

REPORT OF THE EXPERT PANEL ON THE RE-ACCREDITATION OF Faculty of Medicine University of Rijeka

Date of preliminary site visit: 26 April 2022 Date of on-line re-accreditation: 27–29 April 2022

July 2022

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INTRODUCTION

The Agency for Science and Higher Education (the Agency) is an independent legal entity with public authority, registered in the court register, and a full member of the European Quality Assurance Register for Higher Education (EQAR) and European Association for Quality Assurance in Higher Education (ENQA).

All public and private higher education institutions are subject to re-accreditation, which is conducted in five-year cycles by the Agency, in accordance with the Act on Quality Assurance in Science and Higher Education (Official Gazette 45/09) and subordinate regulations, and by following *Standards and Guidelines for Quality Assurance in the European Higher Education Area* (ESG) and good international practice in quality assurance of higher education and science.

The Agency's Accreditation Council appointed an independent Expert Panel for the evaluation of the Faculty of Medicine University of Rijeka.

Members of the Expert Panel:

- Assoc. prof. Joško Božić, MD, PhD, School of Medicine, University of Split, the Republic of Croatia, chair,
- Assoc. prof. Rok Fink, PhD, Faculty of Health Sciences, University of Ljubljana, the Republic of Slovenia,
- Prof. Mark McEntee, PhD, School of Medicine, University College Cork, Ireland,
- Prof. dr. sc. Zdravko Petanjek, School of Medicine, University of Zagreb, the Republic of Croatia,
- Prof. Algimantas Tamelis, PhD, Faculty of Medicine, University of Health Sciences, the Republic of Lithuania,
- Ema Slapničar, student, School of Medicine, University of Split, the Republic of Croatia.

During the on-line re-accreditation, the Expert Panel held meetings with the following stakeholders:

- Management,
- Quality Assurance and Improvement Committee,
- Head of the Committee for International Cooperation,
- Head of the Committee for Recognition and Evaluation of Prior Learning,
- Representative of the Ethical Committee for Biomedical Research,
- Representative of the Center for Improvement of Teacher Competences and Communication Skills,
- Representative of the Student Affairs Service and Library,
- Students,
- Heads of departments, clinics and clinical institutes,
- Heads of study programmes,
- Full-time teaching staff,
- Teaching assistants and postdoctoral researchers,
- Leaders of research projects,
- Alumni,
- Representatives of external stakeholders.

The Croatian Expert Panel members went to the preliminary site-visit on 26 April 2022, during which they had a tour of the work facilities, laboratories, library, IT classrooms, student administration office and classrooms, and attended sample lectures, where they held a brief Q&A session with students.

During the preliminary site visit, the Expert Panel examined the available additional documents and study programme descriptions (learning outcomes).

The Expert Panel drafted this Report on the re-accreditation of the Faculty of Medicine University of Rijeka on the basis of the Faculty of Medicine University of Rijeka selfevaluation report, other relevant documents, preliminary site visit and on-line meetings.

The Report contains the following elements:

- Short description of the evaluated higher education institution,
- Brief analysis of the institutional advantages and disadvantages,
- List of institutional good practices,
- Analysis of each assessment area, recommendations for improvement and quality grade for each assessment area,
- Detailed analysis of each standard, recommendations for improvement and quality grade for each standard,
- Appendices (quality assessment summary by each assessment area and standard, and protocol),
- Summary.

In the analysis of the documentation, preliminary site visit to the Faculty of Medicine University of Rijeka, online meetings and writing of the Report, the Expert Panel was supported by:

- Maja Šegvić, coordinator, ASHE,
- Iva Žabarović, assistant coordinator, ASHE,
- Ivana Rončević, interpreter at the preliminary site visit and during the online meetings, ASHE,
- Vedrana Vojković Estatiev, translator of the Report, ASHE.

On the basis of the re-accreditation procedure conducted, and with the prior opinion of the Accreditation Council, the Agency issues the following accreditation recommendations to the Minister for Higher Education and Science:

- 1. **issuance of a confirmation on compliance with the requirements** for performing the activities, or parts of the activities
- 2. **denial of license** for performing the activities, or parts of the activities
- 3. **issuance of a letter of expectation** with the deadline for resolving deficiencies of up to three years. A letter of expectation can include the suspension of student enrolment within a set period.

The accreditation recommendation also includes a quality grade of a higher education institution, and recommendations for quality improvement.

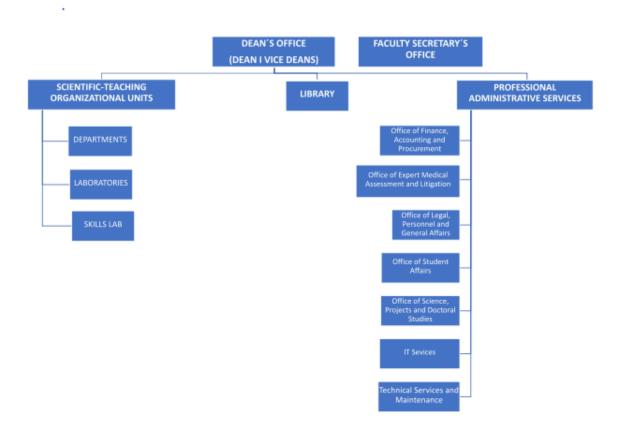
SHORT DESCRIPTION OF THE EVALUATED HIGHER EDUCATION INSTITUTION

NAME OF HIGHER EDUCATION INSTITUTION: Faculty of Medicine University of Rijeka

ADDRESS: Braće Branchetta 20

DEAN: izv. prof. dr. sc. Goran Hauser dr. med.

ORGANISATIONAL STRUCTURE:



ENROLLMENT IN REGISTER OF SCIENTIFIC ORGANISATIONS: Scientific field of Biomedicine and Health

STUDY PROGRAMMES:

- Public and Environmental Health, undergraduate university study programme
- Medical Laboratory Diagnostics, undergraduate university study programme
- Public and Environmental Health, graduate university study programme
- Medicine, integrated undergraduate and graduate university study programme
- Medicine in English, integrated undergraduate and graduate university study programme
- Pharmacy, integrated undergraduate and graduate university study programme
- Biomedicine, postgraduate (doctoral) university study programme
- Health and Environmental Engineering, postgraduate (doctoral) university study programme
- Dental Medicine, postgraduate (doctoral) university study programme
- Clinical Medicine, postgraduate (doctoral) university study programme
- Public Health, postgraduate (doctoral) university study programme
- Biomedicine of Developmental Age, postgraduate specialist university study programme
- Psychiatry, postgraduate specialist university study programme
- Cardiology, postgraduate specialist university study programme
- General Internal Medicine, postgraduate specialist university study programme
- Endocrinology and Diabetology, postgraduate specialist university study programme
- Gastroenterology, postgraduate specialist university study programme
- Clinical Radiology, postgraduate specialist university study programme
- Pulmology, postgraduate specialist university study programme

NUMBER OF STUDENTS: Analytic supplement to Self-analysis, page 2, Table 3.1. Number of students per study programme for the evaluated academic year

Study programme name	Full-time students	Part-time students
Public and Environmental Health (1496), undergraduate university study programme, Rijeka	65	0
Medicine (1498), integrated undergraduate and graduate university study programme, Rijeka	958	0
Public and Environmental Health (1499), graduate university study programme, Rijeka	64	0
Biomedicine (1504), postgraduate (doctoral) university study programme, Rijeka	279	0
Biomedicine of Developmental Age (1506), postgraduate specialist university study programme, Rijeka	0	8
Health and Environmental Engineering (1510), postgraduate (doctoral) university study programme, Rijeka	57	0
Psychiatry (1514), postgraduate specialist university study programme, Rijeka	0	6
Cardiology (1520), postgraduate specialist university study programme, Rijeka	0	9
General Internal Medicine (1521), postgraduate specialist university study programme, Rijeka	0	2
Endocrinology and Diabetology (1522), postgraduate specialist university study programme, Rijeka	0	6
Gastroenterology (1524), postgraduate specialist university study programme, Rijeka	0	8
Clinical Radiology (1525), postgraduate specialist university study programme, Rijeka	0	7
Pulmonology (1526), postgraduate specialist university study programme, Rijeka	0	3
Dental Medicine (1530), postgraduate (doctoral) university study programme, Rijeka	6	0
Clinical Medicine (1531), postgraduate (doctoral) university study programme, Rijeka	28	0
Public Health (1532), postgraduate (doctoral) university study programme, Rijeka	12	0
Total	1.469	49

NUMBER OF TEACHERS: Analytic supplement to Self-analysis, page 12, Table 4.1.a Staff Structure – FOR UNIVERSITIES in the evaluated academic year

Staff	Full-time employees	Part-time employees (cumulative employment)	External associates
Full-time professors with tenure	22	38	8

Full-time	6	26	14
professors		26	14
Associate	24	49	13
professors			
Assistant	25	66	32
professors			
Scientific Advisors	-	-	-
with tenure			
Scientific Advisors	-	-	-
Senior Research	_	-	-
Associate	-		
Research	_	-	-
Associates	_		
Teaching grades	2	1	1
Assistants	21	54	49
Postdoctoral researchers	13	18	10
Project staff	51	1	-
Expert assistants	-	-	-
Technical staff	36	16	-
Administrative staff	69	4	-
Support staff	25	1	-

SHORT DESCRIPTION OF THE EVALUATED HIGHER EDUCATION INSTITUTION

The Faculty of Medicine of the University of Rijeka was officially founded on November 21, 1955. The curricula of university studies of medicine, dental medicine, environmental and public health, and professional studies have changed several times since then in order to modernize the teaching process, relieve overburdened curricula and increase the pass rate and study efficiency. Based on the progress of health professions, the Faculty of Health Studies was established in 2015 and took over the university-level training of non-medical health professionals, while the Faculty of Dental Medicine became independent in 2020. Although separate University constituents, these faculties are still strongly connected with the Faculty of Medicine in Rijeka. These three faculties cooperate in undergraduate and postgraduate teaching, scientific programs, infrastructure sharing and teaching and professional staff sharing. After many years of preparation and in

response to the needs of the real sector, integrated graduate study of Pharmacy was accredited in 2021. After an eight-year break, the study of Medical Laboratory Diagnostics was relaunched in 2021 as a university undergraduate study. A new curriculum has been developed for the postgraduate doctoral school program, which aims to combine the doctoral-level training of scientific professionals, taking into account the specificities of individual scientific fields within the scientific field of biomedicine and health (basic sciences, clinical sciences, public health and health care, dental medicine, etc.) at the Doctoral School. Furthermore, numerous postgraduate specialist study programs have been accredited and conducted at the Faculty of Medicine to implement many specializations that require theoretical training.

BRIEF ANALYSIS OF THE INSTITUTIONAL ADVANTAGES AND DISADVANTAGES

ADVANTAGES OF THE INSTITUTION

- 1. The Faculty is clearly a well-structured, well-organised and well-managed institution.
- 2. The Faculty has a very responsive faculty management team which is clearly committed to continually and proactively improving the quality of its procedures and existing study programmes.
- 3. The Faculty has a strong positive attitude and feedback from all stakeholders (students, teachers, alumni, and external associates).
- 4. The Faculty has good relationships with industry, especially with the pharmaceutical industry.
- 5. The Faculty has an excellent awareness of its relationship with the local community of Rijeka and is committed to making a positive impact upon the community through a wide range of activities.
- 6. The Faculty has an active student community which organises a wide range of activities (such as volunteering), and is clearly producing capable, confident, and committed students who are engaged in the life of the institution.
- 7. There has been a huge effort by the Faculty in implementing changes and development in practical teaching ("shadowing") starting this year. These good practices should be continued in the years to come.
- 8. Faculty staff participate in numerous research activities, and are especially recognised in the fields of viral immunology and gastroenterology.
- 9. The Faculty participates in Erasmus+ and CEEPUS mobility programmes and has established bilateral and multilateral agreements with international institutions. Its mobility office with the Erasmus+ coordinator provides good support for students interested in participating in mobility programmes.
- 10. The Faculty carries out the Medical Studies in English study programme, which enables international students to participate in classes delivered in English. International students are encouraged to learn the Croatian language; the Faculty organises Croatian language learning courses.

DISADVANTAGES OF THE INSTITUTION

- 1. Student success rates of first-year students are poor, with low retention rates and high student withdrawal from study programmes posing a particular concern, especially regarding the Public and Environmental Health programme.
- 2. The Faculty should conduct regular analyses of passing rates to identify weak spots and to encourage higher passing rates, especially regarding the Public and Environmental Health programme.
- 3. Student participation rates in formal surveys and feedback need to improve, and the use of the results of these surveys in curriculum review requires attention.
- 4. The Croatian and English versions of the website of the Faculty of Medicine of the University of Rijeka are not consistent in terms of quality and ease of access to information: the English version is primarily aimed at international student admissions. It does not contain the same quality or extent of information as the Croatian version.
- 5. The Faculty should find the means to increase and encourage teaching, staff and student mobility. The current rates are too low.
- 6. Certain Faculty procedures need to be formalised, defined and standardised in the form of regulations, protocols or standard operating procedures.
- 7. Research administrative offices are understaffed, which may result in inadequate support for project applications and project management.

LIST OF INSTITUTIONAL GOOD PRACTICES

EXAMPLES OF GOOD PRACTICE

- 1. The Faculty has established excellent mechanisms for monitoring the progress of PhD students.
- 2. The Faculty has developed internal programmes for funding and supporting young researchers.
- 3. The Faculty has established a Centre for the Development of Teaching Competencies.

- 4. The Faculty provides access to a great number of online databases and a number of available online textbooks.
- 5. The Faculty engages in research projects performed in cooperation with the private sector. Partnerships have been established between Faculty units (e.g., the Center for Proteomics) and prestigious research institutes, universities, and biotechnological enterprises.

ANALYSIS OF EACH ASSESSMENT AREA, RECOMMENDATIONS FOR IMPROVEMENT AND QUALITY GRADE FOR EACH ASSESSMENT AREA

I. Internal quality assurance and the social role of the higher education institution

Analysis

This is an area of satisfactory quality for the Faculty. Quality assurance processes are in place at the Faculty and they are conducted in accordance with the approved procedures. Four of the six standards have been rated as being of satisfactory quality, and one as being at a high level of quality. The Committee for Quality Assurance provided the Panel with an action plan. However, the action plan lists tasks without detailed elaboration or specific milestones with defined deadlines for implementation and execution. A Committee for the Internal Assessment of the Quality Assurance System should be established at the Faculty level and this committee should conduct internal self-evaluations every two years. Furthermore, it was reported to the Panel by the Committee for Quality Assurance that student participation in online surveys is not very high. More of an effort should be directed at increasing student engagement with the evaluation of teaching.

The Panel was impressed with the response of the Faculty to previous accreditation recommendations. However, although it is evident that MEDRI has implemented the majority of the recommendations of the prior re-accreditation cycle, this was not formally addressed in the Faculty's action plan. The Faculty has implemented most of the recommendations from periodic quality assurance procedures conducted by the University of Rijeka (internal evaluation) in 2018.

The Faculty has a quality policy that supports the prevention of all forms of unethical behaviour, intolerance and discrimination. The Faculty's Office of Legal, Personnel and General Affairs is available to students who need to resolve any legal problems. The Vice Deans in charge of individual studies, the Vice Dean for Teaching, and the entire Faculty administration are available for all issues related to teaching. Students have their student ombudsman at the University and Faculty levels. Improvements can be made in defining the procedure for obtaining the ethical approval to conduct undergraduate and graduate

thesis research. Also, the part of the website related to the Ethics Committee for the Protection of Academic Integrity is sparsely populated, and its role is not adequately covered in the relevant documents.

The Faculty has a very good website with information on many aspects of the operation of the Faculty, including details of study programmes, staff profiles, teaching schedules, services for students, access to the e-learning system (Moodle), and a list of the scientific activities of the Faculty. The English version of the website needs to be improved, as it is missing a lot of information that would be useful to international students and users. Website navigation is quite complex and needs to be more user-friendly. The social engagement of the Faculty is very high, and this is an area of strength for the Faculty.

The Faculty has a Committee for Postgraduate Studies and Lifelong Learning, which, according to the needs of the labour market and guidelines in higher education, organises and implements several lifelong learning programmes tailored to the modern needs of professional, scientific, educational and social development. An evaluation of lifelong learning programmes should be conducted. Participants should be given the opportunity to present the positive and negative aspects of conducted programmes. In accordance with the results obtained, continuous improvement should be carried out regarding programme content and delivery.

Recommendations for improvement

- Find ways to increase motivation and encourage engagement with the completion of student surveys.
- Examine the role of the Committee for Quality Assurance to explore ways in which to increase its impact within the Faculty. Additionally, it is recommended that the number of Committee members be optimised.
- Develop a mechanism of reporting on the follow-up on conducted surveys.
- Develop a Committee for the Internal Assessment of the Quality Assurance System at the Faculty level. It is recommended that this Committee conduct internal self-evaluations every two years.
- Establish a formal action plan in accordance with the recommendations of this and future re-accreditation cycles.
- The role of the Ethics Committee for the Protection of Academic Integrity needs to be described in the relevant documents and on the Faculty website.
- Clarify and describe the procedure for obtaining the ethical approval to conduct undergraduate and graduate thesis research.

- More detail about departments, study possibilities and activities have to be available on the Faculty's English website in order to accommodate international students and develop MEDRI's international image and reputation.
- The overall website navigation needs to be more user-friendly. The Panel finds that the structure and overview of information, especially for students, should be improved by placing all the important links and information on a single page.
- Increase the number of lifelong learning programmes delivered by the Faculty of Medicine in Rijeka in accordance with the needs of the labour market.
- Surveys on participant satisfaction with lifelong learning programmes should be implemented and recommendations for programme improvement should be made.

Quality grade

Satisfactory level of quality

II. Study programmes

Analysis

The University of Rijeka and the Faculty of Medicine have properly elaborated strategic development plans. The mission and strategic goals are clearly stated and correspond to society's needs. The general objectives of all study programmes of the Faculty of Medicine are in line with the mission and these strategic goals. The Faculty clearly monitors and reacts to the needs of the society by adapting study programmes and processes.

Learning outcomes at the study programme level are well elaborated and in line with the mission and goals too.

The Faculty of Medicine has a huge variety of assessment procedures to ensure that these learning outcomes are achieved. The Faculty mostly relies on the oral type of assessments and logbooks for practical skills. Some more objective methods, such as OSCE, are applied too, but on a limited scale. The Faculty does not assess practical skills during the graduation procedure of medical students in an objective way. Surprisingly, the proportion of students passing exams on their first attempt is rather low, but the Faculty does not recognise this as more than just a partial problem.

The Faculty strongly relies on information collected during various student surveys. This is important source of understanding but sometimes difficult to interpret. The procedures for the initiation, modification or termination of study programmes or course units are unclear and look quite sporadic.

Student workload is represented in credits and is distributed in accordance with European recommendations. The appropriateness of the distribution is analysed only by means of student surveys, which are difficult to interpret and make necessary changes. Student practice is not obligatory in all study programmes of the Faculty of Medicine. Medicine students have just a few short elective periods.

Recommendations for improvement

- Continue to monitor the needs of society.
- Fully align learning outcomes at programme level with international best practices: EU Tuning, ACGME Competencies, CanMEDS framework, Tomorrow's Doctors: Outcomes and Standards for Undergraduate Medical Education, etc.
- Apply objective methods for assessing knowledge and practical skills more often.
- Optimise the overall number of oral assessments, define structure and criteria for those oral assessments that are absolutely necessary for successful programme implementation.
- Start to assess practical skills at the end of the medical programme using standardised and objective methods.
- Carefully evaluate student assessment practices using modern methods, including psychometrics.
- Clearly define procedures for the initiation, modification or termination of study programmes or course units.
- Apply a whole range of methods to involve students and other stakeholders in the management of the Faculty.
- Carry out an in-depth analysis of the actual student workload based not exclusively on student surveys and adapt programmes if and as needed.
- Make professional practice an integral and obligatory part of the curriculum for all medicine students.

Quality grade

Satisfactory level of quality

III. Teaching process and student support

Analysis

The Panel considers the teaching process and student support provided by the Faculty to be adequate, but further improvements could be made. Thus, the overall grade of this assessment area is at a satisfactory level of quality. There are ten standards in this assessment area: two are considered to be at a high level of quality, five are satisfactory and three are at the minimum level of quality.

The Faculty has effective mechanisms for recognising prior learning. Improvements could be made by analysing student performance on the study programme and adjusting admission criteria and criteria for the continuation of studies to their performance.

The Faculty has a Quality Assurance and Improvement Committee, which is responsible for conducting student surveys, but it does not analyse student progress and the student withdrawal (dropout) rate. Individual department members collect and review data on student progress which is used at the department level. However, during interviews with the heads of departments, the Panel members noticed that a few participants did not know the passing rates for their courses. It is strongly recommended that a regular record of student success rates be kept and yearly statistical analysis of exam results be conducted. Although the majority of departments do analyse exam results, the implementation of methods to promote better exam success rates is lacking. A low progression rate for some study programmes is noticeable. The Faculty's goal should be to increase the rate of students who regularly enrol in a higher year of education.

The Faculty encourages various modes of programme delivery. The implementation of all study programmes includes forms of teaching: lectures, seminars, and practicals, while some study programmes also include field courses. Further development of online teaching methods is recommended (for instance, via the Merlin e-learning platform). Examples of good practice would be to introduce elective subjects which would be held online and to provide students with more interactive learning materials. Student-centred learning encompasses not only diverse methods of teaching, but also a focus on the students' future needs and the relevance of teaching materials. Ensuring the relevance of the curriculum can be achieved by adherence to learning outcomes while testing the knowledge of students. Some courses have listed their learning outcomes very precisely, which is praiseworthy. However, there is still a concern that those outcomes are not tested in reality, but rather are a dead letter.

The Faculty ensures adequate student support. This support is seen through various aids, e.g. organised healthcare (family medical doctor and gynaecologist) and psychological support. Students can seek such support at any time. It is especially important to dedicate more time and support to foreign students, students with disabilities, professional athletes and students who do not originate from the City of Rijeka or the Primorje-Gorski Kotar County.

The Faculty motivates students to gain international experience, provides support to students in applying for and carrying out exchange programmes. It is important that it ensures the recognition of ECTS credits gained at another higher education institution. The exchange rate of medical students is satisfactory, but it is recommended to increase the rate of public and environmental health students who are participating in mobility programmes. It is also necessary to emphasise the importance of international experience of postgraduate students. The Panel received feedback from postgraduate students that indicates there is a lack of time for mobility, especially because time spent at international institutions is not part of their curricula.

The Faculty carries out the Medical Studies in English study programme, which enables foreign students to participate in classes delivered in English.

From the data presented in the Self-Evaluation Report and conversations with staff, external stakeholders and students, it is evident that the Faculty is engaged in obtaining information on and analysing the employability of its graduates.

Recommendations for improvement

- Analyse student performance on the study programme and adjust admission criteria and criteria for the continuation of studies to their performance.
- Assess the exam pass rate and keep a record of students' success rates.
- Conduct a statistical analysis of exam results at least once a year.
- Analyse and address the reasons for the high withdrawal rate.
- Openly publish learning outcomes for every course in order to inform students about the subject matter and skills they need to acquire during the course.
- Further development of online teaching methods is recommended (for instance, via the Merlin e-learning platform).
- Introduce an elective subject which would be held partially or solely online.
- Provide students with more interactive learning materials.
- Ensure the relevance of teaching materials by adhering to learning outcomes while testing student knowledge.
- Implement methods to promote better exam success rates and provide greater support to students who are struggling to pass exams. This includes teaching support such as organising additional introductory courses for the most demanding courses of the study programme, as well as psychological support.

- Focus on the students of the Public and Environmental Health study programme in order to increase their interest and participation in mobility programmes.
- Revise postgraduate curricula to formally dedicate time to mobility and acknowledge the importance of international experience.

Quality grade

Satisfactory level of quality

IV. Teaching and institutional capacities

Analysis

The Faculty has a good academic structure that follows the needs of all study programmes. The employees have extensive publications in highly-ranked journals, are the authors of several textbooks, and participate in a significant number of international projects. Regarding teaching capacities, the Faculty has adopted an individual promotion plan, but what is missing is a career-tracking system that would allow the head of department to monitor each employee's annual teaching and research progress. Furthermore, the heads of departments monitor the workload of each individual, taking into account the ratio between researching, teaching, and administrative work. However, some teacher-clinicians are reporting that they are lacking time for research and that they are doing research in their free time. The Expert Panel has noticed a certain lack of communication between the Faculty and the dislocated department of Paediatric Surgery. A great advantage of the Faculty regarding teaching capacity is the process of recruitment, advancement, and re-appointment. The entire procedure is very transparent, structured, and well organised. Moreover, the Faculty also takes into account student feedback when an individual is promoted to a higher academic rank. Special validity criteria have been adopted for student feedback. Nonetheless, clinicians find it challenging to achieve the same criteria as non-clinicians; therefore, again, the Faculty should focus on how to reduce the workload of clinicians. The Faculty has established the Center for the Improvement of Teachers' Competencies and promotes mobility. However, the Faculty should intensify the mobility of teachers, especially longterm mobility (> 3 months). The Faculty has well-organised premises, space, and equipment. In recent years there has been a substantial improvement of Faculty infrastructure, including an upgraded Center for Proteomics, ownership of new buildings, ICT infrastructure, and renovation of the library. The Faculty has shown financial sustainability and spending efficiency. They have several resources of funding from governmental to tuition fees, professional services, the market, and donations.

Recommendations for improvement

- Monitor and adapt the workload of all teachers. Pay special attention to teachers who are researcher-clinicians, so that they have opportunities for research within their workload.
- Establish better communication with the dislocated department of Paediatric Surgery.
- The Faculty should ensure an academic environment in which clinicians will also be able to meet the quality criteria, as non-clinical teachers are.
- The Faculty should increase short-term (<3 months) and long-term (> 3 months) teaching mobility.
- The Faculty should establish a more formal and structured career-tracking system for employees. This would be especially beneficial for young employees.
- The Faculty should increase the space available for studying on the library premises.

Quality grade

Satisfactory level of quality

V. Scientific/artistic activity

Analysis

The Panel considers the scientific activity of the Faculty to be at a high level of quality. There is a large number of teachers, associates, and professional staff who are recognised as experts at an international level. Despite this, some improvements could be made. In particular, the sustainability of such a high research level should be elaborated upon, and a possible negative impact on the teaching process should be taken into account.

The Faculty of Medicine in Rijeka has a large number of high-quality publications. Around 15% of publications are in the top 10% of journals, with the dominant participation of groups within the field of virological immunology. There is a clear upward trend in the number of papers published yearly.

The researchers register their publications at official platforms. Teachers and associates of the Faculty actively promote scientific achievements at national and international meetings and conferences. The social relevance of the Faculty's work is reflected in the number of competitive projects. The Faculty has been cooperating with the private sector for many years. At the international level, the Faculty of Medicine cooperates with a

number of institutions and experts abroad that enable knowledge and technology transfer.

The Faculty Science Strategic Plan, whose goals have mainly been achieved, is in accordance with those of the University. There is a proper system of monitoring whether strategic indicators have been met. An action plan stating the plan of activities and target values is defined.

The Faculty has a high level of research and IT infrastructure, and the availability of relevant scientific literature is good. The equipment for scientific research and professional activities is used in teaching mainly at the postgraduate level and much less so at the undergraduate-graduate level.

The Faculty of Medicine in Rijeka is continuously improving its scientific activity by using its own resources to finance employees. The Faculty of Medicine is also improving its scientific activity by financing the costs of doctoral studies.

Although a substantial proportion of researchers have high scientometric parameters, more than half have a rather low citation rate and h-index, most likely due to a high teaching overload. The position of clinical employees is particularly difficult, because they have a regular clinical workload, which obviously leaves less time for quality research work.

It is important for advancement in research to be sustainable. It is crucial that negative effects of high research activity do not reflect on the quality of teaching and professional activity. Project leaders have complained that their research engagement is not properly recognised by the Faculty and have mentioned that they expect to reduce their teaching and administrative duties. However, it is not clear how their reduced teaching engagement is going to be compensated.

Undergraduate and graduate students have been involved in the Faculty's scientific activities, but there is no student section organised within the Faculty that promotes scientific activities.

There is a high drop-out rate and a highly delayed period for finishing a PhD programme and defending a thesis. Even though a significant number of papers have been coauthored by students, these are almost exclusively PhD students and only a very small number of graduate students are involved in research. The research laboratories seem not to be highly involved in teaching activities for graduate students.

Recommendations for improvement

- Stimulate diversification of research within more fields.
- Stimulate the writing of PhD theses in English.
- For clinical employees promote more applied research that is related to their clinical work.

- Stimulate more collaboration and integration among researchers, particularly those that do not receive significant financial support.
- Establish a clear record of teaching, research and administrative load for project leaders.
- Before reducing the teaching and administrative load of a productive researcher, do a clear calculation of how this is going to be compensated.
- Make a financial calculation whereby projects which will not bring potential income to the Faculty (projects without translational potential) will cover the cost of overheads (so as not to incur additional costs for the Faculty).
- Require that PhD students and postdocs employed on projects make at least 10% of engagement in teaching or other activities with graduate students.
- Formally encourage the involvement of students doing graduate studies in research.
- Have research activity at graduate level count as a substitute for elective courses and recognise this with ECTS points.
- Oblige leading researchers that have a reduced teaching commitment (below 50%) to increase their scientific work with graduate students (in proportion to the reduction of teaching activities).
- Increase the monitoring of PhD students' advancement during postgraduate studies and the monitoring of research activities related to their thesis.

Quality grade

High level of quality

DETAILED ANALYSIS OF EACH STANDARD, RECOMMENDATIONS FOR IMPROVEMENT AND QUALITY GRADE FOR EACH STANDARD

I. Internal quality assurance and the social role of the higher education institution

1.1. The higher education institution has established a functional internal quality assurance system.

Analysis

The Faculty of Medicine in Rijeka has an established internal quality system aligned with the University of Rijeka's Quality Assurance and Improvement regulations and relevant ordinances, including the criteria in the Act on Quality Assurance in Science and Higher Education, ESG standards, the Statute of the University of Rijeka, and the Statute of the Faculty of Medicine in Rijeka. The basic organisational body for quality assurance at the Faculty is the Quality Assurance and Improvement Committee. Additionally, they have an operational Office of Quality Assurance and Improvement. This is set out in detail on the Faculty website, including the membership of the Committee, which includes academic-scientific and administrative staff and a student representative.

The Panel met with the Quality Assurance and Improvement Committee and explored their role within the Faculty and their ongoing action plan. The Committee provided the Panel with the action plan. However, the action plan lists tasks without detailed elaboration or specific milestones with deadlines defined for implementation and execution. Records of meetings are kept regularly and the minutes of the meetings were presented to the Panel.

The quality management system, internal processes, procedures and activities are set out in the Quality Assurance Manual of the Faculty of Medicine in Rijeka and the Ordinance on Quality Assurance and Improvement System of the Faculty of Medicine in Rijeka.

For each calendar year, the Faculty Council adopts a Plan for Promotion, Employment and Other Personnel Changes, which is created based on job complexity coefficients available to the Faculty and in accordance with current Croatian regulations.

The Faculty of Medicine in Rijeka places significant emphasis on student satisfaction and student satisfaction with study programmes is measured by both a survey on student satisfaction with the teaching conducted when studies have been completed (after graduation) and a teaching evaluation survey. It was reported to the Panel by the Committee for Quality Assurance that the participation of students in online surveys is not very high.

Students are involved in various committees within the Faculty. The Panel received a lot of information from students and employers that made it clear that a range of methods is used to listen to various stakeholders and that, overall, the Faculty is responsive to the

information they get in this manner. Moreover, the Vice Dean for Quality Assurance and the chairperson of the Quality Assurance Committee organise meetings with student representatives in the Quality Assurance Committee and with representatives of study years of all study programmes to discuss ways of increasing motivation and encouraging student turnout in terms of completing student surveys, which clearly is not a sufficient measure to increase the student response.

The Strategic Development Plan of the Faculty of Medicine in Rijeka 2019–2025, the Science Strategic Plan 2021–2025 of the Faculty of Medicine in Rijeka and the University of Rijeka Strategic Development Plan for the periods 2014–2020 and 2021–2025 were provided to the Panel.

The Faculty follows the University of Rijeka Strategic Development Plan for the periods 2014–2020 and 2021–2025, the basic goals of which are included in the Strategic Development Plan of the Faculty of Medicine in Rijeka. In addition, every year, the Faculty analyses the implementation of the University's strategic goals and the Report on the Implementation of the Strategic Development Plan, which are adopted at Faculty Council sessions.

Recommendations for improvement

- The Panel recommends that the Faculty find ways to increase motivation and encourage student turnout in terms of completing student surveys.
- The Panel recommends that the role of the Quality Assurance and Improvement Committee be examined in order to explore ways in which to increase its impact within the Faculty. Additionally, it is recommended that the number of the Committee members be optimised.
- The Panel recommends that the Faculty develop a mechanism of reporting on the follow-up on conducted surveys.
- The Panel recommends that a Committee for the Internal Assessment of the Quality Assurance System be developed at the Faculty level. It is recommended that this Committee conduct internal self-evaluations every two years.

Quality grade

Satisfactory level of quality

1.2. The higher education institution implements recommendations for quality improvement from previous evaluations.

Analysis

On top of the Agency for Science and Higher Education (ASHE) evaluation, the Faculty undergoes periodic quality assurance procedures conducted by the University of Rijeka (internal evaluation) every three years. In accordance with the recommendations of the previous external evaluation procedure, in the section "Higher education institution management and quality assurance", the Faculty has adopted a new Strategic Development Plan of the Faculty of Medicine in Rijeka for the period 2019–2025, with clearly defined areas and goals and defined subgoals/tasks, indicators, target values, and persons and/or bodies responsible for their realisation at the Faculty. Also, in July 2016, the Science Strategic Plan of the Faculty of Medicine in Rijeka for the period 2016–2020 was adopted, with clearly specified strategic goals for scientific development and expected outcomes and indicators of implementation success. The Science Strategic Plan 2021–2025 of the Faculty of Medicine was adopted on March 8, 2022.

The Panel was impressed with the development of the Faculty since the last reaccreditation in 2015. Most of the recommendations given in the 2015 accreditation report have been implemented and have resulted in the transformation and improvement of the Faculty.

However, although it is evident that MEDRI has implemented the majority of the recommendations of the prior re-accreditation cycle, this was not formally addressed in the Faculty's action plan.

The Faculty has implemented most of the recommendations from periodic quality assurance procedures conducted by the University of Rijeka (internal evaluation) from 2018.

Recommendations for improvement

• The Panel recommends that the Faculty set a formal action plan in accordance with the recommendations of this and future re-accreditation cycles.

Quality grade

Satisfactory level of quality

1.3. The higher education institution supports academic integrity and freedom, prevents all types of unethical behaviour, intolerance and discrimination.

Analysis

The Faculty has a quality policy that supports the prevention of all forms of unethical behaviour, intolerance and discrimination. It is in accordance with the Code of Ethics for Teachers, Associates and Scientists of the Faculty of Medicine in Rijeka, the Code of Ethics for Students of the Faculty of Medicine in Rijeka, and the Ethics Committee Rules of Procedure for the Protection of Academic Integrity, Preserving the Dignity and Promoting the Reputation of the Faculty of Medicine, University of Rijeka. The Faculty also has an

operating permanent Ethics Committee for Biomedical Research and an Ethics Committee for the Protection of Academic Integrity. While the role of the Ethics Committee for Biomedical Research is well described and clear in the documents, the role of the Ethics Committee for Protection of Academic Integrity is not clear, not mentioned in the selfevaluation report, and the Faculty website lists only the members of the Committee, without a description.

The Faculty uses the Turnitin software to verify the originality of student theses at all constituents of the University of Rijeka. However, greater attention should be paid to sanctioning all types of student misconduct and especially dishonest actions such as cheating on exams.

The Faculty publishes regulations on studying, student evaluation, and the undergraduate and graduate theses on the Faculty website.

There is a Faculty Office of Legal, Personnel and General Affairs available to students if they have a legal problem to resolve, while vice deans in charge of individual studies, the Vice Dean for Teaching and the entire Faculty administration are available for all issues related to teaching. Students have their student ombudsman at the University level and at the Faculty level.

Recommendations for improvement

- The role of the Ethics Committee for the Protection of Academic Integrity needs to be described in the relevant documents and on the Faculty website.
- It is necessary to clarify and describe the procedure for obtaining ethical approval to conduct undergraduate and graduate thesis research.

Quality grade

Satisfactory level of quality

1.4. The higher education institution ensures the availability of information on important aspects of its activities (teaching, scientific/artistic and social).

Analysis

The Faculty has a good website with information on many aspects of the operation of the Faculty, including details of study programmes, staff profiles, teaching schedules, services for students, access to the e-learning system (Moodle), and a list of the scientific activities of the Faculty. The website is available in Croatian and English and contains the following information: information for students, information about the Faculty, links to the SharePoint Portal (SPP) for teachers and students, and a link to the Faculty Council website for Council members. A special website is available on the Faculty website under the information section. However, the English version of the website needs to be

improved, as it is missing a lot of information that would be useful to foreign students and users. More details about departments, study possibilities and activities have to be available in English in order to accommodate international students (e.g. Erasmus+). The website navigation is quite complex and needs to be more user friendly. The Panel finds that the structure and overview of information, especially for students, should be improved by placing all the important links and information on a single page. During our visit, MEDRI informed us that the website is currently in the process of being redesigned, so we expect substantial improvement regarding the quality of the website, especially the English version. It should be noted that the redesign should have commenced earlier.

The Faculty has an information officer who operates according to the Right of Access to Information Act. Information on study programmes (courses, course coordinators, ECTS points) of undergraduate, graduate and integrated studies and postgraduate university (doctoral) and postgraduate specialist studies are also published on the Faculty website (Information for students – Study Programmes).

Information on enrolment, enrolment criteria, enrolment quotas, calls for application for undergraduate, graduate, integrated, postgraduate university (doctoral), and postgraduate specialist studies are available on the Faculty website (Information for students – Admissions and Enrolment). Relevant information is a part of the Guide for Freshmen, used by all University constituents, including the Faculty of Medicine in Rijeka. Course syllabi containing a list and description of lectures, seminars/practicals, learning outcomes, and literature for each course are published on the Faculty website and the Merlin e-learning platform, which students and teachers can access using their AAI identity. In addition to the official website, the Faculty is active on social media (Facebook, LinkedIn, YouTube channel) and provides a highly active news section on its website, with up-to-date information on events.

Recommendations for improvement

- More details about departments, study possibilities and activities need to be available in English in order to accommodate international students, and develop MEDRI's international image and reputation.
- The overall navigation through the website needs to be more user-friendly. The Panel finds that the structure and overview of information, especially for students, should be improved by placing all the important links and information on a single page.

Quality grade

Satisfactory level of quality

1.5. The higher education institution understands and encourages the development of its social role.

Analysis

The Faculty understands and encourages the development of its social role and is continuously developing and improving its cooperation with local government and selfgovernment units, civil society institutions, and other educational institutions. The Faculty's social responsibility is visible through a series of activities aimed at popularising science and communicating with the public through the media. In that sense, the key goals are stated in several points of the Strategic Development Plan of the Faculty of Medicine. Faculty employees contribute to the development of the economy and the local community by participating in scientific and professional projects. The Faculty also contributes to the community by providing its premises, equipment and infrastructure for seminars, workshops, conferences, and guest lectures to be conducted by national and international experts on topics relevant to the local community.

During the past period, Faculty staff have held numerous positions in various associations, expert bodies, committees, and working groups at both the parent institution and the University, in the governing councils of various institutions, local government bodies, national bodies (Croatian Parliament, ministries, national agencies) and international organisations (various societies, the European Medicines Agency, etc.). Moreover, students volunteer in a number of organised events.

Recommendations for improvement

No recommendations.

Quality grade

High level of quality

1.6. Lifelong learning programmes delivered by the higher education institution are aligned with the strategic goals and the mission of the higher education institution, and social needs.

Analysis

The University of Rijeka, in accordance with the Ordinance on Lifelong Learning of the University of Rijeka, lists the development of lifelong learning as one of its strategic goals. In this sense, the importance of lifelong learning is recognised at the Faculty level, which is why lifelong learning is included in the Strategic Development Plan of the Faculty of Medicine in Rijeka 2019–2025 within the goals related to education.

The Faculty has a Committee for Postgraduate Studies and Lifelong Learning, which, in accordance with the needs of the labour market and guidelines in higher education, organises and implements several lifelong learning programmes tailored to the modern needs of professional, scientific, educational and social development. Additionally, the

Faculty has established a rulebook that defines the terms under which lifelong learning programmes can be organised, as well as the roles of the Committee. The Rulebook on Conditions of Registration and Scoring of Lifelong Learning is available on the Faculty website. The list of programmes (9) with programme details is available on the Faculty website (only in Croatian). All these programmes are accredited by the Committee for Lifelong Learning of the University of Rijeka in accordance with the procedure and criteria prescribed by the Ordinance on Lifelong Learning of the University of Rijeka. Administrative support to the Committee is provided by the Office of Postgraduate (Specialist) Studies and Lifelong Learning.

Although MEDRI has stated in their self-evaluation that the evaluation of lifelong learning programmes is already being conducted, the Panel found that this element is lacking. When a programme has been completed, the participants should be given a survey whereby they can evaluate the programme. Based on the survey results, recommendations for the improvement of the programme should be made.

Recommendations for improvement

- Increase the number of lifelong learning programmes delivered by the Faculty of Medicine in Rijeka in accordance with the needs of the labour market.
- Surveys on participant satisfaction with lifelong learning programmes should be implemented and recommendations for programme improvement should be made.

Quality grade

Satisfactory level of quality

II. Study programmes

2.1. The general objectives of all study programmes are in line with the mission and strategic goals of the higher education institution and the needs of the society.

Analysis

The mission of the University of Rijeka and its basic organisational principles and vision are presented in the University Statute.

The mission and objectives of the Faculty of Medicine are formulated in the Statute of the Faculty of Medicine.

The Strategic Development Plan of the Faculty of Medicine in Rijeka 2019–2025 indicates four main directions of development: education, science and research, organisation, and public function. For education the Faculty envisages "*1. Enabling high-quality and effective education based on learning outcomes, 2. Placing students at the center of the learning*

process and participating in co-responsibility for the success of the educational process and active involvement in cultural, sport and social activities, 3. Involvement in the European Higher Education Area, 4. Concern about student employability through study programs based on learning outcomes and 5. Systematic development of the lifelong learning programs."

All study programmes of the Faculty of Medicine are standard ones; equivalents can be found at most faculties of this type. The goals and objectives of all undergraduate, integrated undergraduate and graduate, and postgraduate study programmes of the Faculty of Medicine are clear and relevant, meeting the basic modern principles of such programmes. The Faculty states that it works closely with the regional administration, constantly monitoring and assessing the changing need for specialists in the labour market. It is stated that the programmes of Pharmacy and Medical Laboratory Diagnostics were launched precisely because of the need of the society.

Recommendations for improvement

• Continue monitoring needs of the society.

Quality grade

High level

2.2. The intended learning outcomes at the level of study programmes delivered by the higher education institution are aligned with the level and profile of qualifications gained.

Analysis

The Faculty has defined learning outcomes for study programmes that are in line with the mission and goals of the Faculty of Medicine and the University of Rijeka.

The Faculty has defined 20 learning outcomes for the undergraduate programme on Environmental and Public Health, 4 – for the undergraduate programme Medical Laboratory Diagnostics, 10 – for the postgraduate programme on Environmental and Public Health, 21 – for the integrated study programme Medicine and 33 – for the integrated study programme Pharmacy. The Faculty has considered descriptors of learning outcomes in accordance with the levels of the Croatian Classification Framework (CROQF) and the European Classifications Framework (EQF) for the 6th and 7th levels.

Generally, learning outcomes for all study programmes are in line with the best international examples of such outcomes, but further elaboration of generic learning outcomes would be desirable.

The harmonisation of learning outcomes of the Medicine study programme with Directive 2005/36/EC of the European Parliament and of the Council of 7 September 2005 on the recognition of professional qualifications is in place too.

Recommendations for improvement

• Further improvement of learning outcomes at the programme level to fully align them with best international practices: EU Tuning, ACGME Competencies, CanMEDS framework, Tomorrow's Doctors: Outcomes and Standards for Undergraduate Medical Education, etc.

Quality grade

High quality

2.3. The higher education institution provides evidence of the achievement of intended learning outcomes of the study programmes it delivers.

Analysis

Assessment procedures are defined by the Ordinance on Assessment and Evaluation of Students at the Faculty of Medicine in Rijeka (2018).

Programme-level-intended learning outcomes of all undergraduate, graduate, and integrated study programmes are clearly stated. The learning outcomes for the majority of course units are clear too, but for some courses they are too numerous, too technical, too narrow, or correspond just partially to programme level outcomes. Especially apparent was the lack of generic learning outcomes indicated at the programme level, which should have been developed for specific course units.

Faculty staff use a variety of different assessment methods for and of learning (seminar papers, tests, written and oral examinations, practical assignments, project assignments and presentations). The description of every course unit indicates assessment principles and procedures, but the assessment mode of generic learning outcomes is unclear. Practical skills are assessed by filling in logbooks, while a limited number of departments have some OSCEs in place. Practical skills are not formally assessed in many clinical course units (Internal Medicine, Emergency Medical Conditions I, etc.).

The achievement of the expected learning outcomes of study programmes is assessed during final graduation exams and the preparation and defence of the bachelor's/master's thesis.

The major weakness of assessment practices at the Faculty of Medicine is the preference for oral assessments (exams) and a weak focus on the assessment of generic learning outcomes, both at course unit level and programme level. The Faculty implements student surveys to collect feedback on many different issues, including teaching, assessment, and the actual course workload, as well as the extent to which graduates are prepared to enter the labour market.

Recommendations for improvement

- Objective methods for assessing knowledge and practical skills need to be applied more often. The number of oral assessments needs to be reduced.
- It is recommended that practical skills at the end of the medical programme begin to be assessed not only by logbook but also by standardised and objective methods.
- Careful evaluation of student assessment practices is recommended, not only based on survey data, but by using modern methods, including psychometrics, because the proportion of students passing exams on their first attempt is unacceptable.

Quality grade

Minimum level

2.4. The HEI uses feedback from students, employers, professional organisations and alumni in the procedures of planning, proposing and approving new programmes, and revising or closing the existing programmes.

Analysis

The Faculty collects feedback on different issues mostly by means of student surveys. Unfortunately, this is a very subjective way of information gathering. The Faculty is not particularly successful at this, as response rates are rather low.

The Faculty indicates that changes in study programmes are carried out in cooperation with course coordinators and students (students are members of the Study Year Council and the Teaching Committee) and considering labour market needs. It was pointed out that new courses (Sanitary Hydrotechnics, Hygiene Management in the Hospitality Industry) were introduced because of alumni feedback.

The lack of highly qualified staff in medical laboratory diagnostics was the reason to relaunch a significantly reformed and improved study programme of Medical Laboratory Diagnostics at the Faculty of Medicine.

We were assured that society's needs and labour market demands were also the main reasons for the University of Rijeka and the Faculty of Medicine to launch the study programme of Pharmacy too.

Recommendations for improvement

- Clearly define procedures for the initiation, modification or termination of study programmes or course units.
- Apply a whole range of methods to involve students and other stakeholders in the management of the Faculty.

Quality grade

Satisfactory level of quality

2.5. The higher education institution ensures that ECTS allocation is adequate.

Analysis

The European Credit Transfer and Accumulation System (ECTS) is implemented in all study programmes at the Faculty of Medicine.

The Faculty states that ECTS points are awarded for all study activities and take into account the total amount of work required to achieve the expected learning outcomes.

All course units of all undergraduate, graduate, and integrated study programmes at the Faculty of Medicine clearly express student workload in terms of ECTS points too.

The University of Rijeka and the Faculty of Medicine mostly rely on student surveys to collect feedback on different aspects, including student workload. The relevant authorities (heads of studies, the Quality Committee, the Vice Dean for Teaching, the Vice Dean for the programmes of Public and Environmental Health and Medical Laboratory Diagnostics, and the Vice Dean for Quality) conduct periodic analyses of the results. The Faculty pointed out that survey results were difficult to interpret unambiguously and to conduct a systematic change in ECTS points within the programme curriculum. The Faculty believes that there is very limited or even non-existent room to correct the number of ECTS points for certain course units because of programme complexity. Instead, the Faculty foresees the adaptation of course content in case of a disbalance between the actual student workload and the number of ECTS points. Unfortunately, an example of such an adjustment was not provided.

Recommendations for improvement

• Carry out an in-depth analysis of the actual student workload, not based only on student surveys, and adapt the study programmes if necessary.

Quality grade

Minimum level of quality

2.6. Student practice is an integral part of study programmes (where applicable).

Analysis

Professional practice is an integral part of teaching at the integrated undergraduate and graduate university study of Medicine, but the volume is too small and organisational principles are not sufficient to ensure that all students will obtain sufficient clinical experience. This is because professional practice is part of just a few elective courses for 2nd – 6th year students. It was stated that students obtained clinical experience as part of obligatory course units on clinical medicine too, but the extent of these activities and their total volume was not clear.

The number of medical students who have chosen the elective course Professional Practice increased from 97 to 195 and to from 27 to 50 (Medicine in English) from the academic year 2017–2018 to 2020–2021. This clearly shows student interest in gaining experience and their willingness to develop it.

The elective Professional Practice is conducted at the teaching bases of the Faculty of Medicine, located mostly in the Primorje-Gorski Kotar County. Students also have the option of doing their professional practice at their place of residence.

Professional practice is an obligatory part of other study programmes too: Public and Environmental Health undergraduate (75 teaching hours, 5 ECTS, since the academic year 2017–2018) and graduate (120 teaching hours, 3 ECTS, since the academic year 2020–2021), and Pharmacy (1180 teaching hours, 38 ECTS points).

Recommendations for improvement

• In order to fully comply with the requirements of Directive 2005/36/EC of the European Parliament and of the Council of 7 September 2005 on the recognition of professional qualifications – suitable clinical experience in hospitals under appropriate supervision – professional practice of sufficient volume needs to be an integral and obligatory part of the curriculum for all students of medicine.

Quality grade Minimum level

III. Teaching process and student support

3.1. Admission criteria or criteria for the continuation of studies are in line with the requirements of the study programme, clearly defined, published and consistently applied.

Analysis

The Faculty has published its enrolment criteria and they are in accordance with Croatian legislative acts, as well as the requirements of the study programme.

Criteria for admission to the Faculty are openly published and highly accessible to high school students, since they follow the basic rules of Croatian State Matura exams ("*Državna matura*"), used by higher education institutions in Croatia for the admission of students.

Student selection is transparent and based on the results of State Matura exams. Therefore, the list of students that fulfil the criteria for enrolment is openly published.

Criteria for the continuation of studies are consistently applied and the Faculty has effective mechanisms for recognising prior learning.

Improvements could be made by analysing student performance on a study programme and adjusting admission criteria and criteria for the continuation of studies to their performance. For example, to enrol in the Public and Environmental Health study programme, students are required to pass State Matura exams in compulsory subjects (Croatian Language, a modern foreign language and Mathematics), but just at the basic level of knowledge. If that level of prior knowledge is shown to be insufficient during the first year of the Public and Environmental Health study programme (e.g. students are struggling to pass exams due to their lack of prior knowledge), it is recommended that admission criteria be revised and a higher level of initial knowledge required.

Recommendations for improvement

• Analyse student performance on study programmes and adjust admission criteria and criteria for the continuation of studies to their performance.

Quality grade

Satisfactory level of quality

3.2. The higher education institution gathers and analyses information on student progress and uses it to ensure the continuity and completion of study.

Analysis

The Faculty has a Quality Assurance and Improvement Committee. During the meeting with the Panel, its members provided information on the role of the Committee in the evaluation and analysis of student progress. The Committee participates in conducting student surveys and advocates continuous education for teaching staff. However, it does not analyse student progress or the student withdrawal (dropout) rate. Thus, the responsibility of monitoring student success is left up to the departments. Individual department members collect and review data on student progress which is used at the department level. This means that some departments keep track of student progress, but since there are no official rules and requirements to do so, some departments do not analyse exam results and success rates. It is strongly recommended that a regular record of student success rates be kept and statistical analyses of exam results be conducted. This

is a requirement for the evaluation of the quality of the teaching process and for reviewing which aspects of teaching could be improved, in addition to analysing student surveys.

A low progression rate for some study programmes is also noticeable. For example, the Public and Environmental Health study programme has a low passing rate from first to second year of studying, as only approximately 30% of students manage to do so. The problems that need to be addressed are low progression rates and high withdrawal (dropout) numbers in some study programmes. Potential reasons for low progression rates and high withdrawal (dropout) numbers in those programmes as highlighted by staff and students include:

- The degree programme and/or university was not the students' first preference.
- The high-school curriculum does not prepare students for the university curriculum.
- The programme curriculum is not adapted to the learning needs of first-year students.

• The programme curriculum is too difficult and not relevant to students' learning and future needs.

Recommendations for improvement

- Assess the exam pass rate and keep a record of student success rates.
- Conduct statistical analyses of exam results at least once a year.
- Analyse and address the reasons for the high withdrawal rate.
- Implement methods to promote better exam success rates.

Quality grade

Minimum level of quality

3.3. The higher education institution ensures student-centred learning.

Analysis

The Faculty encourages various modes of programme delivery. Prior to the COVID-19 pandemic, teaching was mainly done in person. Because state regulations prohibited all gatherings due to the potential spread of the infectious disease, teaching was transferred online. Online classes were held for the whole duration of the COVID-19 pandemic and students were satisfied with these. Practical classes were held in smaller groups in Rijeka hospitals, which allowed students to obtain practical knowledge even during those challenging times for education. Once the public health situation had stabilised, teaching returned to the original mode of classroom-based lesson delivery.

The implementation of all study programmes includes various forms of teaching: lectures, seminars, and practicals, while some study programmes also include field courses. Class attendance is regularly assessed and evaluated. Students can miss up to 30% of classes.

Further development of online teaching methods is recommended (for instance, via the Merlin e-learning platform). One example of good practice would be to introduce an elective subject which would be held partially or solely online. Another example would be to provide students with more interactive learning materials that they could use at home: quizzes, videos, e-books, recommendations for free online classes held by other respectable higher education institutions, etc.

Student-centred learning encompasses not only diverse methods of teaching, but also a focus on students' future needs and relevant teaching materials. The latter aspect is not that well elaborated. Ensuring the relevance of the curriculum can be achieved by adherence to learning outcomes while testing student knowledge. Some courses have listed their learning outcomes very precisely, which is praiseworthy. However, there is still a concern that those outcomes are not tested in reality, but rather are a dead letter. It is important for teachers not to forget that they are teaching students, not scientists or medical specialists, and that student knowledge should be basic and in accordance with their future needs. While it may be to a teacher's advantage to focus on their main field of scientific or clinical interest, it is not justified to elaborately teach that field, while neglecting other important parts of the subject curriculum.

One more thing to revise is the adequacy of obligatory literature. An example is the obligatory reading for the Surgery course unit on the Medicine study programme, which includes the book "Kirurgija" by T. Šoša, which was published in 2007. While the issue of the lack of medical literature in Croatian is present nationwide, it is unacceptable that students are referred to learn from 15-year-old books, which are mostly obsolete. This issue could be solved by using student-oriented non-Croatian literature and possibly translating it into Croatian. More recent and relevant textbooks would largely improve quality of student education. This also offers the opportunity to collaborate with other Croatian medical faculties in the process of translation. The Surgery textbook is not an isolated example; there are a lot of similar examples in other course units as well.

Recommendations for improvement

- Further development of online teaching methods is recommended (for instance, via the Merlin e-learning platform).
- Introduce an elective subject which would be held partially or wholly online.
- Provide students with more interactive learning materials that they can use at home.
- Ensuring the relevance of teaching materials by adhering to learning outcomes while testing student knowledge.

- Revise the adequacy of obligatory literature, as some of it is already obsolete or too demanding for students.
- The Faculty is encouraged to participate in the translation of well-written non-Croatian literature, which is student-oriented and recent.

Quality grade

Minimum level of quality

3.4. The higher education institution ensures adequate student support.

Analysis

At MEDRI, student support is provided by the Faculty in numerous different ways, starting from the matriculation ceremony for newly admitted students. The library and other building facilities, as well as the infrastructure overall are adequate for student needs. Moreover, all of the necessary administrative online services are provided (ISVU, Merlin, Webmail, INP MEDRI), with IT services available in case of any problems. Furthermore, the Faculty website provides basic information for students and publishes all necessary legal acts that are of interest to students. All student questions and inquiries are resolved with the support of student offices. For additional support regarding international mobility, there is the Office of International Relations and Quality Improvement and the Vice Dean for International Relations. The individual counselling of students is possible via a mentoring system, whereby first-year students are assigned a mentor from teacher and student ranks. Also, student office hours with course teachers are published on each department's webpage, with student demonstrators providing additional support in achieving learning outcomes.

Students with disabilities rated at 60% or above can enrol outside the regular quota, if they meet the classification threshold of 40%, with all relevant staff informed regarding the adjustment of teaching or examination methods. The Faculty does not have special funds to finance students of lower socioeconomic status; however, they are referred to apply for University scholarships. The student union is quite active, with several associations that operate at the Faculty, with all of the included activities aimed at important initiatives, humanitarian projects and organisation of student congresses. All student projects are partially funded by the Faculty and other constituents: that is well regulated. Finally, the best students are rewarded for their success in accordance with carefully planned criteria.

Even though overall student support is present at various levels at MEDRI, with the student-mentor system and adequate services providing administrative support, the Expert Panel has noticed a continuous lack of systemic support for students who are experiencing problems with passing their exams.

Recommendations for improvement

• The Expert Panel emphasizes the need for continuous and systemic support for the students who are experiencing problems with mastering courses during the academic year. The recommendation includes a systematic approach to this problem, with clear steps that should be implemented in all study programmes (e.g. continuous monitoring of student success and development of a tutoring system).

Quality grade

Satisfactory level of quality

3.5. The higher education institution ensures support to students from vulnerable and under-represented groups.

Analysis

The Faculty ensures that all students from vulnerable and underrepresented groups are provided with systemic support during enrolment, which is based on the recommendation of the Croatian Rectors' Conference regarding the right to priority enrolment in higher education institutions. Furthermore, a coordinator from the Department of Anatomy, Faculty of Medicine, University of Rijeka is responsible for all the potential needs of these students and for providing them with individual support. Students can contact the coordinator at any time and exercise their right to have teaching and examination methods adapted, as well as raise any other issues. Regarding the overall support of students from vulnerable and underrepresented groups, the coordinator and vice deans cooperate with the Office for Students with Disabilities within the University Counseling Center of the University of Rijeka, starting at the beginning of each academic year. Moreover, the vice deans communicate directly with teachers to ensure the adequate adjustment of academic activities for these students.

In addition, a proposal of the Protocol for Care and Monitoring of Students with Health Conditions, Disabilities and Chronic Diseases has been drafted, as well as the document titled Exercising the Right to Adapt the Academic Environment for Students with Impairments and Other Disabilities at the University of Rijeka. The Faculty's spatial accessibility and infrastructure have also been adapted to students with disabilities and reduced mobility, while students with other disabilities are allowed individual adjustments in course management, including exam duration or taking oral instead of written exams. Finally, financial support is given to students who have been affected in recent earthquakes.

Overall, as it seems that students from vulnerable and underrepresented groups do receive a certain level of support at the Faculty, the Expert Panel deems that this support and awareness of these students should be improved and more systematically organised.

Furthermore, it seems that most of the Faculty support is centred around students with disabilities, while students from other vulnerable and underrepresented groups are not adequately aided.

Recommendations for improvement

- The Expert Panel deems that other vulnerable and underrepresented groups of students should be more clearly defined, and the support system should be adequately adjusted to the needs of each particular group.
- Furthermore, with continuous awareness-raising regarding these students and their needs, clear criteria for the support of students of lower socioeconomic status should be developed.

Quality grade

Satisfactory level of quality

3.6. The higher education institution allows students to gain international experience.

Analysis

The Faculty participates in Erasmus+ and CEEPUS mobility programmes. It has also established bilateral and multilateral agreements with institutions outside of the European Union, namely in Japan, China and the USA.

The good support for students who are interested in participating in mobility programmes is commendable. This support mostly consists of providing students with continuous access to the Erasmus+ coordinator so they can obtain information on the available options with regard to attending part of their studies abroad and to obtain help with the application process and implementation of the student mobility programme. Furthermore, the Faculty organises Erasmus+ Info Days.

It is important that the Faculty recognises ECTS credits which the student has obtained at another higher education institution in accordance with Faculty guidelines for outgoing Erasmus+ students. However, there are no published written instructions for students which would specify the courses that allow for the recognition of ECTS points obtained during the mobility programme. This shortcoming complicates the decision to spend a part of their studies abroad, because students have no insight into the possible outcomes of their mobility when it comes to finishing a particular course and having exams passed at other institutions recognised by their home institution.

The exchange rate of medical students is satisfactory, but it is recommended that the rate of public and environmental health students who are participating in mobility

programmes be increased because interviews have shown that the vast majority of participants are students of the Medicine study programme.

It is also necessary to emphasise the importance of international experience of postgraduate students. The Panel has received feedback from postgraduate students that indicates a lack of time for mobility, especially because time spent at international institutions is not part of their curricula. This gives rise to the possibility of revising the curricula and formally devoting part of postgraduate education solely to participation in international programmes.

Recommendations for improvement

- Increase the bilateral mobility of staff and students to promote international collaboration and grow the international reputation of the Faculty.
- Write and publish a detailed guide for students which would specify courses that allow for the recognition of ECTS points obtained during the mobility programme.
- Focus on the students of the Public and Environmental Health study programme with a view to increasing their interest and participation in mobility programmes.
- Revise postgraduate curricula to formally dedicate time to mobility and acknowledge the importance of international experience.

Quality grade

Satisfactory level of quality

3.7. The higher education institution ensures adequate study conditions for foreign students.

Analysis

The Faculty carries out the Medical Studies in English study programme, which enables foreign students to participate in classes which are delivered in English. Data on incoming students who participate in mobility programmes shows that the majority of those incoming spend up to three months in Rijeka.

It is commendable that foreign students are encouraged to learn the Croatian language and the Faculty organises Croatian language learning courses. The Faculty has also demonstrated the ability to cooperate successfully with other faculties of the University of Rijeka, namely with the Department of Croatian Language and Literature of the Faculty of Humanities and Social Sciences.

The Faculty has a dedicated academic staff member responsible for supporting both outgoing and incoming students in pursuit of their Erasmus+ experience, and who is also supported by the University of Rijeka international office.

What could be improved is the collection of feedback on the satisfaction and needs of foreign students. This could be assessed both by formal surveys and informal ways of communication, such as peer-to-peer communication. It is also recommended that information packages for foreign students be created, which would contain the most common student questions and answers to these.

Recommendations for improvement

- Increase the number of incoming students who decide to spend more than three months at the Faculty of Medicine of the University of Rijeka.
- Conduct surveys among incoming students on their satisfaction with the mobility programme and their needs during their stay in Rijeka.
- Create information packages for foreign students, which would contain the most common student questions and answers to these.

Quality grade

Satisfactory level of quality

3.8. The higher education institution ensures an objective and consistent evaluation and assessment of student achievements.

Analysis

From the data presented in the self-evaluation report and conversations with staff and students, it is evident that the Faculty is obtaining information on and analysing student progress and success rate. However, there are exceptions to that, and during the interviews with the heads of departments, the Panel members noticed that a few participants do not know the passing rates for their courses. It is strongly recommended that regular records of student success rates be kept and annual statistical analyses of exam results be conducted. This is required in order to evaluate the quality of the teaching process and to review which aspects of teaching could be improved, in addition to student analysing surveys. Although the majority of departments do analyse exam results, the implementation of methods to promote better exam success rates is lacking. The Faculty's goal should be to increase the rate of students who regularly enrol in a higher year of education. A low passing rate is especially noticeable in the case of the students of the Public and Environmental Health study programme, as only approximately 30% of the students succeed in obtaining 60 ECTS points during their first year of study and manage to enrol in the second year. The data for the students of the Medicine study programme is relatively better, but the Panel still considers the rate of 67% of students who obtain 60 ECTS points during their first year of study to be insufficient. This problem could be

mitigated by providing the students with greater support. This includes teaching support, such as organising additional introductory courses for the most demanding courses of the study programme (e.g. an introductory chemistry course before the Analytical Chemistry course in the first year of the Public and Environmental Health study programme, but this is not the only example). It also includes psychological support, which need not be provided solely by professionals (although this kind of support is also praiseworthy and recommended), but also by peers and colleagues. This is one reason to encourage the establishment of student sections, in which higher year students could provide support to their younger colleagues. Other than psychological support, student sections can provide many benefits for the Faculty. Their members are usually highly motivated and ambitious students who have great ideas on how to improve the quality of studies and ways to turn their ideas into reality.

Furthermore, there is no evidence that the Faculty aligns the criteria for the evaluation of knowledge with the teaching methods used during classes. During the interview, students mentioned that there are often discrepancies between the course curriculum and exam questions. The Panel recommends that detailed learning outcomes be published openly for every course in order to inform students about the subject matter and skills they need to acquire during the course. The learning outcomes that are currently published on the official Faculty website are vague and have no practical value, especially those for really demanding courses such as Anatomy (e.g. the learning outcomes for the Social Medicine course are better elaborated and provided in greater detail than the learning outcomes for the Anatomy course).

The Faculty has a way of continuously assessing student knowledge and activity during classes, which is praiseworthy. Most of the interviewed students are satisfied with that kind of practice and have no complaints about the way they are periodically assessed and graded.

Recommendations for improvement

- Assess the exam pass rate and keep a record of student success rates.
- Conduct a statistical analysis of exam results at least once a year.
- Align evaluation and grading methods with the teaching methods used during classes.
- Openly publish learning outcomes for every course in order to inform students about the subject matter and skills they need to acquire during the course.
- Implement methods to promote better exam success rates and provide greater support to students who are struggling to pass their exams. This includes teaching

support, such as organising additional introductory courses for the most demanding courses of the study programme, as well as psychological support.

• Encourage the establishment of student sections.

Quality grade

Minimum level of quality

3.9. The higher education institution issues diplomas and Diploma Supplements in accordance with the relevant regulations.

Analysis

The Faculty issues a Diploma and a Diploma Supplement in accordance with the current Croatian legislative acts. Upon the completion of their studies, students are issued appropriate documents (a Diploma and a Diploma Supplement) in Croatian and English, free of charge.

Recommendations for improvement

No recommendations

Quality grade High level of quality

3.10. The higher education institution is committed to the employability of graduates.

Analysis

From the data presented in the self-evaluation report and conversations with staff, external stakeholders and students, it is evident that the Faculty is engaged in obtaining information on and analysing the employability of its graduates.

Admission quotas are aligned with social and labour market needs and available resources.

The Faculty maintains good contact with alumni and during the conversation with alumni all of the interview participants expressed a highly positive attitude towards their *alma mater*.

One thing that could be improved is to standardise the name of the Public and Environmental Health study programme, which is sometimes referred to as Sanitary Engineering. Nowadays, when the English language is so widely used and essential for the careers of many students and graduates, it is important to align the names of study programmes with the terminology of the European Union.

Recommendations for improvement No recommendations

Quality grade High level of quality

IV. Teaching and institutional capacities

4.1. The higher education institution ensures adequate teaching capacities.

Analysis

The Faculty has more than 290 employees with full-time jobs and more than 120 external associates. Regarding academic rank, the Faculty employs over 200 staff, from full professors to teaching assistants. Most of the teachers are appointed for the fields of Biomedicine and Health, Medical Sciences, and Public Health, which correspond to study programmes of both Medicine and Public and Environmental Health. The teachers are publishing scientific papers in highly-ranked journals in the field of Biomedicine and are leaders of several international and national projects. The ratio of students and full-time teachers is 1:10, which is good. The Faculty has adopted the Plan for the Promotion and Employment of Teachers and Associates, where annual plans for individual promotion are prepared. The Faculty has established the monitoring of teacher workload with the aim of supervising the ratio between scientific work, teaching, and administrative work according to the Collective Agreement for Science and Higher Education. In accordance with Faculty organisation, the heads of departments are in charge of monitoring and adapting the workload of each department employee. In a meeting with the heads of departments, they explained that individual workload plans are made and that any overload is either distributed to other employees, or a new assistant is hired. They have regular weekly meetings with employees regarding teaching and research. However, the meeting with full-time teachers showed that some teachers, especially those that are researcher-clinicians, do not have enough time for research and that they are researching in their free time with a lot of enthusiasm. The meeting with heads of departments also revealed a lack of communication between the Faculty and the dislocated department of Paediatric Surgery.

Recommendations for improvement

- Monitor and adapt the workload of all teachers. Pay special attention to teachers who are researcher-clinicians, so that they may have opportunities for research within their workload.
- Establish better communication with the dislocated department of Paediatric Surgery.

Quality grade

Satisfactory level of quality

4.2. Teacher recruitment, advancement and re-appointment is based on objective and transparent procedures which include the evaluation of excellence.

Analysis

The Faculty recruits new employees based on teaching and research needs that are defined in the annual employment and promotion plan. The criteria for promotion to academic ranks are defined by the National Council, Ordinance and Rectors' Conference. For each new employment a public call is issued and a special expert committee is established for the appointment. One of the members is an external one. The Faculty follows the national and University legislation in process of academic appointments. The approach to the selection of the best candidate is standardised and transparent. In the appointment process the Faculty also takes into account previous teaching and research activities. The expert committee evaluates whether criteria have been met, e.g., published scientific and professional papers, work experience, awards and achievements, and projects and mobility. Student feedback is an additional criterion. If the grade given by the students is below 3 on average, the candidate must conduct a self-evaluation. The Faculty has established that the response rate is valid if 30% of all students in the class complete the survey. If the response rate is too low, the survey is repeated. Teacher promotion to higher academic rank is based on the evaluation of teaching and research criteria. A particular focus is placed on criteria such as publishing in highly-ranked journals, coordination of international projects, publishing of monographs, and mentoring of PhD students. As was noted in the meeting with the Dean and the Vice-Deans, some of the criteria are hard to meet for clinicians who are very busy with their work in hospitals.

Recommendations for improvement

• The Faculty should ensure an academic environment in which clinicians will also be able to meet the quality criteria, as non-clinical teachers are.

Quality grade Satisfactory level of quality

4.3. The higher education institution provides support to teachers in their professional development.

Analysis

The Faculty provides teachers with the opportunities to improve their teaching competencies by encouraging them to attend training and workshops that are focused on learning outcomes, teaching methods, e-learning and other topics. The Faculty has established the Center for the Improvement of Teachers' Competencies and Communication Skills, which organises training focused on different teaching related topics. Another role of the Center is to conduct peer reviews to improve the teaching process based on peer feedback. The peer reviews assess the teacher's pedagogical activities and recommend changes in teaching. Student feedback is also a guideline for the improvement of teaching competencies. The Faculty encourages teachers to participate in mobility and internationalisation by way of motivational meetings and Info Days. The teachers are familiar with different mobility schemes, e.g., Erasmus, Ceepus and so on, and there is a mobility coordinator at the Faculty. However, according to the self-evaluation report, over the last five years there has only been one outgoing teaching mobility lasting up to 3 months and no outgoing teaching mobilities lasting 3 or months or more. The Faculty has adopted a Plan for Promotion but what is lacking is a career-tracking system whereby the heads of organisation units annually evaluate the progress of each employee. Heads of departments can conduct annual interviews to evaluate teaching and research goals, and make plans for the forthcoming year. This approach is especially important for employees at the beginning of their career, e.g., teaching assistants and postdoctoral fellows.

Recommendations for improvement

- The Faculty should increase short-term (<3 months) and long-term (> 3 months) teaching mobility.
- The Faculty should establish a more formal and structured career-tracking system for employees. This would be especially beneficial for young employees.

Quality grade

The minimum level of quality

4.4. The space, equipment and the entire infrastructure (laboratories, IT services, work facilities etc.) are appropriate for the delivery of study programmes, ensuring the achievement of the intended learning outcomes and the implementation of scientific/artistic activity.

Analysis

There is clear evidence that the Faculty is planning and improving infrastructure development. In the last five years, they have upgraded the Center for Proteomics and are in the legal process of obtaining the ownership of some new buildings. The Faculty has established a plan for procuring new equipment which is based on objective teaching and research criteria, as well as financial means. During the pandemic, they equipped some lecture rooms with ICT and introduced distance learning. The Faculty started a new approach to the long-term rental of IT equipment.

Recommendations for improvement

• No recommendations

Quality grade High level of quality

4.5. The library and library equipment, including the access to additional resources, ensure the availability of literature and other resources necessary for a high-quality study, research and teaching.

Analysis

In recent years the library has been updated and modernised. Moreover, in the last year, the Faculty library was integrated with the Library of the Clinical Centre into the Biomedicine and Health Library. Students have access to printed and e-publications. In the last three years, the library funding for reading material has more than tripled. Another activity of the library is participation in publishing activities and proofreading services. The library is also in charge of a digital repository system that provides access to theses and scientific papers. Students and academic staff have access to multiple international scientific databases.

Recommendations for improvement

• The Faculty should increase the space available for studying on the library premises.

Quality grade

Satisfactory level of quality

4.6. The higher education institution rationally manages its financial resources.

Analysis

The Faculty has shown a high level of financial sustainability and spending efficiency. The main source of funding is the public budget. However, the Faculty has several other

sources of income that add to its financial stability, e.g., tuition fees, professional services, the market, rental revenues, exchange gains, and organising conferences and meetings. A major source of funding is national and EU projects and donations. The data in the analytical supplement show stable financial income and fixed expenditures. Moreover, the Faculty has even increased its income due to the international Medicine in English programme. The Faculty has established an efficient and transparent system of internal calls for projects whereby young employees at the beginning of their careers can apply for starting research grants. Financing such mechanisms is an important achievement in higher education. The Faculty manages its financial resources and expenditures transparently, efficiently and in accordance with national legislation. The financial activities are based on an annual plan that is constructed following department administrative services and project teams' needs.

Recommendations for improvement

• No recommendations

Quality grade High level of quality

V. Scientific/artistic activity

5.1. Teachers and associates employed at the higher education institution are committed to the achievement of high quality and quantity of scientific research.

Analysis

Scientific research groups of the Faculty of Medicine in Rijeka are competitive and internationally recognisable in their research, which significantly contributes to the development of the Faculty of Medicine. This is evidenced by the number of particularly high-quality scientific publications, the number of competitive projects, the number of scientifically educated doctoral students, and the international scientific cooperation that has been achieved.

In past five years there has been a clear upward trend (20%) in the number of papers published yearly. More than half of the papers were published in Q1/Q2 journals, and around 15% of the publications were published in the top 10% of journals. The citation rate and h-index were high (almost 60,000 citations and an h index of 96). For approximately two thirds of the papers, the researchers of the Faculty of Medicine in Rijeka were listed as first, main, or corresponding authors.

However, for a consistent and fully objective analysis it is necessary to elaborate on the extent of the participation of temporary and definite-term contract researchers compared to the participation of principal employees (including full-time employees of

the School of Medicine and employees with cumulative contracts with Faculty clinical bases). Despite that, it can be concluded that the Faculty of Medicine in Rijeka has a high number of high-quality publications and thus a significant international influence. Furthermore, a high proportion of Q1/Q2 papers, and a particularly high proportion of top 10% journals, is related to a single research topic (virological immunology). It would be worthwhile to have data on publications by research topic and to stimulate greater diversification of research.

In addition to research articles, the employees of the Faculty of Medicine have also published significant number of professional papers and books/book chapters.

As there are several internationally recognised research groups at the Faculty, it is surprising that only two PhD theses out of the total number have been written and defended in English.

The Faculty of Medicine also engages in its own publishing activities and has published or co-published professional and scientific journals over time.

Recommendations for improvement

- Stimulate diversification of research in more fields;
- Stimulate the writing of PhD theses in English.

Quality grade

High level of quality

5.2. The higher education institution provides evidence for the social relevance of its scientific / artistic / professional research and transfer of knowledge.

Analysis

There is a high social relevance of scientific and professional research at the Faculty of Medicine in Rijeka and an important transfer of knowledge, which is mainly a product of several prominent research groups in the field of immunology and virology. The Faculty of Medicine in Rijeka maintains close relations with local authorities and the local community. The Faculty has been cooperating with the private sector for many years. At the international level, the Faculty of Medicine cooperates with a number of institutions and experts abroad that enable a transfer of knowledge and technology.

The Faculty of Medicine in Rijeka has established a Researcher Support Fund, which is also financed by donations from business entities. The Faculty also receives donations and provides additional support for research activities.

Employees of the Faculty of Medicine in Rijeka are members and chairpersons (or in other managing positions) of numerous experts, public and advisory bodies, and encourage all forms of the popularisation of science.

Recommendations for improvement

• For employees who are clinicians promote more applied research that is related to their clinical work.

Quality grade High level of quality

5.3. Scientific/artistic and professional achievements of the higher education institution are recognized in the regional, national and international context.

Analysis

The scientific and professional achievements of teachers, associates, and experts of the Medical Faculty in Rijeka are very well recognised in regional, national and international contexts. A large number of employees are well recognised as experts at an international level and have received numerous recognitions and awards. There is also intensive research activity (25 national projects funded by the CSF, two Centers of Excellence and two infrastructural projects funded by the Ministry of Science and Education). There are also 20 CSF-funded projects for the career development of young researchers. The Faculty also has several smaller projects funded by the City of Rijeka and by the County. In terms of international projects, quite a large number of projects have been funded by European Funds and the US National Institutes of Health (NIH).

Teachers, associates, and experts of the Faculty of Medicine in Rijeka are internationally recognised and distinguished scholars who are invited lecturers, participate in numerous committees of scientific/professional meetings held in the country and abroad, and many of whom are members of the editorial boards of scientific journals. Ten employees are editors-in-chief or editors of scientific topics in national and international scientific journals.

Recommendations for improvement

• Stimulate greater collaboration and integration among researchers, particularly those that do not receive significant financial support.

Quality grade

High level of quality

5.4. The scientific / artistic activity of the higher education institution is both sustainable and developmental

Analysis

The Science Strategic Plan of the Faculty of Medicine in Rijeka defines the institution's main strategic goals, with precisely defined tasks and target values. The Faculty Plan is in accordance with the Strategic Development Plan of the University of Rijeka. The scientific goals of the previous Science Strategic Plan have mainly been achieved.

The Faculty of Medicine is actively involved in the European Research Area (ERA) and the European Higher Education Area (EHEA), and strongly encourages all forms of international cooperation. Scientific and innovation activity is monitored by means of strategic indicators. Scientific activities representing the implementation of the strategic plan are submitted every academic year within the Report on the Implementation of the University of Rijeka Strategic Development Plan 2016–2020 at the Faculty of Medicine in Rijeka. An action plan stating the plan of activities and target values is also defined. Department heads are obliged to submit their annual reports to the Dean.

The Faculty has a high number of quality researchers, research infrastructure, and available scientific literature. Several scientific research groups of the Faculty of Medicine in Rijeka are competitive and internationally recognisable in their research. The Faculty is supplied with scientific equipment that allows modern scientific research to be conducted. There is a Laboratory of Mouse Engineering and Breeding Facility (LAMRI) and a Stool Biobank that serves as repository and distribution centre for neighbouring countries as well.

The Faculty regularly nominates its most prominent scientists for awards and the Faculty's employees are frequent winners of state awards. At the Faculty level there are awards for the best young scientists.

The Faculty of Medicine in Rijeka is continuously improving its scientific activity by financing employees from its own resources and invests a significant amount of its own money into maintaining and upgrading the existing infrastructure. There is also a Researchers' Support Fund.

It is apparent that the Faculty of Medicine in Rijeka is continuously improving its scientific activity and provides significant support in order to encourage further scientific advancement. However, it is obvious that only some researchers have high scientometric parameters. More than half of the employees have a rather low citation rate and h-index. Not surprisingly, this is due to teaching overload, because it is obvious that members of successful research groups participate less in teaching and administrative activity. This creates a very high teaching and administrative overload for the rest of the employees. The position of clinical employees is particularly difficult because their teaching engagement is around twice their cumulative contract obligation. In addition, they have a regular clinical workload, which obviously leaves less time for quality research work. It is important that research advancement is sustainable, considering the mission of the University. It is crucial that negative effects on the quality of teaching and professional activity are avoided by stimulating scientific activities. This will probably require significant reorganisation of teaching, research and administrative structure.

Project leaders have complained that their research engagement is not properly recognised by the Faculty and have mentioned that, in accordance with the new rules, they are allowed to reduce their teaching activities. If this happens, it is not clear how a reduction in their teaching and administrative duties is going to be compensated, because new employment is not expected as compensation for reduced teaching and greater research engagement.

Recommendations for improvement

- Establish a clear record of teaching, research and administrative load;
- Before reducing the teaching and administrative load of a productive researcher, do a clear calculation of how this is going to be compensated;
- Make a financial calculation whereby projects which will not bring potential income to the Faculty (projects without translational potential) will cover the cost of overheads (so as not to incur additional costs for the Faculty);
- Require that PhD students and postdocs employed on projects make at least 10% of engagement in teaching or other activities with graduate students.

Quality grade

Satisfactory level of quality

5.5. Scientific/artistic and professional activities and achievements of the higher education institution improve the teaching process.

Analysis

The Faculty's scientific-teaching organisational units consist of 39 preclinical and clinical institutes and departments as well as six centres. The Biomedicine and Health Library is available to all students and teaching staff.

The equipment for scientific research and professional activities is used in teaching mainly at the postgraduate level and much less so at the level of undergraduate and graduate studies.

The Faculty of Medicine in Rijeka stimulates student interest in scientific work and research during the first years of their studies by organising student congresses and enabling them to work with mentors. There is a student section of the scientific and professional journal Medicina Fluminensis, but no student section which promotes scientific activities has been established at the Faculty.

In the past five years, 103 students have been directly involved in scientific and professional projects as associates: mainly postgraduate university (doctoral) students (90). The total number of PhD theses resulting from these projects is 32, which is one

third of the students involved in PhD projects. This suggests that there might be a high drop-out rate or a highly delayed period for the completion of the PhD programme and thesis defence.

Graduate and undergraduate students are also involved in projects by way of preparing seminar papers and bachelor's and master's theses that are thematically related to projects. Over the last five-year period at the Faculty of Medicine in Rijeka, a significant number of papers have been published in journals indexed in SCIE/CC in co-authorship with students – almost exclusively PhD students.

Because of the large number of researchers and laboratories, it is surprising that only a very small number of graduate students are involved in research, and research laboratories seem to not to be highly involved in teaching activities aimed at graduate students.

Recommendations for improvement

- Formally encourage the involvement of students of graduate studies in research;
- Have research activity at graduate level count as a substitute for elective courses and recognise this with ECTS points;
- Oblige leading researchers who have a reduced teaching commitment (below 50%) to increase scientific work with graduate students (in proportion to the reduction of teaching activities);
- Increase the monitoring of PhD students' advancement during postgraduate studies and the monitoring of research activities related to their thesis.

Quality grade

Satisfactory level of quality

APPENDICES

1. Quality assessment summary – tables

Quality grade by assessment area				
Assessment area	Unsatisfactory level of quality	Minimum level of quality	Satisfactory level of quality	High level of quality
I. Internal quality assurance and the social role of the higher education institution			X	
II. Study programmes			X	
III. Teaching process and student support			Х	
IV. Teaching and institutional capacities			Х	
V. Scientific/artistic activity				X

Quality grade by standard				
I. Internal quality assurance and the social role of the higher education institution	Unsatisfactory level of quality	Minimum level of quality	Satisfactory level of quality	High level of quality
1.1. The higher education institution has established a functional internal quality assurance system.			X	
1.2. The higher education institution implements recommendations for quality improvement from previous evaluations.			X	
1.3. The higher education institution supports academic integrity and freedom, prevents all types of unethical behaviour, intolerance and discrimination.			X	
1.4. The higher education institution ensures the availability of information on important aspects of its activities (teaching, scientific/artistic and social).			X	
1.5. The higher education institution understands and encourages the development of its social role.				Х
1.6. Lifelong learning programmes delivered by the higher education institution are aligned with the strategic goals and the mission of the higher education institution, and social needs.			X	

Quality grade by standard				
II. Study programmes	Unsatisfactory level of quality	Minimum level of quality	Satisfactory level of quality	High level of quality
2.1. The general objectives of all study programmes are in line with the mission and strategic goals of the higher education institution and the				X
needs of the society. 2.2. The intended learning outcomes at the level of study programmes delivered by the higher education institution are aligned with the level and profile of qualifications gained.				Х
2.3. The higher education institution provides evidence of the achievement of intended learning outcomes of the study programmes it delivers.		X		
2.4. The HEI uses feedback from students, employers, professional organisations and alumni in the procedures of planning, proposing and approving new programmes, and revising or closing the existing programmes.			X	
 2.5. The higher education institution ensures that ECTS allocation is adequate. 2.6. Student practice is an integral part of study programmes (where applicable). 		X X		

Quality grade by standard				
III. Teaching process and student support	Unsatisfactory level of quality	Minimum level of quality	Satisfactory level of quality	High level of quality
3.1. Admission criteria or criteria for the continuation of studies are in line with the requirements of the study programme, clearly defined, published and consistently applied.			X	
3.2. The higher education institution gathers and analyses information on student progress and uses it to ensure the continuity and completion of study.		Х		
3.3. The higher education institution ensures student- centred learning.		X		
3.4. The higher education institution ensures adequate student support.			X	
3.5. The higher education institution ensures support to students from vulnerable and under-represented groups.			Х	
3.6. The higher education institution allows students to gain international experience.			X	
3.7. The higher education institution ensures adequate study conditions for foreign students.			X	
3.8. The higher education institution ensures an objective and consistent evaluation and assessment of student achievements.		X		
3.9. The higher education institution issues diplomas and Diploma Supplements in accordance with the relevant regulations.				X
3.10. The higher education institution is committed to the employability of graduates.				Х

Quality grade by standard				
IV. Teaching and institutional capacities	Unsatisfactory level of quality	Minimum level of quality	Satisfactory level of quality	High level of quality
4.1. The higher education institution ensures adequate teaching capacities.			Х	
4.2. Teacher recruitment, advancement and re- appointment is based on objective and transparent procedures which include the evaluation of excellence.			X	
4.3. The higher education institution provides support to teachers in their professional development.		Х		
4.4. The space, equipment and the entire infrastructure (laboratories, IT services, work facilities etc.) are appropriate for the delivery of study programmes, ensuring the achievement of the intended learning outcomes and the implementation of scientific/artistic activity.				X
4.5. The library and library equipment, including the access to additional resources, ensure the availability of literature and other resources necessary for a high-quality study, research and teaching.			X	
4.6. The higher education institution rationally manages its financial resources.				Х

Quality grade by standard				
V. Scientific/artistic	Unsatisfactory	Minimum level	Satisfactory level	High level of
activity	level of quality	of quality	of quality	quality
5.1. Teachers and associates				Х
employed at the higher				**
education institution are				
committed to the achievement				
of high quality and quantity of				
scientific research.				
5.2. The higher education				Х
institution provides evidence				
for the social relevance of its				
scientific / artistic /				
professional research and				
transfer of knowledge.				
5.3. Scientific/artistic and				Х
professional achievements of				
the higher education				
institution are recognized in				
the regional, national and				
international context.				
5.4. The scientific / artistic			X	
activity of the higher education				
institution is both sustainable				
and developmental.				
5.5. Scientific/artistic and			Х	
professional activities and				
achievements of the higher				
education institution improve				
the teaching process.				

2. Site visit protocol

	Utorak, 12. travnja 2022.	Tuesday 12 April 2022
12:50- 13:00 CEST	Spajanje na poveznicu ZOOM	Joining ZOOM meeting
13:00 - 15:00 <mark>CEST</mark>	 Predstavljanje AZVO-a Predstavljanje sustava visokog obrazovanja u RH Postupak reakreditacije Standardi za vrednovanje kvalitete Kako napisati završno izvješće 	 Presentation of ASHE Overview of the higher education system in Croatia Re-accreditation procedure Standards for the evaluation of quality How to write the final report

Edukacija članova stručnog povjerenstva /Education of panel members

Priprema članova stručnog povjerenstva za posjet Medicinskom fakultetu Sveučilišta u Rijeci/ preparation of the expert panel members for the meetings with HEI in virtual form

Hotel Jadran, Šetalište XIII divizije 46, 51000, Rijeka

Polazak domaćih članova stručnog povjerenstva u Rijeku u jutarnjim satima/Departure of Croatian panel members to Rijeka in the morning

	Ponedjeljak, 25. travnja 2022.	Monday 25 April 2022
14:50 - 15:00 CEST	Spajanje na poveznicu ZOOM	Joining ZOOM meeting
15:00 - 17:00 CEST	Priprema povjerenstva za sastanke s visokim učilištem (rasprava o samoanalizi i popratnim dokumentima)	Preparation of the expert panel members for the meetings with HEI (discussion on the self-evaluation report and supporting documents)

Preliminarni posjet stručnog povjerenstva visokom učilištu u Rijeci/ Preliminary site-visit of expert panel members to HEI in Rijeka

	Utorak, 26. travnja 2022.	Tuesday, 26 April 2022
8:50 - 9:00 <mark>CEST</mark>	Spajanje dijela članova povjerenstva na poveznicu ZOOM	Joining the part of the expert panel members to the ZOOM meeting
9:00 - 10:00 CEST	Sastanak članova stručnog povjerenstva s dekanom i prodekanima	Meeting of expert panel members with the dean and vice-deans
10:00 - 10:15 CEST	Pauza	Break
10:15 - 11:15 CEST	Sastanak članova stručnog povjerenstva s Odborom za osiguravanje i unapređivanje kvalitete	Meeting of expert panel members with the Quality Assurance and Improvement Committee
11:15 - 12:30 CEST	Analiza dokumenata	Document analysis
12:30 - 14:30 CEST	Obilazak fakulteta (predavaonice, informatičke učionice, knjižnica, studentske službe, odjeli, zavodi, klinike i laboratoriji) i prisustvovanje nastavi	Tour of the Faculty (classrooms, computer classrooms, library, student services, divisions, departments, clinics and laboratories) and participation in teaching classes

Medicinski fakultet, lokacija: Braće Branchetta 20, Rijeka

Prvi dan reakreditacije u virtualnom okruženju / First day of re-accreditation in virtual form

	Srijeda, 27. travnja 2022.	Wednesday, 27 April 2022
09:50-10:00 CEST	Spajanje na poveznicu ZOOM	Joining ZOOM meeting
10:00 - 11:00 CEST	Sastanak s nastavnicima u stalnom radnom odnosu (nisu na rukovodećim mjestima)	Meeting with full-time teachers who do not have managerial positions

11:00 - 11:15 CEST	Pauza	Break
11:15 - 12:15 CEST	Sastanak s predstojnicima zavoda, klinika i kliničkih zavoda	Meeting with the Heads of departments, clinics and clinical institutes
12:15 - 12:30 CEST	Pauza	Break
12:30- 13:30 CEST	Sastanak s voditeljima studijskih programa; Medicina Medicina na engleskom jeziku Sanitarno inženjerstvo	Meeting with the Heads of Study Programme; Medicine Medicine in English Public and Environmental Health
13:30 - 14:15 CEST	Ručak	Lunch
14:15 - 15:30 <mark>CEST</mark>	Sastanak s prodekanicom za nastavu, prodekanicom za studij medicine na engleskom jeziku i međunarodnu suradnju i prodekanicom za studijske programe Sanitarno inženjerstvo i Medicinsko laboratorijska dijagnostika	Meeting with Vice Dean for Teaching, Vice Dean for the Study of Medicine in English and International Cooperation and Vice Dean for Public and Environmental Health and Medical Laboratory Diagnostics
15:30-16:00	Organizacija dodatnog sastanka o otvorenim pitanjima – prema potrebi	Organisation of an additional meeting on open questions - if needed

Drugi dan reakreditacije u virtualnom okruženju / Second day of re-accreditation in virtual form

	Četvrtak, 27. travnja 2022.	Thursday, 27 April 2022
9:50 - 10:00 CEST	Spajanje na poveznicu ZOOM	Joining ZOOM meeting
10:00 - 11:15 CEST	Sastanak sa:	Meeting with: • Head of the Commission for International Cooperation

	 Predsjednicom Povjerenstva za međunarodnu suradnju Erasmus+ koordinatorom Predsjednicom Povjerenstva za priznavanje i vrednovanje prethodnog učenja Predstavnikom Etičkog povjerenstva za biomedicinska istraživanja Predstavnikom Centra za unaprjeđivanje nastavničkih kompetencija i komunikacijskih vještina Predstavnik Službe za studentske poslove Predstavnikom knjižnice 	 Erasmus+ coordinator Head of the Commission for the Recognition and Evaluation of Prior Learning Representative of the Ethical Committee for Biomedical Research Representative of the Center for Improving Teacher Competences and Communication Skills Representative of the Student Affairs Service Representative of the Library
11:15 - 11:30 CEST	Pauza	Break
11:30 - 12:30 CEST	Sastanak sa studentima – otvoreno za sve student	Meeting with the students - open meeting for all students
12:30 - 12:45 CEST	Pauza	Break
12:45- 13:30 CEST	Sastanak s alumnijima (bivši studenti koji nisu zaposlenici visokog učilišta)	Meeting with the alumni (former students who are not employed by HEI)
13:30 - 14:45 CEST	Pauza	Break
14:45- 15:30 CEST	Sastanak s vanjskim dionicima (nenastavnim) s kojim visoko učilište surađuje	Meeting with external stakeholders
15:30 - 16:00 CEST	Organizacija dodatnog sastanka o otvorenim pitanjima – prema potrebi	Organisation of an additional meeting with HEI on open questions - if needed

Treći dan reakreditacije u virtualnom okruženju / Third day of re-accreditation in virtual form

	Petak, 29. travnja 2022.	Friday, 29 April 2022
9:20 - 9:30 CEST	Spajanje na poveznicu ZOOM	Joining ZOOM meeting
9:30 - 10:30 CEST	Sastanak s prodekanicom za znanstveno-istraživačku djelatnost	Meeting with Vice Dean for Scientific Research Activity
10:30 - 10:45 CEST	Pauza	Break
10:45 - 11:30 CEST	Sastanak s asistentima i poslijedoktorandima	Meeting with teaching assistants and postdoctoral researchers
11:30 - 11:45 CEST	Pauza	Break
11:45 - 12:45 CEST	Sastanak s voditeljima znanstvenih projekata	Meeting with the heads of research projects
12:45 - 13:00 CEST	Pauza	Break
13:00 - 13:30 CEST	Organizacija dodatnog sastanka o otvorenim pitanjima – prema potrebi	Organisation of an additional meeting on open questions - if needed
13:30 - 14:00 CEST	Interni sastanak članova stručnog povjerenstva	Internal meeting of the expert panel members
14:00 - 14:15 CEST	Završni sastanak članova stručnog povjerenstva s dekanom i prodekanima	Exit meeting of expert panel members with the dean and vice-deans
14:15 - 15:00	Pauza za ručak	Lunch break
15:00- CEST	Interni sastanak članova stručnog povjerenstva – ocjenjivanje prema standardima kvalitete	Internal meeting of the expert panel members – assessment according to quality standards

SUMMARY

In summary, in all the assessment areas the Faculty of Medicine of the University of Rijeka was judged to be either at a satisfactory or a high level of quality. Overall, the Panel concluded that the Faculty is clearly a well-structured, well-organised and well-managed institution. The Panel has found that the Faculty has made substantial progress in developing and implementing its strategic planning process over the past 5 years. The Faculty of Medicine of the University of Rijeka has a very responsive faculty management team, which is clearly committed to continually and proactively improving the quality of its procedures and the existing study programmes. The Faculty of Medicine has an excellent awareness of its relationship with the local community of Rijeka and is committed to making a positive impact upon the community through a wide range of activities. There has been a huge effort to implement changes and develop practical teaching ("shadowing") starting from this year. These good practices should continue in the following years.

However, the Panel has identified and recommended some areas that would benefit from further review and improvement, which have been described in detail in this report.

One of the main concerns was the low student success rate, with low retention rates and high student withdrawal from study programmes, especially regarding the Public and Environmental Health programme. The Faculty should conduct regular analyses of passing rates in order to identify weak spots and encourage higher passing rates, especially regarding the Public and Environmental Health programme. Furthermore, the Faculty's Croatian and English website versions are not consistent in quality and ease of access to information. The English version of the website is primarily aimed towards international student admissions and does not contain the same quality or extent of information as the Croatian version. Additionally, certain Faculty procedures need to be formalised, defined and standardised in the form of regulations, protocols or standard operating procedures.

The Panel members would like to applaud the Faculty management and staff for the professional completion of the self-evaluation report, a collegial and open discussion, and their hospitality during the first day of the on-site visit. The Panel noticed a strong positive attitude and feedback from all the stakeholders (students, teachers, alumni, external associates). Finally, we believe that recommendations from this re-accreditation procedure will contribute to the further development and quality improvement of the Faculty.