. On average 15 students per year of the Northwestern University are completing this course in Belgrade under supervision of the FMUB and Northwestern University academic staff.

As concerns the inbound mobility, the existence of a separate English-speaking track for international (mostly Serbian expat students) is an asset to the program. The peers however consider the outbound international exchange not to be a trademark of the study program under review. Only a very small number of Serbian students are going abroad for an international experience. This is mostly due to the fact that Serbia until the beginning of 2019 was not eligible to participate in ERASMUS exchange programs. Within the admittance of Serbia to this program at the beginning of this year, the chances for exchange have become much better. However, due to personal contact of the scientific staff short-term internships for students and staff in Italy and Germany were possible. In terms of recruiting an international staff body, there are also limitations, which have been mentioned in prior parts of this report.

Final assessment of the peers after the comment of the Higher Education Institution regarding criterion 6:

The peers see that FMUB tries to cope as best as possible with the financial restrictions that are caused by the poor economic situation in Serbia. However, the peers insist that the lab equipment needs to be upgraded in order to meet international safety standards.

The peers consider criterion 6 to be mostly fulfilled.

7. Program Evaluation

Criterion 7.1 Mechanisms for program monitoring and evaluation

There is a programme of routine curriculum monitoring of processes and outcomes and an established and implemented mechanism for program evaluation. These mechanisms ad-

dress the curriculum and its main components, students' progress and concerns, and ensure that relevant results of evaluation influence the curriculum.

The program is evaluated periodically by comprehensively addressing the context of the educational process, the specific components of the curriculum, the overall outcomes, and its social accountability.

Guiding Questions

- In what way is the programme subject to regular internal quality assessment procedures aiming at continuous improvement?
- Are binding responsibilities and mechanisms defined for the purposes of continued development? Where are they defined?
- What measures for the improvement of the quality of the degree programs have been taken within the last few years?
- Which elements of the internal quality assessment have been especially useful for the continuous improvement of the degree programs?

Evidence

- Average length of studies
- Graduate Students Survey of Study Programme
- Quality Assurance Strategy
- Report of the Commission for improvement of education 2013 to 2016
- Rulebook on Quality Assurance
- Students success rate
- Student surveys

Preliminary Assessment and analysis of peers

At FMUB there is an established and implemented system for systematically seeking, analysing, and responding to teachers and students feedback in place. The feedback results are used for program development. The quality control of the teaching process is carried out by the "Commission for the control of teaching" and includes the control of the regularity of the term of teaching performed by the program and plan, the quality control of the program material and the methods of teaching. The work of the Commission takes place through regular visits to all subjects, examination and control of relevant documentation (records on teaching, continuous examination of knowledge, final exam). In addition, the quality of teaching is perceived through students' surveys, and quality analysis is carried out by the Faculty. Reports on the conducted control during the semester are delivered to the teaching deputy who, in cooperation with the heads of the departments ensure the regularity of the teaching process. An on-line surveying system to collect student feedback has been established, which is at times hampered by insufficient motivation and not all students responding

to the surveys.

The quality assurance system seems to work, there are a considerable number of examples, where – on intervention of different stakeholders – the curriculum or study conditions were improved. There are, however, sometimes too many committees involved with conflicting roles. On the one hand the committee for curriculum improvement, which is focusing on content, on the other hand the committee of internal accreditation which is focusing on process.

Criterion 7.2 Teacher and student feedback

There is an established and implemented system for systematically seeking, analysing, and responding to teachers and students feedback. The feedback results are used for programme development.

Guiding Questions

- Are there teacher, students and alumni surveys?
- How do students, teachers, and alumni evaluate the quality and development of their degree programme?

Evidence

- Regulations about quality management, documents describing the evaluation processes
- Sample surveys
- Relevant results from internal surveys and evaluations with respect to programme quality

Preliminary Assessment and analysis of peers

Student feedback is evaluated regularly, twice per year. The faculty laments the feedback rate, which is currently between 40-50% of all students. The teachers from their side in the interviews mentioned, that they would appreciate to get a more detailed feedback from student surveys as the standard questions not always would produce satisfactory results.

The quality control of the teaching process is carried out by the Commission for the control of teaching and includes the control of the regularity of the term of teaching performed by the program and plan, the quality control of the exposure of the program material and the methods of teaching. The work of the Commission takes place through regular visits to all subjects, examination and control of relevant documentation (records on teaching, continu-

ous examination of knowledge, final exam). In addition, the quality of teaching is perceived through students' surveys, and quality analysis is carried out by the appropriate authorities of the Faculty. Reports on the conducted control during the semester are delivered to the teaching deputy who ensures the regularity of the teaching process.

Criterion 7.3 Performance of students and graduates

The medical school analyses the performance of cohorts of students and graduates in relation to its mission and intended educational outcomes, the curriculum, background and condition, entrance qualifications, and provision of resources.

The analysis of student performance is used to provide feedback to the committees responsible for student selection, curriculum planning, and student counselling.

Guiding Questions

- Are there teacher, students and alumni surveys? Who is responsible for them?
- How do students, teachers, and alumni evaluate the quality and development of their degree programme?
- How does the medical school monitor the performance of its students and graduates?

Evidence

- Results from survey about employers' satisfaction with the acquired qualifications of graduates

Preliminary Assessment and analysis of peers

The quality control of study programs is carried out continuously and systematically through the quality control of the curriculum, the control of the quality of teaching, that is, the regularity of the terms of the exposure of the program material and the control of methods of checking knowledge. The implementation of the control is accomplished through self-evaluation through questionnaires, regular visits by the members of the Commission for the control of teaching, which includes the review and control of the relevant documentation, as well as the application of the relevant rules. The Commission for improvement of education regularly monitors and analyses the results of student surveys.

Efficiency and transitions of students are monitored by the commission of the Teaching Council, whereby efficiency is defined as the ratio between the number of enrolled students and the number of graduates. Also, the number of students who passed the exams, the number of passed exams and average grades are monitored by year of study and by subjects. The individual success of each student is available in the documentation for basic and post-

graduate teaching. The average duration of studies in the previous ten-year period is still long, but there is a sharp decrease in the total length of study.

In order to evaluate the quality of study programs and learning outcomes from graduate students, a survey was conducted according to which students support the necessity of better ECTS compliance with the real burden of students and better organization of practical classes within clinical subjects in order to achieve the minimum of skills for independent work.

Evaluation of the quality of graduate students at the FMUB was also conducted through anonymous surveys involving the directors of the clinic of the Clinical Centre of the Republic of Serbia, as well as the directors of other health care institutions in Belgrade where FMUB graduate students in Belgrade work. Most employers rated the level of theoretical knowledge significantly higher than their practical skills.

The assessment system is based on the measurement of learning outcomes and takes place continuously. The type, number and level, as well as the method of assessment, have been determined for each subject in accordance with the defined competencies, according to the "Ordinance on the organization and implementation of integrated academic studies for obtaining the title of Doctor of Medicine". Assessment methods and exam questions for each course are available at the Faculty website.

The experts find that there is a transparent and functioning system in place to monitor the performance of students, although there is no system in place to track the individual academic success. A certain number of students are however kept in the system, which are not apt for studying while there is no possibility for their ex-matriculation. As has been mentioned before there is no systematic monitoring of the performance of graduates on the labour market, the positions they are offered, or the salary range in which they are employed.

Criterion 7.4 Involvement of stakeholders

The academic staff and students are involved in programme monitoring, governance and management, and evaluation activities.

All relevant stakeholders have access to results of course and programme evaluation. They are able to give feedback on the curriculum and performance of graduates.

The analysis of student performance is used to provide feedback to the committees responsible for student selection, curriculum planning, and student counselling.

Guiding Questions

- How are external stakeholders involved in the quality management processes?

- How are evaluation results accessible to all stakeholders?
- Are there regular meetings with employers and alumni? What is discussed there?

Preliminary Assessment and analysis of peers

The experts find that external stakeholders are involved in the quality management processes in different ways, from advice to potential users. Although evaluation of results is accessible for all stakeholders, their engagement in evaluations, up to now, is not implemented in a systematic way. There are currently no regular meetings with employers and alumni, and information from them is obtained rather on an individual level.

Final assessment of the peers after the comment of the Higher Education Institution regarding criterion 7:

The peers appreciate that FMUB will follow their suggestion and will take steps to merge some of the numerous committees.

The peers consider criterion 7 to be mostly fulfilled.

8. Governance and Administration

Criterion 8.1 Governance

The medical school has defined its governance structures and functions including their relationships within the University. The governance structures describe the committee structure and reflect representation from academic staff, students, and other relevant stakeholders. The transparency of the work of governance and its decisions is ensured.

Guiding Questions

- Where is the governance structure and its functions described?
- How are the relevant stakeholders involved?

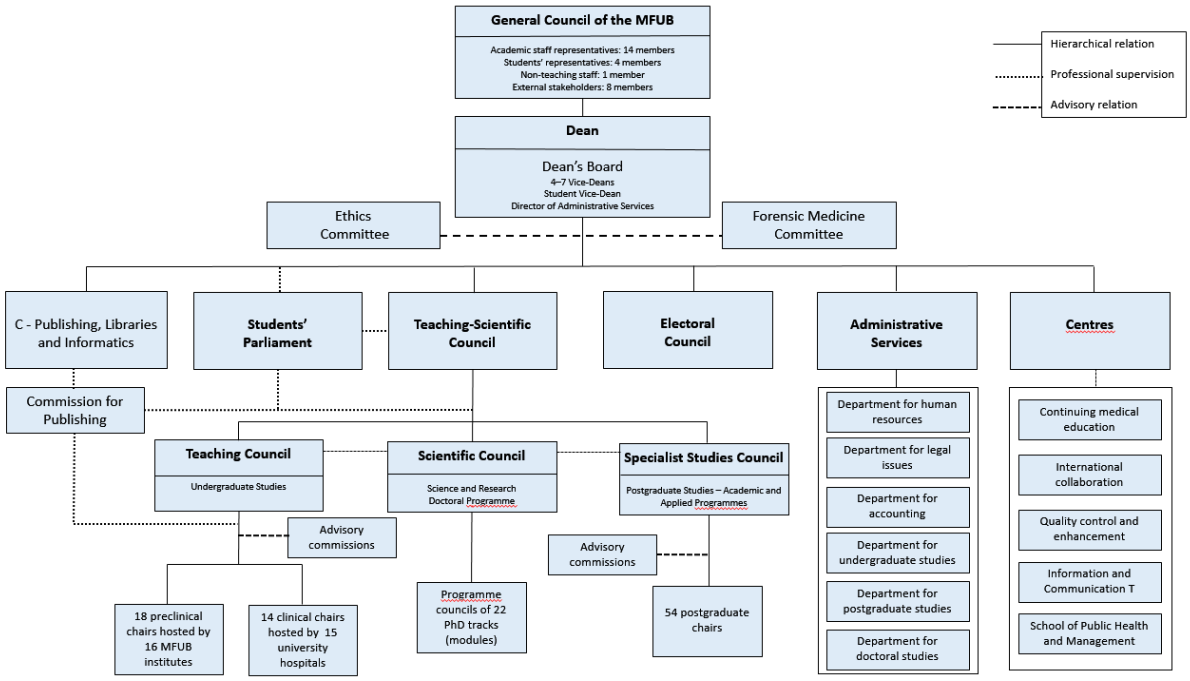
Evidence

- Documents describing the involvement of stakeholders
- Regulations about governance and administration

Preliminary Assessment and analysis of peers

In order to describe the governance and administration system operation at FMUB, the following graph has been presented with a considerable number of organizational units; these units do not have legal status and cannot participate independently in legal transactions with legal entities.

Figure 1. Organizational Chart of the Faculty of Medicine, University of Belgrade



Sources: Compiled from the Law on Higher Education (Official Gazette RS 73/2018), 2006 Statute of the University of Belgrade (http://www.fpn.bg.ac.rs/en/wp-content/uploads/2011/05/The-Statute-of-the-University-of-Belgrade.pdf), and 2018 Statute of the Faculty of Medicine (http://www.FMUB.bg.ac.rs/sr/organizacija_fakulteta/opsta_akta_u_primeni/)

The basic components of the FMUB governance are defined by the FMUB Statute (adopted in 2007, with latest revision in 2018)[3] and other general acts (available at: http://www.FMUB.bg.ac.rs/sr/organizacija_fakulteta/opsta_akta_u_primeni/). These acts, exposed to the public at the internet page of the FMUB, regulate the procedures and manner of work of all FMUB managerial bodies and organizational units. The Rulebook on internal organization and systematization of the FMUB activities defines the organization of departments, institutes and services as internal organizational units, including the Students' Parliament and administration, which provides support to all Faculty activities[4].

All activities of the FMUB with its 1,100 employees including academic staff and administration) are predominantly carried out through work in organizational units. On the one hand

[3] The Statute of the FMUB in English is available at: http://www.FMUB.bg.ac.rs/dotAsset/105748.pdf
[4] For details, see: http://www.FMUB.bg.ac.rs/sr/organizacija_fakulteta/opsta_akta_u_primeni/

there are the institutes of the FMUB being led by preclinical chairs to perform education, scientific-research activities and specific health services (in total 18), and on the other hand the network of university hospitals with clinical chairs – "cathedra-s" (in total 14) to perform education, scientific work, healthcare services and other activities. In addition, there are number of support units such as the centres for quality enhancement, international cooperation, communication and IT, publishing and library etc.

The governing authority of the Faculty is the General Council and the managing authority is the Dean. The selection, competences, work and responsibility of these bodies is determined by the Statute of the Faculty in accordance with the law. Relevant external stakeholders are involved in governance as members of the General Council of FMUB delegated by the Government of the Republic of Serbia being the founder of the FMUB. Out of 27 members, this Council has majority of members representing Faculty academic staff elected by the Teaching-Scientific Board (in total 14), followed by external stakeholders (in total 8), representatives of the Students' Parliament (in total 4) and one representative of administrative staff. Roles and responsibilities of the Council are defined in Article 130 of the Statute of the FMUB.

The Dean of the Faculty is elected from the rank of full professors, who are full-time employees at the Faculty, for a period of three school years, with the possibility of one re-election. To consider the issues from the scope of work of the Faculty and to take views on them, the dean is forming the Dean's Board. The members of this managing body are Dean, Vice-deans (4 to 7), Student Vice-dean and the Secretary of the Faculty (director of administrative services) who participate in the work of the Board. The Student Vice-dean is the elected representative of the Students' Parliament and participates in the work of Dean's Board within issues of relevance to all aspects of teaching, student rights, student organization, student activities within Faculty and outside and other issues that are of immediate importance for the work and life of students at the Faculty.

All activities of the Faculty, including the work of all bodies, are subject to a periodic assessment of the quality of work in accordance with the provisions of the 2018 Law on Higher Education, the Statute of the University of Belgrade, the Statute of the FMUB and the Rulebook on Quality Assurance at the FMUB. The Dean and the Vice-deans are responsible for the overall functioning of the Faculty, while the heads of the organizational units (institutes/ cathedra-s) organize work necessary for implementation of given courses of AIMS. The responsibilities of the Dean are determined by Article 94 of the Statute of the FMUB. The Dean may delegate certain powers and tasks from its scope to Vice-deans, persons with special powers and responsibilities and other persons employed at the Faculty.

The professional bodies of the Faculty are the Teaching-Scientific Council, the Electoral Council, the Forensic Medicine Committee and the Ethics Committee. The composition and competencies of the Teaching-Scientific Council are defined in Articles 115 - 121 of the Statute of the Faculty. The Electoral Council makes the appointment of academic staff in accordance with the Statute, and the composition and competencies of this body are defined in Article 122 of the Statute. Chairs are composed of academic staff who perform educational-professional and scientific work necessary the course of AIMS for which organizational unit (32 institutes and clinical cathedra-s) is responsible. The Forensic Medicine Committee is defined in Articles 127 and 128 of the Statute of the FMUB, and the Ethics Committee in Article 129 of the Statute of the FMUB.

The Students' Parliament is the body through which students exercise their rights and protect their interests at the Faculty. The composition, method of election and jurisdiction of the Students' Parliament are defined in Articles 130 and 131 of the Statute of the FMUB.

The experts appreciate the detailed information provided by the faculty. There are a lot of committees, which may have conflicting roles (see above, e.g. committee on curriculum improvement vs. committee on internal accreditation). Communication channels between the theoretical institutions and the clinics (especially) should be improved.

Criterion 8.2 Academic leadership

The medical school has described the responsibilities of its academic leadership for defining and managing the medical educational programme.

The academic leadership is periodically evaluated with respect to achieving its mission and intended educational outcomes.

Guiding Questions

- Where are the responsibilities of the academic leadership described?
- How is the academic leadership evaluated?

Evidence

- Financial Plan
- The Statute of FMUB – articles 57-107

Preliminary Assessment and analysis of peers

The roles and responsibilities for academic leadership for defining and managing the educational program are described in the FMUB Statute, Articles 24-29. The work of organizational units of preclinical and clinical courses is managed by the heads of departments (preclinical

and clinical chairs). The Dean appoints the head of the organizational unit for a period of three years by obtaining prior opinion of the academic staff employed at the particular unit. If the teaching or part of the teaching of clinical courses is performed at more teaching bases (more university hospitals) and if the number of academic staff at the teaching base is more than 5, the Dean appoints a Teaching Coordinator of that teaching base, at the proposal of the Head of Chair.

The main tool for evaluation of leadership are based on the self-assessment reports conducted periodically, but also by random sample of employees of the FMUB who are completing questioners' survey organized by the University of Belgrade within assessment of academic integrity.

Criterion 8.3 Educational budget and resource allocation

The medical school has a clear line of responsibility and authority for resourcing the curriculum, including a dedicated educational budget. There are sufficient educational resources for the implementation of the curriculum and they are distributed in relation to educational needs.

The medical school has autonomy to direct resources, including teaching staff remuneration, in an appropriate manner in order to achieve its intended educational outcomes. The distribution of resources takes into account the developments in medical sciences and the health needs of the society.

Guiding Questions

- Who is responsible for allocating the educational resources?
- What are the rules and guidelines on using the available resources, increasing their efficiency and avoiding misuse or waste?
- Is the educational budget planned according to the needs?

Evidence

- Regulations on budget allocation
- Budget Figures

Preliminary Assessment and analysis of peers

The FMUB according to the information provided receives its financial budget from different sources. By far the biggest proportion of the budget is provided by the Government of the Republic of Serbia followed by students' fees, donations, gifts and bills, funds for financing scientific and professional work, projects and contracts related to the realization of teaching, research and consulting services, fees for commercial and other services, founding rights and

contracts with third parties, and finally other sources in accordance with the law. The overall budget for the past fiscal year amounted to 2,386,153,641 RSD corresponding to approximately 20 million EUR.

The state allocations have dropped in recent year. On average, the share of the revenue from the Government budget in the last decade amounted to 69% but has receded to only 56% in 2016. This allocation is spent mainly on the gross salaries of employees, material costs, current and investment maintenance, equipment, funds for the library and for carrying out scientific research work, for the scientific and professional development of employees but also for financing publishing activities and the expenses related to the work of the Students' Parliament and extra-curricular activities of students; other purposes in accordance with the Law.

The financial resources of the Faculty on the basis of tuition, providing services to third parties, gifts, donations, sponsorships or other sources of funds, other than transfers from the budget, make up the Faculty's own income up to 44%, in average – 31% for the last decade. The funds from own sources are held on the sub-account of the Faculty within the consolidated treasury account, or on the bank account in accordance with the Law. Regarding own revenues, the most significant is the income from postgraduate studies. Revenue for postgraduate studies and health education participate with more than 12% in total income and the income from regular studies (all forms of teaching) participates with up to 10% in total income. The funds from the performance of healthcare services, based on their own income, participate in average with 5% in the total. While, international projects participate in average with 3% in total revenue of the FMUB.

The representatives of the faculty mention by their own account, that the funds transferred from the Ministry of Education, Science and Technological Development are insufficient for covering all costs at the Faculty level, so that is has to use its own resources to purchase material needs during the fiscal year, settle overhead expenses: purchased coal, cover electricity costs, telephone expenses etc. In spite of the fact that the Faculty received insufficient funds for material expenses by the Ministry, the Faculty could do a positive and successful performance of basic education and all other activities, since it invested most of its own income in material needs.

Works on the capital investments, such as premises are carried out on the basis of the Strategic Plan, Annual Financial Plan and the needs of organizational units that were submitted in the previous year.

Sometimes, the Faculty receives an extraordinary equipment such as electronic microscope for permanent use from the Ministry of Education, Science and Technological Development, so in fact, the value of the purchased equipment is considerably higher. Procurements are

made from own revenues of the Faculty, dedicated funds from the Ministry of Education, Science and Technological Development, project funds and funds of the FMUB institutes that perform additional activities. In order to develop the Publishing Activities of the Faculty, that is, to provide quality textbooks and guides to the Faculty students, investments were made in publishing function, in average close to 150,000 EUR in the last three years.

The Faculty has harmonized its business with the 2009-2018 Budget System Law which specifies that expenditures can be realized only if sources of funds are provided.

The Strategy of the FMUB is to increase the quality of the conditions for academic staff and students, which can be concluded on the basis of increased investment in the reconstruction of facilities, procurement of equipment, procurement of laboratory materials, etc.

The experts understand that the university experiences considerable financial constraints and that important investments cannot be done due to a lack of financial resources. At the same, the higher education law of Serbia does not foresee financial autonomy for its state universities, limiting the perspectives of entrepreneurial activities of the Faculty in the process.

Criterion 8.4 Administrative staff and management

There is an administrative and professional staff, which is appropriate to support implementing the educational programme and related activities. Good management and efficient resource deployment is ensured.

The medical school formulates and implements an internal programme for quality assurance of the management including regular reviews.

Guiding Questions

- How is the efficient allocation of resources managed and reviewed? Who is involved in these processes?
- What are the mechanisms for preventing inefficient use of resources?

Preliminary Assessment and analysis of peers

Administration services perform legal, personnel, accounting, administrative-technical, library, information-computer and other affairs that are of common interest for the performance of FMUB activities. There are 94 administrative staff in the core services, and 180 employees are employed in the FMUB organizational units, that is, on administrative and laboratory-technical tasks in different organizational units of the Faculty. The work and op-

eration of administration services are available to assessment by academic staff, students and public opinion. Employees of administration with academic degrees have an opportunity to participate in educational activities and projects of the FMUB depending on their personal expertise. This possibility is particularly relevant for multidisciplinary teams, which request expertise of lawyers, economists, and other non-medical disciplines.

The FMUB has an adequate number of administrative staff for running the clinics and institutes. The above listed employees, however, cover *all* non-academic staff, such as librarians, technicians, caretakers, IT, lab assistants, etc. There is definitively too few professional staff for the administration of the study programme, independent student counselling, student monitoring, or curriculum development, e.g. in a Deanery of Student Affairs. For example, during the site visit, the international students mentioned that their administrative contact basically is the International Office, who also confirmed this. The International Office, however, usually has other responsibilities like exchange programmes, international cooperation, etc. and not student counselling. The further professionalization of the support structure for students and curriculum development should be envisaged.

Criterion 8.5 Interaction with health sector

There is constructive interaction between the medical school and the health and health related sectors of society and government. The medical school formalises its collaboration, including engagement of staff and students, with partners in the health sector.

Guiding Questions

- How does the staff communicate with the health sector?
- Do the cooperations work successfully? What could be improved?

Preliminary Assessment and analysis of peers

All employees of the FMUB communicate regularly with the health sector, either through collaborative work on preventive programmes or as being direct employees of university hospitals. Also, academic staff participate in different working groups of governmental authorities, particularly the Ministry of Health, Ministry of Education, Science and Technological Development.

As Serbia is a quite centralistic country (70% of doctors graduate from FMUB), the academic staff of FMUB is of course involved in the health sector. This is, however, not very formal, as the ways in Belgrade are short, and the policymakers and stakeholders are few. There are no formalized collaborations (cooperation treaties, memorandum of understanding, etc.) in place. Especially the primary health care could be involved more.

Final assessment of the peers after the comment of the Higher Education Institution regarding criterion 8:

The peers appreciate that FMUB will try to further professionalise the support structure for students and curriculum development.

As FMUB point out, there are formalised collaborations with external stakeholders – bilateral agreements with hospital sectors and memoranda of understandings with primary health care centres. Nevertheless, the peers are convinced that the interaction with the primary health care sector should be improved.

The peers consider criterion 8 to be mostly fulfilled.

9. Continuous Renewal

As a dynamic and socially accountable institution, the medical school has to initiate procedures for regularly reviewing and updating its structure and functions, to rectify documented deficiencies, and to allocate resources for continuous renewal.

The medical school bases the process of renewal on prospective studies and analyses and on results of local evaluations and the medical education literature.

It ensures that the process of renewal and restructuring leads to the revision of its policies and practices in accordance with past experience, present activities, and future perspectives. In addition, the following issues are addressed in its process of renewal:

- Adaptation of mission statement and outcomes to the scientific, socio- economic and cultural development of the society. (see 1.1)
- Modification of the intended educational outcomes of the graduating students in accordance with documented needs of the environment they will enter. The modification might include clinical skills, public health training and involvement in patient care appropriate to responsibilities encountered upon graduation. (see 1.4)
- Adaptation of the curriculum model and instructional methods to ensure that these are appropriate and relevant. (see 2.1)
- Adjustment of curricular elements and their relationships in keeping with developments in the basic biomedical, clinical, behavioural and social sciences, changes in the demographic profile and health/disease pattern of the population, and socioeconomic and cultural conditions. The adjustment would ensure that new relevant knowledge, concepts and methods are included and outdated ones discarded. (see 2.2 - 2.6)

- Development of assessment principles, and the methods and the number of examinations according to changes in intended educational outcomes and instructional methods. (see 3.1 and 3.2)
- Adaptation of student recruitment policy, selection methods and student intake to changing expectations and circumstances, human resource needs, changes in the pre-medical education system and the requirements of the educational programme. (see 4.1 and 4.2)
- Adaptation of academic staff recruitment and development policy according to changing needs. (see 5.1 and 5.2)
- Updating of educational resources according to changing needs, i.e. the student intake, size and profile of academic staff, and the educational programme. (see 6.1 - 6.3)
- Refinement of the process of programme monitoring and evaluation. (see 7.1 – 7.3)
- Development of the organisational structure and of governance and management to cope with changing circumstances and needs and, over time, accommodating the interests of the different groups of stakeholders. (see 8.1 – 8.5)

Preliminary Assessment and analysis of peers

Quality Assurance of the Program

This criterion of the WFME standard has been dealt with as an integral part of the analysis for the first eight criteria in this report. As an overall judgement, the peers generally find that continuous monitoring and renewal is indeed taking place and the quality assurance loops in many instances are closed. There is a formal body in place which is in charge to conduct an internal accreditation process.

As a result the program is adapted if needed. Examples mentioned during the review was the change of sequence between Radiology and Internal Medicine, the moving of Nuclear Medicine form the 3rd to the 5th year etc.

There is in many aspects room for improvement, which has been identified in the various subsections by the peers, e.g. the need to build a reliable alumni database to stay in contact with graduates and to use their expertise and feedback in the further development of the program under review, to cite again but one example.

The experts see a broad commitment for continuous development as part of the culture at the Faculty of Medicine. They have identified certain problems on the procedural level, as there is a certain overlap in the tasks of different committees engaged in the field of quality assurance, with various committee being in charge of changes in content whereas the committee for internal accreditation is primarily occupied with questions of procedure. This in some instance can lead to disputes of competence and to suboptimal results as the peers

noted during the audit.

The faculty displays a high motivation to improve and even undergo an additional external AMSE/WFME/ASIIN accreditation procedure. The quality assurance committee / teaching innovation committee are highly active. However, the continuous renewal process is not well formalized, especially on a superordinate level, e.g. the faculty has no (external) advisory board. It is also not known to the audit team, how the national accreditation process is structured, and what role governmental institutions play in this process.

Final assessment of the peers after the comment of the Higher Education Institution regarding criterion 9:

The peers support FMUB's plans to establish an external advisory board.

The peers consider criterion 9 to be fulfilled.

D Additional Documents

No additional documents are needed.

E Comment of the Higher Education Institution (18.03.2019)

The following quotes the comment of the institution:

“Comments to the report of the experts

Thank you so much for efforts to develop a comprehensive accreditation report, which we appreciate and have read with a great interest. The report is very useful for us to explore opportunities and perform steps for further FMUB improvement. We have only several comments.

B – Characteristics of the Degree Program

Also, the objectives of the study program are based on the Law on the National Qualification Framework of the Republic of Serbia [Закон о националном оквиру квалификација Републике Србије] (Official Gazette RS 27/2018), which is fully in line with the European Qualifications Framework (EQF) – its learning outcome descriptors . Since October 1st, 2015, it has been under the responsibility of ENIC/NARIC Centre Serbia (a member of the ENIC/NARIC network as a joint initiative of the European Commission, the Council of Europe and UNESCO), the unit of the Ministry of Education, Science and Technological Development of Serbia. In the past, this sort of recognition procedure was under the responsibility of universities of Serbia. Please, see: http://www.enic-naric.net/

C – Self-Assessment

1. Mission and Outcomes

Criterion 1.2 Participation in the formulation of mission and outcomes

In fact, there is routine monitoring of graduates in all fields by the Statistical Office of the Republic of Serbia and results are published in annual reports – statistical yearbooks. Please, look at: http://www.stat.gov.rs/en-US/

We are aware of this weakness and already took steps to improve alumni database, which is placed at: http://alumni.med.bg.ac.rs/login. Based on our assessment, it will be functional in 2 months and the first rough report of the alumni survey will be ready in one year, while detailed survey including the ongoing cohort of the 6th grade students will be ready in two years.

Criterion 1.3 Institutional autonomy and academic freedom

Changes in the accredited curriculum can exceed a range of 10%, and in that case the FMUB has to inform CAQA. Accreditation cycle is 7 years. We consider this possibility as significant degree of autonomy.

There is **no limit** in the number of courses offered, **but defined minimum** of the ECTS points (60 ECTS points and 600 contact hours per year).

2. Educational Programme

Criterion 2.1 Curriculum model and instructional methods

Since 2009, the FMUB recognized a need to support academic staff in application of student-cantered approach and in 2018 brought both to junior and senior faculties an opportunity for training in pedagogic skills, instructional methods and application of problem-based learning in cooperation with Faculty of Philosophy Belgrade University.

Criterion 2.6 Curriculum structure composition and duration

Thank you for this observation. We are aware that you refer to the Typical Medical School Curriculum (TMSC), however in our country presence of urology, geriatrics and anaesthesia are well established and have a long tradition throughout the history as separate units integrated in already mentioned bigger modules (surgery and internal medicine), due to the recognition of the Serbian burden of diseases as well ageing society. The number of ECTS and contact hours for all three disciplines correspond to the separate modules of the TMSC. Also, we found some outstanding medical school, which do not have urology and anaesthesia as a separate modules, while geriatrics is recognized as the ageing patient (as an example: medical school at Imperial College London and some others). We consider that sometimes such situation (having those disciplines in a broader module) has certain advantages as with development of medicine and burden of diseases and injuries, we need translation of knowledge and skills with problem based learning, which appreciate integrative approach. Also, we can pose the question why some other medical disciplines are not a separate modules, such as traumatology, looking at the burden of diseases and injuries.

Criterion 2.8 Linkage with medical practise and the health sector

Very often external stakeholders who belong to the health sector are graduates of our FMUB, as an example the Minister of Health is a graduate of our FMUB and also, before appointment was a member of our academic staff. The same case is with assistants ministers of health.

We agree with wishes of the interviewed groups and recently, since 2012, FMUB is investing attempts to improve cooperation with primary health care by introducing Memorandum of Understandings with all 17 primary health care centres in Belgrade („Dom zdravlja-s“).

3. Assessment of Students

Criterion 3.1 Assessment methods

All exams, as a composite part, have pre-examination obligations, which are always performed in the form of tests and multiple-choice questionnaires contributing with 30% (30 points) in overall marking. In addition, student who failed to pass this test – „collegium“ also failed exam.

We are in the transitional phase and preparation of equal approach to both the Serbian and English track, expecting to complete the harmonisation up to the next year as we approach the next cycle of national accreditation.

Unfortunately, the education system in Serbia and actual national regulation provides these opportunities.

In a way, oral examination are standardised as each module has specified list of questions to be posed to students during examination. A number of question is weighted by number of points and contact hours necessary for the completion of the module.

Criterion 3.2 Relation between assessment and learning

We fully agree with the summary and being in the transitional phase (mentioned above) we are already preparing equalization and working on guidelines to further standardised oral examination. We expect to complete the process up to the next academic year.

4. Students

Criterion 4.3 Student counselling and support

Thank you, we will consider establishment of an independent counselling office, though counselling office exists at the Belgrade University „Centre for Career Development“, which our medical students are fully eligible to use.

5. Academic Staff/Faculty

Criterion 5.1 Recruitment and selection policy

The FMUB announcements for the job positions are publicly exposed. Sometimes, professionals who do not belong to graduates of FMUB apply, however, after careful consideration of their biographies based on above mentioned criteria, unfortunately, they do not fulfil those criteria or are ranked worse than graduates of the FMUB.

We would be glad if our guest professor could devote more time to work at our FMUB, however, we agree that remuneration is absent and therefore they do not have this incentive to stay longer. Occasionally they stay if their time spent in academic activities at our FMUB is covered by some projects (Tempus in the past, and today Erasmus).

There are opportunities, which FMUB is using through the state scientific projects (Ministry of Education, Science and Technological Development) to up-graded the lab equipment and some labs – such

as biochemistry, completely fulfil international standards and therefore are recognized as reference laboratories in the Serbian health system. We hope that financial situation will be better in the future.

Criterion 6.2 Clinical training resources

Unfortunately observed situation with physical resources is a reflexion of overall economic conditions in the country. The FMUB tries to overcome that by providing conditions in which students can meet variety of patients and their cases. Also the FMUB invest efforts to establish the new simulation centre for clinical skills.

Criterion 6.3 Information technology

The FMUB, in 2015, has adopted the Rules on the content of the internet portal [Правилник о садржају интернет портала] (decision No26/IX-4 from 16.01.2015.). Also, the IT centre of the faculty prepared a document on the effective use and evaluation of ICT, which is under consideration and will be adopted in this year. The rest we agree.

Criterion 6.5 Educational expertise

We understand your remark and will invest efforts to overpass this weakness. However, we do not see the need to employ specialists for didactics as we can involve staff of the University of Belgrade – specialists in didactics. While the policy on the educational expertise of our faculties we could develop in this year, the financial resources necessary to involve all teaching staff in organized training for didactics in medical education will need several steps taking into account the significant number of the FMUB academic staff.

Criterion 6.6 Educational exchanges

Unfortunately, we do not agree, as indeed international exchange program has a long tradition since 1953 at the FMUB, and also today via Serbian IFMSA as a branch of IFMSA (International Federation of Medical Students' Associations). Each year over 100 medical students are in the programme of exchange with countries with which Serbian IFMSA has established contracts. Please, see for details:

http://exchange.ifmsa.org/exchange/score/explore/conditions/view/106 and http://ifmsa-serbia.org/ .

7. Program Evaluation

Criterion 7.1 Mechanisms for program monitoring and evaluation

We agree to have too many committees, however not with conflicting, but rather complementary roles. Therefore, we will follow up your recommendation and take steps to merge some of those structures.

Criterion 7.3 Performance of students and graduates

Also, we commented above re alumni survey, etc.

Criterion 7.4 Involvement of stakeholders

Thank you – we will follow this advice and improve both alumni system and provide regular anual forum for exchange with stakeholders.

8. Governance and Administration

Criterion 8.1 Governance

We agree, however not with conflicting but complementary roles and, as stated above, we will perform mergers of some committees: committee on curriculum improvement vs. committee on internal accreditation.

Criterion 8.4 Administrative staff and management

We agree with the statement: "The further professionalization of the support structure for students and curriculum development should be envisaged". Due to the prolonged financial crisis and budget austerity, it will be difficult effort.

Criterion 8.5 Interaction with health sector

Please see above: **we have formalised collaborations** with external stakeholders – bilateral agreements with hospital sectors and Memoranda of understandings with primary health care centres. Additional example is Memorandum of understanding with Ministry of Health and EU Delegation to the Republic of Serbia regarding establishment of the functional Centre „School of Public Health and Management". Another examples are similar formal documents supporting collaboration with Medical Chamber, Serbian Physicians' Society, Agency for Accreditation of Health Institutions, etc.

9. Continuous Renewal

The FMUB will explore the legal system of the Republic of Serbia and potentially establish external advisory board if there is no barrier.

As CAQA (the Serbian Commission for Accreditation and Quality Assurance) is a member of the ENQA – (European Association for Quality Assurance in Higher Education), we attach its recent report in English as instructive overview of its structure and operations."

F Summary: Peer recommendations (28.06.2019)

Taking into account the additional information and the comments given by Faculty of Medicine, University of Belgrade, the peers summarize their analysis and **final assessment** for the award of the seals as follows:

Degree Programme	ASIIN seal	Subject-specific labels	Maximum duration of accreditation
Doctor of Medicine and Surgery - M.D.	Without requirements	AMSE	30.09.2024

Recommendations

E 1. (WFME 1.2) It is recommended to systematically monitor of the success of graduates on the job market and to establish an alumni database.

E 2. (WFME 2.1) It is recommended to constantly apply new learning and teaching methods, to encourage a student-centred learning process.

E 3. (WFME 2.8) It is recommended to stronger cooperate with the primary health care sector.

E 4. (WFME 3.1) It is recommended to establish common standards for oral exams.

E 5. (WFME 4.3) It is recommended to establish of an independent counselling office for the Medical Faculty.

E 6. (WFME 6.5) It is recommended to develop a strategy to qualify faculty members and teaching staff for educational expertise in curriculum development, and teaching and assessment methodology.

E 7. (WFME 7.1) It is recommended to reduce the number of committees and to clearly define their tasks and responsibilities.

E 8. (WFME 7.4) It is recommended to systematically involve employers and alumni in further developing the programme.

G Decision of the AMSE Executive Committee (27.08.2019)

The AMSE Executive Committee decides to award the following seals:

Degree Programme	AMSE seal	Maximum duration of accreditation
Integrated Academic Studies of Medicine – M.D.	Without requirements	30.09.2024

H Comment of the Technical Committee 14- Medicine (03.09.2019)

Assessment and analysis for the award of the ASIIN seal:

The Technical Committee discusses the different forms of examinations for international (written) and Serbian (oral) students and the development of uniform assessment standards as announced by the university. The majority of the Technical Committee is of the opinion that an additional recommendation should be made (E9) regarding the different treatment of international and Serbian students. The majority of the Technical Committee does not support a condition in this respect. In addition, the Technical Committee suggests two editorial changes to the recommendations E 1 and E 2.

The Technical Committee 14 – Medicine recommends the award of the seals as follows:

Degree Programme	ASIIN seal	Subject-specific labels	Maximum duration of accreditation
Doctor of Medicine and Surgery - M.D.	Without requirements	AMSE	30.09.2024

Recommendations

E 1. (WFME 1.2) It is recommended to systematically monitor the success of graduates on the job market and to establish an alumni database.

E 2. (WFME 2.1) It is recommended to constantly apply new learning and teaching methods, thereby fostering a student-centred learning process.

E 9. (WFME 3.1) It is recommended to unify the assessment methods for international and Serbian students

I Decision of the Accreditation Commission (20.09.2019)

Assessment and analysis for the award of the ASIIN seal:

The Accreditation Commission decides to follow the suggestions of the Technical Committee 14 – Medicine to change the wording of recommendations E 1 and E 2 and to add recommendation E 9 regarding the different assessment form of international and Serbian students.

Finally, the Accreditation Commission adds another recommendation (E 10) with respect to the lab equipment, because in the report it is mentioned that the lab equipment should be upgraded in order to meet international safety standards.

The Accreditation Commission for Degree Programmes decides to award the following seals:

Degree Programme	ASIIN seal	Subject-specific labels	Maximum duration of accreditation
Integrated Academic Studies of Medicine – M.D.	Without requirements	AMSE	30.09.2024

Recommendations

E 1. (WFME 1.2) It is recommended to systematically monitor the success of graduates on the job market and to establish an alumni database.

E 2. (WFME 2.1) It is recommended to constantly apply new learning and teaching methods, thereby fostering a student-centred learning process.

E 3. (WFME 2.8) It is recommended to stronger cooperate with the primary health care sector.

E 4. (WFME 3.1) It is recommended to establish common standards for oral exams.

E 5. (WFME 4.3) It is recommended to establish of an independent counselling office for the Medical Faculty.

E 6. (WFME 6.5) It is recommended to develop a strategy to qualify faculty members and teaching staff for educational expertise in curriculum development, and teaching and assessment methodology.

E 7. (WFME 7.1) It is recommended to reduce the number of committees and to clearly define their tasks and responsibilities.

E 8. (WFME 7.4) It is recommended to systematically involve employers and alumni in further developing the programme.

E 9. (WFME 3.1) It is recommended to unify the assessment methods for international and Serbian students.

E 10. (WFME 6.1) It is strongly recommended to upgrade the lab equipment to meet international safety standards.

Appendix: Programme Learning Outcomes and Curriculum:

According to the university's Self-Assessment Report, the following **objectives** and **learning outcomes (intended qualifications profile)** shall be achieved by the rogramme:

„After completing the IAS, the Doctor of Medicine will be able to:

a. applies knowledge of the basic anatomical, histological and functional characteristics of a healthy and diseased organism

b. applies knowledge about the characteristics of the most important pathogens of infectious diseases, as well as the epidemiological and risk factors of the most significant infectious and non-infectious diseases and conditions *

v. correctly takes anamnesis and performs a clinical examination of the patients

r. recognizes and timely reveals the most common and most important diseases in the health system, clinical syndromes and patients' conditions *

d. provide assistance to the patient in urgent condition *

e. Apply and / or direct patients to appropriate diagnostic procedures (laboratory and / or clinical) in order to set differential diagnosis

f. correctly interprets the results of laboratory and clinical trials, as well as the methods of visualization in medicine

z. determine the therapy and / or referral of patients to the appropriate therapeutic procedure

i. recommend and keep temporary work stops

k. Approaches approaches and provides assistance to the patient in the terminal phase of the disease

l. monitor the state of health and participate in the treatment of acutely and chronically ill patients as part of the team

m. it identifies a fatal outcome and writes a report

n. performs constant promotion of health, healthy lifestyle and immunization *

about. recognizes and quantifies risk factors from life and work environment important for health and provides advice in order to correct risk factors and bad habits. *

p. responsibly approach his work in accordance with the medical doctrine

r. adheres to the principles of decent and adequate communication with both professional associates and patients and their families

s. knows and respects ethical and legal principles relevant to medical practice

t. participates in the activities of the team that forms the basis of modern medical practice, cooperates with other health workers and healthcare associates, as well as with relevant state bodies and bodies.

u. participates in the organization of work in health institutions

f. is constantly working on improving her through continuous medical education

h. follows relevant medical and other literature and performs interpretations of professional and statistical data,

c. contributes to the continuous improvement of the health care system by giving a critical review of the practice and proposing measures for improvement.

ч. by his personality and behavior, gives an example in his own personal and professional environment.“

The following **curriculum** is presented:

INTEGRATED ACADEMIC STUDIES OF MEDICINE

Subject name	espb	Number of classes	Semester
Anatomy	22	I:(55+60+30) II:(50+60+15)	1
English language 1	3	I:(30+30+0)	1
Medicine and the society	3	I:(30+30+0)	1
Basics of clinical practice 1	1	I:(0+30+0)	1
Histology and Embriology	13	I:(30+26+10) II:(30+49+20)	1
Human Genetics	5	I:(30+35+10)	1
First aid	1	II:(8+22+0)	2
Medical biochemistry and chemistry	14	III:(45+45+30) IV:(30+45+30)	3
English language 2	3	III:(30+30+0)	3
Immunology	3	III:(15+15+15)	3
Microbiology	11	III:(30+30+0) IV:(30+45+0)	3
Microbiology	8	III:(15+30+15) IV:(15+30+15)	3
Basics of clinical practice 2	3	III:(0+40+20)	3
Medical Pysiology	18	III:(50+50+30) IV:(56+54+28)	3
Epidemiology	3	IV:(15+22+8)	4
Clinical propedeutics	8	V:(30+60+15)	5
Pathology	16	V:(60+60+15) VI:(30+60+0)	5
Pathophysiology	11	V:(30+30+30) VI:(34+18+18)	5
Medical Statistics and Informatics	3	V:(14+28+8)	5
Pharmacology and Toxicology	9	V:(30+15+15) VI:(30+15+15)	5
Radiology	4	V:(21+16+3) VI:(15+15+0)	5
Nuclear medicine	2	VI:(13+10+7)	6
Dermatovenerology	5	VII:(20+35+20)	7
Infectious Diseases	7	VII:(10+25+10) VIII:(30+30+0)	7
Clinical microbiology	1	VII:(0+0+15)	7
Internal medicine	26	VII:(90+90+30) VIII:(60+90+40)	7
Clinical biochemistry	1	VII:(15+0+0)	7
Neurology	6	VII:(30+60+0)	7
Psychiatry	6	VIII:(30+45+15)	8
Obstetrics and gynecology	10	IX:(30+60+0) X:(30+60+0)	9
Social Medicine	3	IX:(15+22+8)	9
Pediatrics	10	IX:(30+60+0) X:(30+60+0)	9
Physical medicine and rehabilitation	3	IX:(15+30+0)	9
Surgery	26	IX:(70+100+34) X:(60+102+34)	9
Clinical Pharmacology	4	XI:(8+0+32)	11
Hygiene	5	XI:(30+30+15)	11
Clinical oncology	2	XI:(10+10+10)	11
Ocuppational medicine	3	XI:(20+38+2)	11
Otorhinolaryngology and maxillofacial surgery	6	XI:(30+50+10)	11
Ophthalmology	5	XI:(30+30+15)	11
Forensic medicine	6	XI:(40+25+10)	11
Clinical internship	19	IX:(0+435+0)	12