



**REPORT
OF THE EXPERT PANEL
ON THE
RE-ACCREDITATION OF
UNIVERSITY OF APPLIED HEALTH SCIENCES IN ZAGREB**

Date of preliminary site visit: April 4th 2022
Date of on-line re-accreditation: April 5th – 8th 2022

April 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 University of Applied Health Sciences in Zagreb.

Members of the Expert Panel:

- Prof. Nicola Jane Clark, University of Hull, the United Kingdom of Great Britain and Northern Ireland, Panel chair,
- Prof. dr. Carmen M. Suárez Serrano, Universidad de Seville, Spain,
- Prof. dr. sc. Davorka Sutlović, Faculty of Medicine and University Department of Health Studies, University of Split, the Republic of Croatia,
- Doc. dr. sc. Dijana Tomić Linšak, Faculty of Medicine, University of Rijeka, the Republic of Croatia,
- Izv. prof. dr. sc. Marta Čivljak, Croatian Catholic University, the Republic of Croatia,
- Doc. dr. sc. Zrinka Puharić, Polytechnic of Bjelovar, the Republic of Croatia,
- Valentina Granić, student, Faculty of Health Studies, University of Rijeka, the Republic of Croatia.

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

- Management,
- Self-evaluation Report Committee,
- Students,
- Heads of study programmes,
- Full-time teaching staff,

- Assistants,
- External associates,
- Leaders of research and professional projects,
- Alumni,
- Departments for international affairs, student mobility and publishing,
- Representatives of the business sector, potential employers.

Croatian Expert Panel members went to a preliminary site visit on April 4th 2022 and 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 University of Applied Health Sciences in Zagreb on the basis of University of Applied Health Sciences in Zagreb self-evaluation report, other relevant documents, preliminary site visit and online 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 University of Applied Health Sciences in Zagreb, online meetings and writing of the Report, the Expert Panel was supported by:

- Sanja Peulić, coordinator, ASHE,
- Marina Grubišić, assistant coordinator, ASHE,

- Igor Opić, interpreter at the preliminary site visit and during online meetings,
- Marija Omazić, translator of the Report.

On the basis of the re-accreditation procedure conducted, and with the prior opinion of the Accreditation Council, the Agency issues a following accreditation recommendation 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

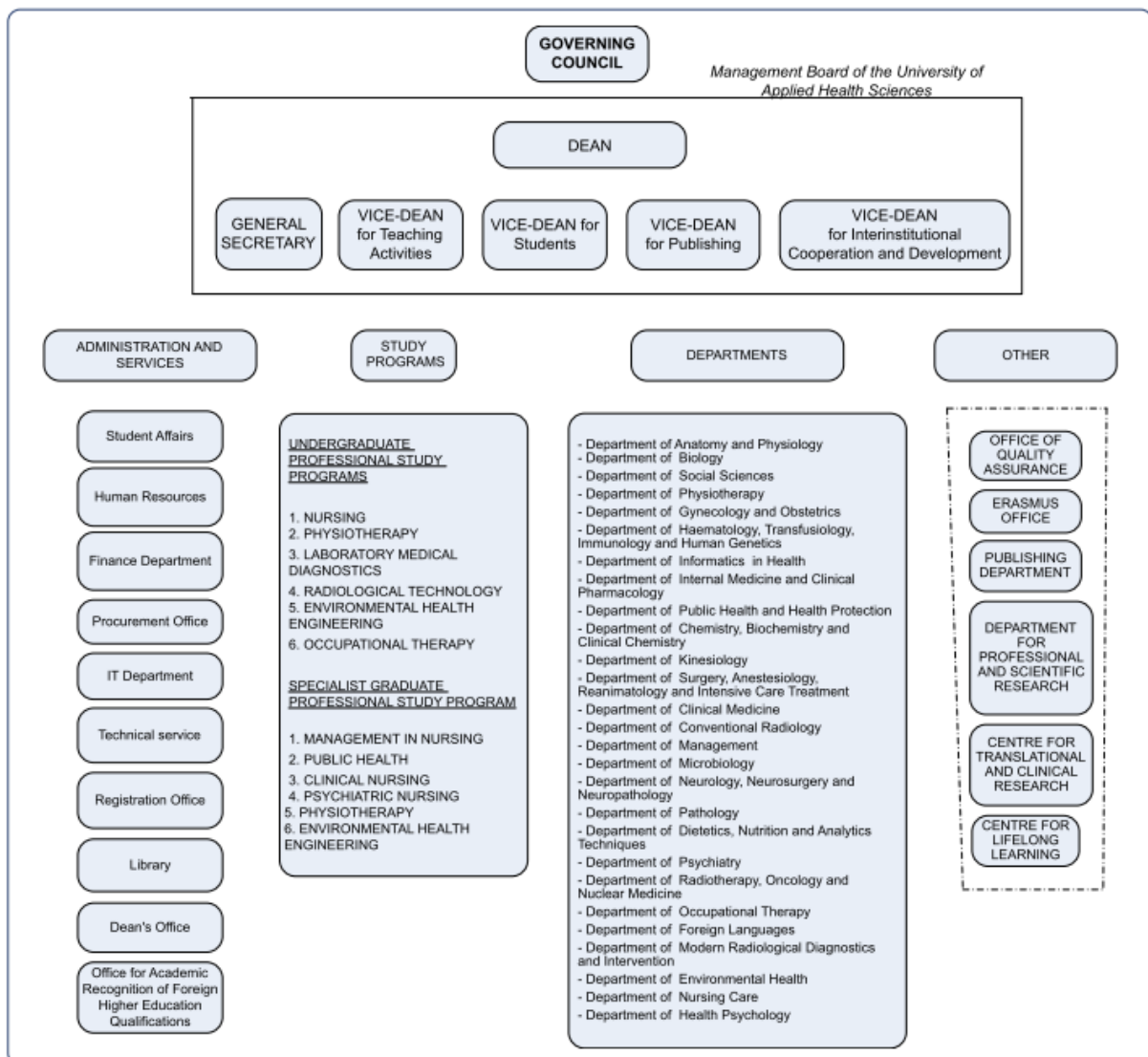
NAME OF HIGHER EDUCATION INSTITUTION: University of Applied Health Sciences in Zagreb

ADDRESS: Mlinarska cesta 38, Zagreb

DEAN: Prof. dr. sc. Krešimir Rotim

ORGANISATIONAL STRUCTURE:

According to information from the Self-evaluation, p. 8, Figure 1



STUDY PROGRAMMES:

According to information from Self-evaluation and Mozvag

Professional undergraduate study programmes:

- Environmental Health Engineering
- Laboratory Medical Diagnostics
- Nursing
- Occupational Therapy
- Physiotherapy
- Physiotherapy (dislocated study in Pakrac)
- Radiological Technology

Specialist graduate professional study programmes:

- Clinical Nursing¹
- Environmental Health Engineering
- Management in Nursing
- Physiotherapy
- Psychiatric Nursing¹
- Public Health¹

¹ *The University asked for exemption of the specialist graduate professional study programmes Clinical Nursing, Psychiatric Nursing and Public Health from the re-accreditation, because these study programmes were not delivered in the period covered by the re-accreditation.*

NUMBER OF STUDENTS:

According to information from the Analytic Supplement, the number of students per study programme (Table 3.1.)

Study programme name	Full-time students	Part-time students
Laboratory Medical Diagnostics (1807), professional undergraduate study programme, Zagreb	135	36
Nursing (1808), professional undergraduate study programme, Zagreb	265	1.054
Radiological Technology (1809), professional undergraduate study programme, Zagreb	128	53
Occupational Therapy (1810), professional undergraduate study programme, Zagreb	140	0
Environmental Health Engineering (1811), professional undergraduate study programme, Zagreb	157	29
Physiotherapy (1812), specialist graduate professional study programme, Zagreb	0	63
Environmental Health Engineering (1814), specialist graduate professional study programme, Zagreb	0	64
Management in Nursing (1816), specialist graduate professional study programme, Zagreb	0	43
Physiotherapy (1817), professional undergraduate study programme, Zagreb	289	625
Physiotherapy (1818), professional undergraduate study programme, Pakrac	0	101
Total	1.114	2.068

NUMBER OF TEACHERS:

According to information from the Analytic Supplement, structure of staff (Table 4.1.b)

Staff	Full-time staff		Cumulative employment		External associates	
	Number	Average age	Number	Average age	Number	Average age
College professors with tenure	11	57,82	12	58,67	3	63,33
College professors	8	53,5	2	55,5	30	60,78
Senior lecturers	28	48,57	3	48,67	29	54,72
Lecturers	20	40,8	6	54,5	122	50,11
Lectors	-	-	-	-	-	-
Full professors with tenure	-	-	-	-	13	65,9
Full professors	-	-	1	54	5	57,67
Associate professors	-	-	-	-	14	56,08
Assistant professors	-	-	-	-	10	51,8
Expert assistants	-	-	-	-	-	-
Assistants	8	37,29	3	46	420	52,01
Technical staff	-	-	-	-	-	-
Administrative staff	41	42,44	-	-	-	-
Support staff	-	-	-	-	-	-

ENROLLMENT IN REGISTER OF SCIENTIFIC ORGANISATIONS:

University of Applied Health Sciences in Zagreb is registered in the fields of Biomedicine and Healthcare.

SHORT DESCRIPTION OF THE EVALUATED HIGHER EDUCATION INSTITUTION

The short description is based on information from the Self-evaluation, p. 5 and 9

The University of Applied Health Sciences is a public higher education institution (HEI) that organizes and implements professional study programs. The founder of the University is the Republic of Croatia, while the rights and duties of the founder are carried out by the Ministry of Science and Education. In addition to organizing and implementing professional study programs, the University carries out professional and scientific work, organizes and implements lifelong learning programs and carries out publishing, library and information technology activities.

The mission of the University is to organize and implement the highest-quality study programs and lifelong learning programs in health education and thus contribute to improving the healthcare and ethical standards, quality of health services, reduction of expenditures in healthcare, humane healthcare relations and protecting patients' rights. This mission is achieved by carrying out study programs adapted to European standards, modern organization and quality teaching, with the use of new medical and information technologies.

The vision is to become the leading higher education institution in the field of health education, recognized for its excellence in Croatia, the neighbouring countries and in Europe. The realization of this vision envisages strong cooperation with related higher education institutions in the region and in EU countries, based on a high degree of mobility of teachers and students, the development of joint study programs and implementation of joint professional and applied scientific research.

BRIEF ANALYSIS OF THE INSTITUTIONAL ADVANTAGES AND DISADVANTAGES

ADVANTAGES OF THE INSTITUTION

1. The institution's mission and vision are clearly articulated which are effectively driving the ambitions of the strategic plan.
2. The institution has worked hard to improve the infrastructure with teaching facilities, equipment, resources and the library provision.
3. The institution has successfully implemented and improved its information technology and digitalised provision across programmes, and student services.
4. The institution evidences continuing investment in the scientific development of teachers. The teachers and research staff are clearly supported to increase the publication and dissemination of high-quality papers, with national and international reach.
5. The staff are passionate about the faculty and its' students, and are well-motivated and hard working. Lecturers and associates of the University of Applied Health sciences are provided with opportunities to further their education at a higher level, with funding available to do so.
6. The institution has a functional and effective quality assurance system in place.

DISADVANTAGES OF THE INSTITUTION

1. Learning outcomes for study programmes are applied differently, with some teachers not knowing what they were nor how to use them to prepare students knowledge and skills; students are unaware how many learning outcomes are to be met for their programmes of study; teachers say they are not specific to programmes of study.
2. Nursing practice hours are not consistently recorded accurately.
3. To increase recruitment and retention of international students, a mandatory programme in Croatian language needs to be considered.
4. The English language competence of all staff is not evidenced.
5. The institution needs to consider further expansion of its premises in order to accommodate additional programmes identified in the strategic plan.
6. Not all locations offer equal facilities when considering students with specific requirements.

LIST OF INSTITUTIONAL GOOD PRACTICES

EXAMPLES OF GOOD PRACTICE

1. The Alumni Club has increased its membership significantly and provides support and activities for the institutions past and current students
2. The library resource has increased its provision, with all books being available as e-books and are free to students; the current availability of a full-time librarian is a much-needed resource to support students
3. The investment in clinical skills with increased resources and the procurement of additional building space. This improves student experiences and competence with the practical elements of their programmes.
4. The use of the SUN database.
5. The commitment to include all teaching staff with writing for publication.
6. PhD study and English-speaking classes are free to employees.

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

A harmonised strategy underpins the policy for quality assurance at the HEI, which comprises of the ESG and ASHE requirements. The implemented quality system evidences a positive culture of quality between both internal and external stakeholders, and is aligned to the mission and vision of the university. This established quality assurance system steers the strategic and operational direction of the HEI, with plans for quality assurance activity arranged on an annual basis.

Following the previous accreditation undertaken by ASHE in 2014/2015, the HEI has successfully achieved a licence to carry out scientific activities. This followed the appointment of the commission for the development of the action plan for quality improvement, and was to address the recommendations of the ASHE (2015) final report. The self-evaluation document clearly articulates the 30 recommendations made and how these have or are being addressed.

The HEI continues to strengthen the transparency of its ethical obligations to its staff, students and society. A Code of Ethics is in place, with implementation and adherence

being subject to scrutiny by the Ethics Committee. The Ethics Committee grants and addresses all requests and complaints.

The university website is publicly available to view in both Croatian and English and details all study programmes; admission requirements; international activities; institutional structure, regulations and quality assurance information; and library and publishing activities.

The HEI continues to contribute to the healthcare system of Croatia by the provision of high-level graduates, and this remains one of its strategic goals.

The largest hospitals in Croatia recruit predominantly from this institution. The Alumni has been established for 9 years, with 1072 members, many being teachers at the institution. The institution is therefore well placed to provide lifelong learning initiatives and programmes of study.

Recommendations for improvement

- The HEI has assessed the implementation of the ESG system in the self-evaluation as being in the developed phase, however an external independent periodic assessment of the quality assurance system (audit) is necessary to evidence this.
- The HEI has invested in the Plagscan program, however clear instructions for the plagiarism limit must be evident for final grade work and seminars in written form.
- Measures to improve student response rates to evaluative surveys should be undertaken.
- The HEI should appoint an inclusion officer to over-see students with different learning needs.
- Feedback from international students should be mandated.
- To develop a system that effectively records all complaints from staff or students
- Ensure all students are fully informed in all study programmes regarding academic misconduct and the university processes surrounding unethical behaviour.
- To re-energise the training and education events for the local and wider healthcare workforce;
- To complement the undergraduate provision with sufficient post-graduate opportunities for staff retained in the local and wider area.

- To consider international opportunities for contribution and participation.

Quality grade

Satisfactory level of quality

II. Study programmes

Analysis

The HEI Quality Assurance system fits into the Quality Assurance Strategy 2018-2022 and the general objectives of all study programmes are aligned with the mission and strategic goals of the University. A huge improvement in this area has been achieved since the last evaluation especially in application of modern teaching technologies and development of the study programmes according to the need of the labour market. Quality assurance is centralized and is perceived as a continuous process in which the opinion of students is monitored through student surveys that focus on several aspects of students' perception of their learning environment. Constant and systematic monitoring of the study programmes, including proposals for innovation, is undertaken every two years. However, changes are mainly proposed by course teachers, Heads of Study Programs and Heads of Departments, or from the labour system.

The learning outcomes in the studies programmes are aligned with the level, profile and CQF/EQF. The study programmes comply with European regulations, the ECTS system and the Bologna process. The expert committee determined that the review of individual courses and their learning outcomes described in the documentation give a structured picture of the predicted competencies. However, the expert committee is concerned about the appropriate level of implementation of learning outcomes at the level of individual courses.

Upon reviewing the documentation (with subsequently submitted syllabus and examples of written tests) and a detailed interview with students, teachers and external associates involved in the teaching process, the committee has concluded that learning outcomes had been clearly defined at the study programs' level, but is not defined nor clear how to check and ensure the implementation of learning outcomes at the level of individual courses.

The expert committee noticed that teachers are using a variety of teaching methods to improve formal lectures. However, it was noticed that there is still an unequal distribution of the workload of individual teachers in permanent employment as well as external associates. The allocation of ECTS in nursing studies is not comparable to many of the other studies. However, this is a problem at the national level due to the core curriculum set by the Ministry of Science and Education. The distribution of student hours within the

ECTS workload is not well made, this is mostly seen in the study of nursing. However, this problem generates a significant number of teaching hours that are not held in nursing studies and are referred to as hours marked as PKL exercises.

The workload of students in the study of Nursing is extremely high. It is extremely problematic to organize classes that would fit into one academic year. Panel members think that Nursing practice hours do not always appear to be recorded effectively and accurately so some more effort should be implemented in order to have that information.

Recommendations for improvement

- For the constant and systematic monitoring of the study programmes or for proposal of new courses the HEI should include student's opinions and needs also.
- It is necessary to organize training of all previously mentioned groups and after that, subsequently, respecting the autonomy of course instructors (see Section 2.3 respectively), implement evaluation of learning outcomes at the level of each course. Each teacher determines which form of teaching methods they will include each learning outcome into (some courses have 3 to 21 learning outcomes), in which way they will check whether the student has acquired each learning outcome and in which way each learning outcome will contribute to the final grade.
- At the beginning of the academic year, it must be clear to each student from the curriculum of a particular subject in which part individual learning outcomes are processed, how they are evaluated and in which way they will contribute to the final grade. After that, it is necessary to adopt new, revised Regulations on grading with uniform grading criteria.
- It is recommended to plan additional space for teaching cabinets for future study programme development.
- It is necessary to equalize the teaching load of all teachers according to their engagement.
- To ensure that Nursing practice hours have more efficient record about hours that have been actually spent on practice or to make that process more effective and accurate.

Quality grade

Satisfactory level of quality

III. Teaching process and student support

Analysis

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. The information on student progress in the study program is regularly collected and analysed. Mechanisms for analysing student performance and pass rates are also ensured by information system of HEI. It is evident that the university strives for implementation of different modes of teaching in order to ensure student centred learning. The online teaching was adopted during the COVID-19 pandemic and they are satisfied with further application of teaching online in theoretical subjects. The HEI has adopted simulated clinical learning as an educational strategy that is being extensively developed in nursing. They have also introduced computers and software in classes of anatomy as a complementary element in the teaching–learning process which ensures more interactive teaching. Different methods of testing knowledge and skills are used (written and oral exams, seminar papers, presentations, evaluation of acquired skills during practice and in skills cabinets, etc.). The HEI ensures adequate student support by providing guidance on studying, with all the rules defined in Regulations of Studying. Furthermore, HEI has established activities that can inform students about their future careers such as career day and career counselling. The HEI also provides Psychological Counselling Centre, making it available for students in need for psychological help to get it. Mentor programmes for freshmen were planned, but not implemented because of COVID-19 pandemic. We believe that HEI really gives special attention to the students from vulnerable and under-represented groups. HEI has shown great practice by including Roma minorities into higher education. The higher education institution allows students to gain international experience by being included in the Erasmus programme. HEI maintains contact with alumni, and they are active in the HEI's activities. HEI ensures that the students are issued appropriate documents following the graduation.

Recommendations for improvement

- We recommend that the management should define in their rulebooks what is low and what is high level of students pass rates on subjects and from lower to higher year of study and to have written measures for increase of student pass rates.
- To improve the implementation of OSCE for the assessment of knowledge and skills
- To consider Mentor programmes for freshmen (student buddy mentor).

- To provide disabled access to all areas at the Ksaver location.
- We think that classes in English should be realized, as well as Croatian language course for foreign students.
- To consider implementing a formal survey for international students to provide feedback to the HEI and therefore improve their quality of experience.
- HEI should try to engage and spark more interest in students about Erasmus programmes.
- HEI should examine student satisfaction with the Erasmus programme and their inclusion.
- To introduce English as an obligatory subject.
- To consider a designated student officer in Erasmus office.
- There is a need for a more transparent and structured way of evaluating the achievements of different learning outcomes at one course (which learning outcomes will be evaluated during the seminar, which ones during the written exams, which ones at practical work, etc.)

Quality grade

Satisfactory level of quality

IV. Teaching and institutional capacities

Analysis

The number and qualification of teachers are acceptable for the delivery of study programs and achievement of the learning outcomes identified by the programmes. The ratio between the number of students and the number of full-time teachers is sufficient to ensure a high quality of study. Checking for teachers' workload it was observed that a smaller number of teachers have a workload of more than 600 standard hours or more than 1,000 hours while some teachers have less workload than the minimum. In contrast, discussing with vice dean for teaching it became obvious that the allocation of workload is balanced.

Teachers who join teaching staff at the HEI are selected by the criteria of excellence in their fields. This is the fundamental criterion for hiring teachers, where everyone in the appointment to grade procedure goes through the process of evaluating their fulfilment of formal requirements. All teachers and associates are informed of the prescribed

conditions for the appointment to grades, which are published on the University's website.

The HEI provides the necessary funds from the specific revenue to its full-time teachers for the enrolment at higher levels of education in Croatia or Slovenia. Currently there are 28 teachers at postgraduate doctoral study programmes.

With the support of the University, teachers participate in international cooperation programmes, but the numbers are low.

Rewarding the best teachers has not been introduced.

Recently, the HEI has significantly invested in the infrastructure, equipment and digitalization of classrooms. Overall, the conclusion is that the university has plans for further infrastructure improvements, and the space and equipment are sufficient for professional studies. According to the number of students, it has a sufficient amount of space 1,263 m² per student (minimum is 1,25 m²).

The library is well equipped with e-books of compulsory textbooks, which students access with AAI code. The library is open for students every day from 8 a.m. to 4 p.m., and provides services of lending books and information services.

Of note, however, there is only one librarian. In its' absence, there may be problems in functioning effectively.

The HEI manages its' resources appropriately.

Recommendations for improvement

- The teaching obligations of teaching staff should be balanced.
- To avoid the excessive teaching load for the assistant- doctoral students.
- To better acquaint external collaborators about the teaching process and learning outcomes.
- To increase the mobility of students, teachers, and also administrative staff.
- Adopt a rulebook on rewarding employees (the best grade from student surveys, the most mentorships, articles in highly indexed journals)
- We recommend that additional librarian support is provided.
- To fully align consumption items with the list of equipment so that consumption can be monitored.

Quality grade

Satisfactory level of quality

V. Professional and/or scientific activity

Analysis

The HEI has among its strategic objectives the development of scientific and professional activity, as well as increasing the quality of this activity. To achieve this purpose it has developed Service for Professional and Scientific Research and the Commission for Professional and Scientific Activity, and in 2017 launched the Center for Clinical and Translational Research with the aim of strengthening scientific activity.

In addition to this, the HEI has a Publishing office that promote scientific and professional publications and the visibility of this activity in Croatia and in the region.

According to the strategy for the development of scientific research work of the HEI for the period 2020-2024, the HEI encourages publishing in high-impact journals. All these actions have led to an evident increase in the scientific production of its teachers and associates with respect to the previous period, both in indexed journals and in manuals and textbooks, or in proceeding abstracts, having reached a total of 153 in WOs and Scopus databases and 257 in total, although many of them are published in national journals.

In addition, a considerable increase in the number of employed teachers (55% of the faculty) with a doctorate in the institution is observed.

Also, during these years, the teachers of the institution took part as members of organizing committees, invited lectures and lectures in many professional and scientific events.

The HEI promoted and financed the implementation of projects in the institution, where students are involved in the research and projects, collaborating and under the supervision of the teaching staff. Both the equipment and the result of the research revert and are used to favour and improve the teaching process.

Also, University has sufficient number of full-time employed scientists in the field of Biomedicine and Health, prescribed by the The Ordinance on the Content of a Licence and Conditions for Issuing a Licence for Performing Scientific Activity and Re-accreditation of Scientific Institutions.

Recommendations for improvement

- To widen international reach for publications and research dissemination
- To increase the number of teachers with research-teaching position
- To further encourage participation with projects in collaboration with the community and civil society organizations.
- To increase international collaboration with funded and research grants

- To increase active participation in international professional and scientific research projects
- To engage students from all disciplines in participating in research projects.

Quality grade

Satisfactory 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

A harmonised strategy underpins the policy for quality assurance at the institution, which comprises of the ESG and ASHE requirements. The implemented quality system evidences a positive culture of quality between both internal and external stakeholders, and is aligned to the mission and vision of the HEI. This established quality assurance system steers the strategic and operational direction of the university, with plans for quality assurance activity arranged on an annual basis. Workshops educate and disseminate the findings to the teaching and non-teaching staff of the integrated quality processes. Mechanisms are in place to monitor and evidence institutional quality and include internal audit and evaluative surveys; involvement of staff and students in quality activities; improving the calibre of the workforce with further training and programmes of study and student satisfaction.

Recommendations for improvement

- The HEI has assessed the implementation of the ESG system in the self-evaluation as being in the developed phase, however an external independent periodic assessment of the quality assurance system (audit) is necessary to evidence this.
- Measures to improve student response rates to evaluative surveys should be undertaken.
- Feedback from international students should be mandated.
- To develop a system that effectively records all complaints from staff or students.

Quality grade

Satisfactory level of quality

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

Analysis

Following the previous accreditation undertaken by ASHE in 2014/2015 and activities afterwards, the university has successfully confirmed a licence to carry out scientific activities. This followed the appointment of the commission for the development of the action plan for quality improvement, and was to address the recommendations of the ASHE (2015) final report. The self-evaluation document clearly articulates the 30 recommendations made and how these have or are being addressed.

The study programmes are tailored towards being competency based, and staff now cross departments to teach across programmes. Learning outcomes for some programmes are not transparent, with both teachers and students being unaware of how they are to be applied to prepare students for learning and assessment.

Recommendations for improvement

- Learning outcomes for study programmes are applied differently, with some teachers not knowing what they were nor how to use them to prepare students knowledge and skills.

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 university continues to strengthen the transparency of its ethical obligations to its staff, students and society. A Code of Ethics is in place, with implementation and adherence being subject to scrutiny by the Ethics Committee. The Ethics Committee grants and addresses all requests and complaints.

The institutional Ethics Committee works in conjunction with the Hospital Ethics Committees in order to provide collegiate support and mutual collaboration.

Student Disciplinary regulations are in place for cases of academic misconduct, and law-breaking offences. There is also the appointment of a student ombudsman who can mediate between students and the university processes.

The university deploys Plag-Scan software to manage the risk of plagiarism, with a tolerance level of 20%. Students are alerted to what constitutes academic misconduct via an elective course which is available in the study programmes.

Recommendations for improvement

- The University has invested in the Plagscan program, however clear instructions for the plagiarism limit must be evident for final grade work and seminars in written form.
- Ensure all students are fully informed in all study programmes regarding academic misconduct and the university processes surrounding unethical behaviour.
- To employ an inclusion officer to oversee and support students with different learning needs.

Quality grade

Satisfactory level of quality

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

Analysis

The university website is publicly available to view in both Croatian and English and details all study programmes; admission requirements; international activities; institutional structure, regulations and quality assurance information; and library and publishing activities. Additional analytical information is added periodically regarding student retention, programme completion and satisfaction. There is a Q&A section and contact details for enquiries. Social media outlets such as Facebook and LinkedIn are used, alongside live streaming of conferences via YouTube.

Open days and recruitment Fairs are organised, alongside an electronic newsletter which shares current topics, news and events to students and teachers of the institution as well as the general public.

The HEI also encourages knowledge exchange of its employees to contribute to social and public life.

Recommendations for improvement

None identified.

Quality grade

High level of quality

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

Analysis

The HEI continues to contribute to the healthcare system of Croatia by the provision of high-level graduates, and this remains one of its strategic goals.

The teachers transfer knowledge by involvement with state and city committees, contributing to decision and policy making activities; as well as participation in their individual professional associations and Councils. The HEI continues to progress its collaboration, scientific activity and publications with healthcare and other institutions, in addition to two scientific journals produced twice a year by the institution.

Student, teachers and members of the Alumni of the institution volunteer to undertake humanitarian activities for the local community and participate in international recognition days celebrated at the university. Students are also encouraged to showcase their knowledge at congress.

The Alumni have hosted 30 events in the past 5 years, of which most were registered with professional bodies for accreditation purposes.

Recommendations for improvement

None identified

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 largest hospitals in Croatia recruit predominantly from this HEI. The Alumni has been established for 9 years, with 1072 members, many being teachers at the institution. The institution is therefore well placed to provide lifelong learning initiatives and

programmes of study. The Centre for lifelong learning was established in 2018 as part of the strategic plan with two programmes currently in evidence. The training programme for operating room nurses and for geriatric care assistants were developed in 2019 and approved in 2020. Unfortunately, due to the pandemic, neither of these programmes were implemented in 2020 or 2021. A further programme is expected to be implemented in due course in nursing in emergency medicine.

A nursing conference has been held annually since 2001, and since 2016, a healthcare professional conference in addition.

There have been a series of training and education events between 2016 – 2020, in response to local request and professional associations, including a masterclass in leadership in 2017 and 2018 with more than 350 participants.

Recommendations for improvement

- To re-energise the training and education events for the local and wider healthcare workforce;
- To complement the undergraduate provision with sufficient graduate opportunities (masterclass) for staff retained in the local and wider area.
- To consider international opportunities for contribution and participation.

Quality grade

Minimum 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 demands of the labour market.

Analysis

The HEI Quality Assurance system fits into the Quality Assurance Strategy 2018-2022, and the general objectives of all study programmes are aligned with the mission and strategic goals of the University. A huge improvement in this area has been achieved since the last evaluation especially in application of modern teaching technologies and development of the study programmes according to the need of the labour market. Quality assurance is centralized and is perceived as a continuous process in which the opinion of students is monitored through student surveys that focus on several aspects of students' perception of their learning environment. Upon completion of studies, students are quickly employed in health care institutions and the economy sector. Justification for conducting study programs is explained in detail. Constant and systematic monitoring of the study programmes, including proposals for innovation, is undertaken every two years. However, changes are mainly proposed by course teachers, Heads of Study Programs and Heads of Departments, or from the labour system. The large total number of students shows interest in the offered study programs that lead to regulated professions and adequate licensing by the relevant professional associations. The level of study, profile and level of qualification are aligned with EQF and CQF.

Recommendations for improvement

- For the constant and systematic monitoring of the study programmes or for a proposal of new courses the HEI should include student's opinions and needs also. (This can be accomplished through student surveys with questions regarding their needs for improvement and implementation of changes to study programmes. Improvement would be a developing of a specific student survey for assessing also some other aspects of the learning environment, more specific to healthcare professions).

Quality grade

High level of quality

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 learning outcomes in the studies programmes are aligned with the level, profile and QCF/EQF. The study programmes comply with European regulations, the ECTS system and the Bologna process. The expert committee determined that the review of individual courses and their learning outcomes described in the documentation give a structured picture of the predicted competencies. The defined learning outcomes and competencies for the undergraduate professional study programs Nursing, Physiotherapy, Environmental Health Engineering, Medical Laboratory Diagnostics, Occupational Therapy and Radiological Technology and specialist graduate programs Physiotherapy, Environmental Health Engineering, Management in Nursing and Nursing are harmonized with the requirements of the profession and internationally recognized standards for the profession. However, the expert committee is concerned about the appropriate level of implementation of learning outcomes at the level of individual courses. Learning outcomes for some study programmes are applied differently, with some teachers not knowing what they were nor how to use them to prepare students knowledge and skills; students are unaware how many learning outcomes are to be met for their programmes of study; teachers say they are not specific to programmes of study.

The current enrolment quotas are adjusted to the availability of learning resources and infrastructures in all study programmes. It is noticed that HEI has provided better pedagogical approaches such as providing help to students who have difficulties or need acquiring skills, counselling or more motivation. That kind of development should be continuously supported in the future.

Recommendations for improvement

- Further support in providing help to students with their special needs.

Quality grade

Satisfactory level of quality

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

Analysis

Upon reviewing the documentation (with subsequently submitted syllabus and examples of written tests) and a detailed interview with students, teachers and external associates involved in the teaching process, the committee has concluded that learning outcomes had been clearly defined at the study programs' level, but are not defined nor is they clear how to check and ensure the implementation of learning outcomes at the level of individual courses. Despite the fact that the management of the University assessed the implementation of the ESG system in self-evaluation as being in the developed phase, to confirm the same it is necessary to conduct an external independent periodic assessment of the quality assurance system (audit).

Recommendations for improvement

- It is necessary to organize training of all previously mentioned groups and after that, subsequently, respecting the autonomy of course instructors, implement evaluation of learning outcomes at the level of each course. Each teacher determines which form of teaching methods they will include each learning outcome into (some courses have 3 to 21 learning outcomes), in which way they will check whether the student has acquired each learning outcome and in which way each learning outcome will contribute to the final grade.
- At the beginning of the academic year, it must be clear to each student from the curriculum of a particular subject in which part individual learning outcomes are processed, how they are evaluated and in which way they will contribute to the final grade. After that, it is necessary to adopt new, revised Regulations on grading with uniform grading criteria.

Quality grade

Minimum level of quality

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 HEI listens to the needs of the market and is ready to follow the proposals of the professional and scientific community by planning analyses of the justification for the implementation of study programs. If there is compliance with strategic goals, valuable proposals are incorporated into study programs according to the prescribed procedure, thus ensuring the necessary levels of quality. Feedback from external stakeholders with whom the AEI cooperates, professional associations and alumni have been well interpreted and show a high interest and willingness to help in producing quality staff. A great improvement has been made with the library and availability of books. The inclusion of e-books and extension of the range of online databases and journals is ensuring that students have access to up-to date sources. Still there is space for improvement in obtaining one additional full-time job librarian to be available to the students and teachers at this HEI.

The expert committee noticed that teachers are using a variety of teaching methods to improve formal lectures. However, it was noticed that there is still an unequal distribution of the workload of individual teachers in permanent employment as well as external associates. Digitalisation of some courses using tablets with very convenient applications for learning anatomy and some other courses section is an example of a very good practice.

Recommendations for improvement

- It is necessary to equalize the teaching load of all teachers according to their engagement.

Quality grade

Satisfactory level of quality

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

Analysis

The evaluated HEI enables the implementation of student practical skills in well-equipped skills cabinets and organizes practical classes outside the university in cooperation with partners in the labour market. The expert committee has identified significant changes in terms of space capacity at the Mlinarska and Ksaver locations, but due to the increased interest of students in enrolling at this HEI, it may be necessary to consider additional space for the future.

Student internships are conducted in a systematic and responsible manner and their implementation is continuously evaluated and monitored through the work diary. The

HEI has an excellent nursing practicum cabinet and it is very convenient for teaching and performing basic clinical skills.

The allocation of ECTS in nursing studies is not adequate in many of the study subjects. However, this is a problem at the national level due to the core curriculum set by the Ministry of Science and Education. The distribution of student hours within the ECTS workload is not well made, this is mostly seen in the study of nursing. However, this problem generates a significant number of teaching hours that are not held in nursing studies. Refers to hours marked as PKL exercises.

Recommendations for improvement

- It is recommended to plan additional space for teaching cabinets for future study programme development.

Quality grade

Satisfactory level of quality

2.6. Student practice is an integral part of the study programmes.

Analysis

Student practice is organised outside the HEI in cooperation with the labour market and is an integral part of study programmes. It is carried out in a systematic and responsible manner. Intended learning outcomes regarding student practice has been explained on several levels (curriculum, student practical skill books, internal student informational system). Part-time students are aware that they can be exempted from one part of the practical classes only for one subject if they are already employed at one of the health institutions. In the undergraduate study programme of nursing there are some issues regarding student hours for clinical training. It seems it is difficult to record all student hours of clinical training (2300 hours), included in the curriculum according to the Directive 36/2005/ as defined by curriculum. Mainly the reason is that the workload of students in the study of nursing is extremely high. It is extremely problematic to organize classes that would fit into one academic year. However, this is again a problem at the national level that all nursing studies in Croatia face. Therefore, it is necessary to change the core curriculum at the national level as soon as possible, which would enable a reduction in the number of hours of theoretical teaching in favour of practical teaching. Panel members think that Nursing practice hours do not always appear to be recorded

effectively and accurately so some more effort should be implemented in order to have that information.

Recommendations for improvement

- To ensure that Nursing practice hours have more efficient record about hours that have been actually spent on practice or to make that process more effective and accurate.

Quality grade

Satisfactory level of quality

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 criteria for admission and continuation of studies are published and available on the web site of HEI. They are very clearly defined. According to our meeting with students these criteria are also consistently applied, students are well informed and satisfied with information they receive. Most of the information regarding admission and continuation of studies are supported by the information system of the HEI which makes communication even easier. The criteria for admission or continuation of studies ensures the selection of candidates with appropriate prior knowledge which is aligned with the requirements of the study programmes.

Recommendations for improvement

None identified

Quality grade

High 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

According to the documentation and the meeting we had with the management of the HEI, especially with the vice dean for teaching, procedures for monitoring students' progress are available. The information on student progress in the study program is regularly collected and analysed. Mechanisms for analysing student performance and pass rates are also ensured by the information system of the HEI.

Recommendations for improvement

- We recommend that the management should define in their rulebooks what is low and what is high level of students pass rates on subjects and from lower to higher year of study and has written procedures of corrections.

Quality grade

High level of quality

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

Analysis

It is evident from the submitted documentation that the HEI has defined learning outcomes and assessment criteria, and encourages the various modes of programme delivery. However, there is a need for much clearer definitions of learning outcomes and assessment criteria. For learning outcomes and assessment criteria to be beneficial to students they need to be clearly aligned with teaching activities. Different teaching methods are adopted to a diverse group of students (part-time, full-time). The online teaching was adopted during the COVID-19 pandemic and they are satisfied with the ongoing application of teaching online in theoretical subjects. During the meetings held with teachers and the vice dean for teaching they emphasized the advantages of online theoretical classes (they have more time for learning, it is much more comfortable, they are not so tired because they don't need to travel to the HEI). They have adopted simulated clinical learning as an educational strategy that is being extensively developed in nursing. They have also introduced computers and software in classes of anatomy as a complementary element in the teaching-learning process which ensures more interactive teaching. Different methods of testing knowledge and skills are used (written and oral exams, seminar papers, presentations, evaluation of acquired skills during practice and in skills cabinets, etc.). Furthermore, they have introduced the objective structured clinical examination (OSCE) for the assessment of knowledge and skills which plays an important part in student nurses' progression through study programmes because they need to demonstrate competency and confidence in the performance of clinical skills. However, implementation of the OSCE assessment requires improvement as according to the students and professors, it is more of a skill test for self-evaluation and/or peer review.

Recommendations for improvement

- To improve the implementation of OSCE for the assessment of knowledge and skills.

Quality grade

Satisfactory level of quality

3.4. The higher education institution ensures adequate student support.

Analysis

The HEI provides guidance on studying, with all the rules defined in Regulations of Studying, which is available on the HEI's website. During the meeting with the students, they said they have a Mentor, which helps them mostly with writing of their final thesis. Mentor programmes for freshmen were planned, but COVID-19 pandemic disrupted these plans.

The HEI has established activities that informs students about their future careers such as the career day and career counselling. During the meeting with the students, they said that they are active in these activities, and are encouraged by the teaching staff to be a part of them. The HEI also provides a Psychological Counselling Centre, making it available for students in need of psychological help to get it. The students said that they are familiar with the work of the psychological counselling centre and that they know who to contact if necessary.

The HEI takes into account students with visual and hearing difficulties, and adapts the teaching methods of both oral and written exams to those students (eg. dark text, enlarged letters, oral exam with a teaching assistant). During the site visit at the HEI, expert services were observed that are available to the students every day, including Student Affairs Office, Registry and Dispatch Office, Information Technology and Technical Service, Financial and Accounting Service, Library and Office for Academic Recognition of Foreign Higher Education Qualifications. During the Library visit, the expert committee concluded that it is very well equipped for student needs, but we feel that one librarian might not be enough.

Recommendations for improvement

- To consider Mentor programmes for freshmen (student buddy mentor).

Quality grade

Satisfactory level of quality.

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

Analysis

The HEI is committed to supporting students from vulnerable and under-represented groups; for example, students with hearing and visual impairments customised tests (black ink, larger fonts, oral exams with a teaching assistant) are provided, which students confirm.

During the site visit, it was observed by the expert committee, elevators at the Mlinarska location, but unfortunately none in the Ksaver location. The HEI said that plans and schedules of classes are adapted so that students that need to use the elevators do not have the need for going to the Ksaver location. The HEI demonstrates good practice by including Roma minorities into higher education. The HEI clearly demonstrates that students from vulnerable and under-represented groups are given support whilst studying by the Heads of study programmes, study year mentors, employees of expert services and the Vice-Dean for Students.

Recommendations for improvement

- To provide disabled access to all areas at the Ksaver location.

Quality grade

Satisfactory level of quality.

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

Analysis

The HEI facilitates students to gain international experience by its' involvement with the Erasmus programme since 2009. All information about studies abroad is published online on the HEI's website, promoted through informative meetings and during consultations. Students say they are familiar with the Erasmus programme and the possibilities it offers. All students who participate in the HEI's mobility agenda are provided with support from the Erasmus Department. Despite students knowing about the programme, the expert committee believe they are not as included/interested in it as much as they could be.

The HEI ensures the recognition on ETCS credits gained at another higher education institution.

Recommendations for improvement

- The HEI should try to engage and spark more interest in students about Erasmus programmes.
- The HEI should examine student satisfaction with the Erasmus programme and their inclusion.
- To have a designated student officer in the Erasmus office.

Quality grade

Satisfactory level of quality

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

Analysis

Information on enrolment and study is available to foreign students on the HEI's website in English as well as Croatian language. The HEI provides support with the application and the on-going studies of foreign students, however foreign students do not have the opportunity of attending classes in foreign language (e.g., English language). Foreign students also do not have the opportunity to be involved in formal Croatian language learning. The HEI said that they usually have about 20-25 inquiries of foreign students per semester, but as expected, that number varied during the pandemic. The HEI also said that they do not have formal surveys for feedback from foreign students, but they believe that foreign students are satisfied as applications continue to be made to the HEI.

Recommendations for improvement

- To consider implementing a formal survey for international students to provide feedback to the HEI and therefore improve their quality of experience.
- To consider introducing English as an obligatory subject.
- To consider introducing a Croatian language course for foreign students

Quality grade

Minimum level of quality.

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

Analysis

The criteria and methods for evaluation and grading are aligned with the teaching methods used and with the rulebook. They are clear and published before the beginning of the course. As determined following meetings with the teachers and the students, as well as the information being available on the web site and the information system, each course also starts with an introductory lecture. During this introductory lecture teachers introduce students with the course and with the criteria and methods for evaluation and grading. The vice Dean for teaching explained that the HEI ensures the objectivity and reliability of grading by providing written exams. Furthermore, the objectivity and reliability during oral exams is ensured in a way that more students are present at the oral exam at the same time. As mentioned before, the evaluation procedure takes into account special circumstances of groups of students with disabilities while at the same time ensuring the achievement of intended learning outcomes. The students with disabilities have more time to answer the questions during the written exam, and have customised tests. All students can receive the feedback on the evaluation results upon request. This feedback can be received during the scheduled consultation with the professor or via e-mail correspondence. During the meeting held with teachers, the expert committee were introduced to the guidance for learning that was prepared from the Department of Anatomy and Physiology. This Department have prepared the book with all possible questions that can be used at the exam of Anatomy.

Recommendations for improvement

- There is a need for more transparent and structured way of evaluating the achievements of different learning outcomes at one course (which learning outcomes will be evaluated during the seminar, which ones during the written exams, which ones at practical work, etc.)

Quality grade

Satisfactory level of quality

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

Analysis

The HEI ensures that the students are issued appropriate documents, which are diploma and Diploma supplement, free of charge in English and Croatian language. Students are aware of the possibility of getting Diploma supplement in both languages, and they know where to get it.

Recommendations for improvement

None identified

Quality grade

High level of quality

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

Analysis

The higher education institution maintains contacts with alumni. Alumni were very active in the activities of the HEI during the last nine years. During the meeting with the management and the meeting with stakeholders, we found out that HEI analyses the employability of its graduates. They also have feedback from the employers. The HEI informs prospective students about the opportunities to continue education or find employment after graduation. The higher education institution provides students with support regarding future career planning. The HEI together with Alumni organizes the career day.

Recommendations for improvement

None identified

Quality grade

High level of quality

IV. Teaching and institutional capacities

4.1. The higher education institution ensures adequate teaching capacities.

Analysis

The number and qualification of teachers are acceptable for the delivery of study programs and achievement of the learning outcomes envisaged by the programmes.

Data analysis for the academic year 2020/2021 (4.1.b table in analytic supplement) shows that out of the total of 142 full-time employees at the University of Applied Health Sciences 100 (71%) directly participated in teaching. Included among them are 23 teachers appointed to the grade of college professor with tenure, 9 to the grade of college professor, 31 to the grade of senior lecturer, 26 to the grade of lecturer, and 10 assistants and one full professor. A number of teachers, employees of the University of Applied Health Sciences appointed to teaching grade are also appointed to scientific-teaching grade (20 teachers). External associates are also involved in teaching (a total of 619 teachers and associates), of which 35 are appointed to scientific-teaching grade (full professor in tenure, full professor, associate professor and assistant professor), 176 are appointed to teaching grade (college professor with tenure, college professor, senior lecturer, lecturer) and 408 are appointed to associate grade of assistants.

Overall, it is concluded that number and qualification of teachers is appropriate for the delivered study programs. This conclusion is additionally supported by the percentage of contact hours provided by full-time teachers in the various study programs. Percentages range from 33% to 43%. An important success factor in higher education is the student-teacher ratio and the total ratio amount is 27.68.

Summarizing, the ratio between the number of students and the number of full-time teachers is sufficient to ensure a high quality of study.

Checking for teachers' workload, two facts have to be considered. First, the majority of teachers has a workload measured in standard hours of less than 540 which is considered in line with the relevant regulation. Here, 540 standard hours are calculated by adding 20% mark-up to the benchmark of 450 hours, implying that teachers reach the upper capacity limit. Second, a smaller number of teachers have a workload of more than 600 standard hours or more than 1,000 hours while some teachers have less workload than the minimum, see table 4.3 in the analytic supplement. The huge workload may arise for a number of reasons, but it indicates that the allocation of workload should be re-considered. Either, there is only one teacher providing specific classes which comes with all the disadvantages of a single-sourcing strategy or an unbalanced allocation emerged randomly over time.

Discussing with vice dean for teaching it became obvious that the allocation of workload is balanced.

Recommendations for improvement

- To avoid the overload of teaching hours for cumulative employees.

- The teaching obligations of teaching staff should be balanced.
- To avoid the excessive teaching load for the assistant- doctoral students.

Quality grade

Satisfactory level of quality

4.2. The higher education institution ensures appropriate quality of external associates.

Analysis

External associates are involved in teaching (a total of 619 teachers and associates), of which 35 are appointed to scientific-teaching grade (full professor in tenure, full professor, associate professor and assistant professor), 176 are appointed to teaching grade (college professor with tenure, college professor, senior lecturer, lecturer) and 408 are appointed to associate grade of assistants.

Teachers who join teaching staff at the HEI are selected by the criteria of excellence in their fields. This is the fundamental criterion for hiring teachers, where everyone in the appointment to grade procedure goes through the process of evaluating their fulfilment of formal requirements.

In meeting with external associates it became obvious that external associates are highly motivated and practically skilled teachers and contribute significantly to the HEI's teaching activities. It has been confirmed that health care institutions value the quality of students and regularly employ them after the final thesis is completed.

However, external associates are not well acquainted with learning outcomes, student workload, and types of clinical training as PKL-M exercises.

Recommendations for improvement

- To better acquaint external collaborators about the teaching process and learning outcomes.

Quality grade

Satisfactory level of quality

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

Analysis

Teachers are recruited in accordance with the needs for the delivery of the study programmes. Human resources are one of the key areas in the University of Applied

Health Sciences Development Strategy 2021 – 2025. Teacher recruitment and advancement procedure is regulated by the Act on the Scientific Activity and Higher Education, Work Regulations and Statute of the University of Applied Health Sciences. All teachers and associates are informed of the prescribed conditions for the appointment to grades, which are published on the University's website. The University of Applied Health Sciences encourages appointments of its employees in scientific and scientific-teaching grades, where costs of appointments to scientific grades is covered by the University.

Rewarding the best teachers has not been introduced.

Recommendations for improvement

- Adopt a rulebook on rewarding employees (the best grade from student surveys, the most mentorships, articles in highly indexed journals).

Quality grade

High level of quality

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

Analysis

The HEI supports and provides opportunities for the improvement of competencies of its employees.

All teachers and associates of the University of Applied Health Sciences are encouraged to continue education at higher levels of education, that is masters and postgraduate study programmes. The University of Applied Health Sciences provides the necessary funds from the specific revenue to its full-time teachers for the enrolment at higher levels of education in Croatia or Slovenia. Currently there are 28 teachers at postgraduate doctoral study programmes.

Teachers of the HEI regularly participate in training related to the improvement of teaching and pedagogical competences. Presentations related to opportunities of participating in mobility programmes are held for teachers, and in the previous period there was an increase in outgoing mobility of teachers under the Erasmus+ programme (11 teachers participated in the mobility).

Teachers who are first authors of papers are provided with opportunities to participate in international and national conventions – congresses, conferences, symposiums, forums, round tables, workshops and other types of public presentation of papers and scientific findings, and funds are provided for this purpose.

With the support of the University, teachers participate in international cooperation programmes, but still in fewer numbers.

Recommendations for improvement

- To increase the mobility of students, teachers, and also administrative staff.

Quality grade

High level of quality

4.5. The space, equipment and the entire infrastructure (laboratories, IT service, work facilities etc.) are adequate for the delivery of the study programmes and ensure the achievement of intended learning outcomes and the implementation of professional and/or scientific activity.

Analysis

The premises of the University of Applied Health Sciences are located at locations Mlinarska 38 and Ksaver 209. During 2019, the premises at the location Ksaver 209 were renovated, and the additional 1000 m² was provided for teaching activities. The total surface area of the premises for carrying out higher education activities was also increased, which is owned by the University of Applied Health Sciences after purchasing premises at the location Ksaver 209 (2303 m²). The University of Applied Health Sciences owns 4316 m² for carrying out teaching activities, and leases 400 m².

Two computer lecture halls are equipped for carrying out teaching at the University: at the location Ksaver 209, hall 334 with 21 computers, and at the location Mlinarska cesta 38, hall 101 with 21 computers.

In addition to computer lecture rooms, three cabinets are also equipped with IT equipment (iPads and simulation equipment): the cabinets for anatomy, physiology, nursing care practice room, laboratory for chemistry, biochemistry and biology. For the purpose of preparing and teaching, 90 tablets were procured for teachers and cabinets in 2019. At Ksaver 209, the anatomy laboratory is equipped to a high level of completion for the purpose of teaching and scientific activities.

For the purpose of teaching using simulation, simulation manikins and equipment for the nursing care cabinet were procured during 2015. Simulation equipment for the outpatient clinic was procured (simulation dummies, blood pressure simulators, teaching models of injections, training models for urinary catheter insertion, vital signs simulator, etc.).

During the day (from 7 a.m. to 8 p.m.) students have access to 32 computers with Internet access at the locations Mlinarska 38 and Ksaver 209. Free Wi-Fi network is available in all buildings of the University, which students can access via the AAI identity. Recently, the HEI has significantly invested in the infrastructure, equipment and digitalization of classrooms. Overall, the conclusion is that the university has plans for further infrastructure improvements, and the space and equipment are sufficient for professional studies. According to the number of students, it has a sufficient amount of space 1,263 m² per student (minimum is 1,25 m²).

It has been noticed that access for disabled people at the Ksaver location is difficult.

Recommendations for improvement

None identified

Quality grade

High level of quality

4.6. The library and library equipment, as well as access to additional resources ensure the literature necessary for ensuring high-quality of study and scientific and teaching activity.

Analysis

The library is located on the premises of the University of Applied Health Sciences at the location Ksaver 209. The surface area for library purposes is 120 m², which includes the library and the reading room. On the Library's website users are able to search availability of books using *on-line* search engine. The library holdings currently number 26.982 books, of which 20.943 are mandatory literature textbooks. The holdings also include 17 foreign and 59 domestic print journals. The libraries take care of the digital repository of the HEI.

The library is well equipped with e-books of compulsory textbooks, which students access with AAI code. The library is open for students every day from 8 a.m. to 4 p.m., and provides services of lending books and information services.

Remark, there is only one employee. In its absence, there may be problems in functioning.

Recommendations for improvement

- We recommend that additional librarian support is provided.

Quality grade

Satisfactory level of quality

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

Analysis

The HEI have a high level of financial autonomy and they manage the resources in an appropriate way, providing also the support for the maintenance of the equipment.

The 41,15% of the HEI revenues were State budget revenues in 2019 and 39,46% in 2020. (According to the Table 4.11. Analytic_supplement), mostly to cover employee salaries and other employee-related expenditures. Significant funds have been invested in infrastructure and procurement of equipment. The activity income of the HEI (including tuition fees, rental income, as well as revenues from special regulations and other unspecified revenues) accounted for most of the total operating revenues of the HEI in 2019 and 2020. The HEI ended both business years with a positive balance.

Recommendations for improvement

- To fully align consumption items with the list of equipment so that consumption can be monitored.

Quality grade

Satisfactory level of quality

V. Professional and/or scientific activity

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

Analysis

The institution registered in the Ministry of Science and Education as a scientific institution, has among its strategic objectives the development of scientific and professional activity, as well as increasing the quality of this activity. To achieve this purpose, it has developed Service for Professional and Scientific Research and the Commission for Professional and Scientific Activity. In 2017 the HEI launched the Centre for Clinical and Translational Research with the aim of strengthening scientific activity. These actions have led to an evident increase in the scientific production from its teachers and associates with respect to the previous period, both in indexed journals and in manuals and textbooks, or in proceeding abstracts, having reached a total of 153 in WOs and Scopus databases and 257 in total, many of these publications are on national journals.

In addition to this, the HEI has a Publishing office that, in addition to promoting scientific and professional publications, aims to promote the visibility of this activity in Croatia and in the region. This office updates the institution's catalogue of publications annually on its website, allowing access to its faculty, students and the Alumni Club, in most cases, free of charge.

The HEI has also developed two scientific journals, one on nursing (Croatian Nursing Journal) and another multidisciplinary one (Journal of Applied Sciences JAHS) that promotes research in the different fields and professional profiles of the HEI.

According to the strategy for the development of scientific research work of the HEI for the period 2020-2024, the HEI efficiently encourages publishing in high-impact journals. In addition, a considerable increase in the number of employed teachers (55% of the faculty) with a doctorate in the institution is observed, also proposing as a result for this period that this number continues to increase.

Teachers and associates of the higher education institution regularly participate at professional conventions, and also actively participate in congresses, conferences and workshops organized by the University of Applied Health Sciences.

Recommendations for improvement

- To widen international reach for publications and research dissemination
- To increase the number of teachers with research-teaching position

Quality grade

Satisfactory level of quality

5.2. The higher education institution proves the social relevance of its professional and/or scientific research and transfer of knowledge.

Analysis

The Strategy for the Development of Scientific Research Work of the higher education institution is aligned with its mission where the professional and research activity is focused on improving individuals and community health.

The HEI founded in 2017 the centre for Translational and Clinical research to support research conducted in collaboration with healthcare institutions (hospitals), associations and community.

In recent years, the institution has organized 19 conferences, workshops, conventions and courses to support research and knowledge transfer. Also, during these years, the teachers of the HEI took part as members of organizing committees, invited lectures and lectures in many professional and scientific events.

Teachers and associates are member of different professional associations, holding, in some cases, committees' positions at a national and regional levels.

Recommendations for improvement

- To further encourage participation with projects in collaboration with the community and civil society organizations.

Quality grade

Satisfactory level of quality

5.3. Professional and/or scientific achievements of the higher education institution have been recognized in the regional, national and international context.

Analysis

In the last 5 years, 5 teachers have received local or national awards for their professional and/or scientific work.

Although the HEI promoted and financed the implementation of projects in the institution, of which 14 were selected at a local level and were developed in 2018 and 2019, and also took part in 3 projects funded by the European Union as a partner, according to the analyzed documentation.

Teachers and associates take part in national and international conferences. Teachers and associates are members of professional organisations and editorial boards of journals, mainly at a national level.

Recommendations for improvement

- To increase international collaboration with funded and research grants
- To increase an active participation in international professional and scientific research projects.

Quality grade

Minimum level of quality

5.4. Professional and/or scientific activities and achievements of the higher education institution improve teaching.

Analysis

According to the review of the documentation as well as the meetings held with the students and alumni club, both undergraduate and postgraduate students are involved in the research and projects carried out by the HEI, collaborating and under the supervision of the teaching staff. Both the equipment and the result of the research revert and are used to favour and improve the teaching process.

The HEI recognizes the most important achievements of its employees and the most relevant scientific papers published by its teachers.

Recommendations for improvement

- To engage students from all disciplines in participating in research projects.

Quality grade

Satisfactory level of quality

APPENDICES

1. Quality assessment summary - tables

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

Quality grade by standard

<i>I. Internal quality assurance and the social role of the higher education institution</i>	<i>Unsatisfactory level of quality</i>	<i>Minimum level of quality</i>	<i>Satisfactory level of quality</i>	<i>High level of quality</i>
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, professional and/or scientific and social role).				X
1.5. The higher education institution understands and encourages the development of its social role.				X
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

<i>II. Study programmes</i>	<i>Unsatisfactory level of quality</i>	<i>Minimum level of quality</i>	<i>Satisfactory level of quality</i>	<i>High level of quality</i>
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 demands of the labour market.				X
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.			X	
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.			X	
2.6. Student practice is an integral part of the study programmes.			X	

Quality grade by standard

<i>III. Teaching process and student support</i>	<i>Unsatisfactory level of quality</i>	<i>Minimum level of quality</i>	<i>Satisfactory level of quality</i>	<i>High level of quality</i>
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.				X
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.			X	
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.				X

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

Quality grade by standard

<i>V. Professional and/or scientific activity</i>	<i>Unsatisfactory level of quality</i>	<i>Minimum level of quality</i>	<i>Satisfactory level of quality</i>	<i>High level of quality</i>
5.1. Teachers and associates employed at the higher education institution are committed to the achievement of high quality and quantity of professional and/or scientific activity.			X	
5.2. The higher education institution proves the social relevance of its professional and/or scientific research and transfer of knowledge.			X	
5.3. Professional and/or scientific achievements of the higher education institution have been recognized in the regional, national and international context.		X		
5.4. Professional and/or scientific activities and achievements of the higher education institution improve teaching.			X	

2. Site visit protocol

Reakreditacija Zdravstvenog veleučilišta u Zagrebu	Re-accreditation of the University of Applied Health Sciences in Zagreb
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**Edukacija članova stručnog povjerenstva i priprema članova povjerenstva za sastanke s visokim učilištem u virtualnom okruženju
/Training of panel members and preparation of the expert panel members for the meetings with HEI in virtual form**

	Utorak, 22. ožujka 2022.	Tuesday 22 th March 2022
9:50 - 10:00 CET	Spajanje na poveznicu ZOOM	Joining ZOOM meeting
10:00 - 13:00	<ul style="list-style-type: none"> • Predstavljanje AZVO-a • Predstavljanje sustava visokog obrazovanja u RH • Postupak reakreditacije • Standardi za vrednovanje kvalitete • Kako napisati završno izvješće • Priprema povjerenstva za sastanke s visokim učilištem (rasprava o Samoanalizi i popratnim dokumentima) 	<ul style="list-style-type: none"> • 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 • Preparation of the expert panel members for the meetings with HEI (discussion on the Self-evaluation report and supporting documents)

Virtualni sastanak članova stručnog povjerenstva, diskusija o zapažanjima i impresijama s preliminarnog posjeta/Virtual meeting of Expert Panel members, discussion on observations and impressions from the document analysis

	Četvrtak, 31. ožujka 2022.	Thursday, 31 st March 2022
12:00 - 12:05	Spajanje na poveznicu (link) ZOOM recenzenata	Joining the ZOOM meeting
12:05 -	Interni sastanak Stručnog povjerenstva	Internal meeting of the Expert panel

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

Zdravstveno veleučilište, Lokacija: Zagreb

	Ponedjeljak, 4. travnja 2022.	Monday, 4 th April 2022
10:00 - 10:15	Spajanje dijela članova povjerenstva na poveznicu ZOOM	Joining the part of the expert panel members to the ZOOM meeting
10:15 - 11:15	Sastanak s dekanom, prodekanima i tajnikom	Meeting with the Dean, Vice-Deans and Secretary
11:15 - 11:20	<i>Pauza</i>	<i>Break</i>
11:20 - 12:20	Sastanak s predstavnicima Povjerenstva za izradu samoanalize + predstavnici Povjerenstva za kvalitetu	Meeting with representatives of the Committee for the preparation of self-evaluation document + representatives of the Committee for Quality Assurance
12:20 - 13:20	Analiza dokumenata	Document analysis
13:20 - 14:35	<i>Ručak</i>	<i>Lunch</i>
14:35 - 16:30	Obilazak veleučilišta (predavaonice, informatičke učionice, prostorije za studente, nastavnički kabineti, knjižnica, obilazak popratnih objekata) i prisustvovanje nastavi	Tour of the University (classrooms, computer classrooms, library, labs, student services) and participation in teaching classes

Virtualni sastanak članova stručnog povjerenstva, diskusija o zapažanjima i impresijama s preliminarnog posjeta/Virtual meeting of Expert Panel members, discussion on observations and impressions from the preliminary site-visit

	Utorak, 5. travnja 2022.	Tuesday, 5 th April 2022
9:30 - 9:45	Spajanje na poveznicu (link) ZOOM	Joining ZOOM meeting
9:45 -	Interni sastanak Stručnog povjerenstva	Internal meeting of the Expert panel

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

	Srijeda, 6. travnja 2022.	Wednesday, 6 th April 2022
9:00 – 9:15	Spajanje na poveznicu (link) ZOOM	Joining ZOOM meeting via the link
9:15 – 10:15	Sastanak s prodekanima za nastavu i studente	Meeting with vice deans for teaching and students
10:15 – 10:20	<i>Pauza</i>	<i>Break</i>
10:20 – 11:20	Sastanak s voditeljima studijskih programa i/ili voditeljima odsjeka	Meeting with study programme coordinators / heads of departments
11:20 – 11:30	<i>Pauza</i>	<i>Break</i>
11:30 – 12:30	Sastanak sa studentima	Meeting with students
12:30 – 13:30	Sastanak s nastavnicima (u stalnom radnom odnosu, osim onih na rukovodećim mjestima)	Meeting with full-time employed teachers, except those in managerial positions
13:30 – 14:30	<i>Pauza za ručak</i>	<i>Lunch break</i>
14:30 – 15:30	Sastanak s asistentima	Meeting with teaching assistants
15:30 – 16:00	Organizacija dodatnog sastanka o otvorenim pitanjima – prema potrebi	Organisation of an additional meeting on open questions, if needed
16:00 –	Interni sastanak članova stručnog povjerenstva –	Internal meeting of the Expert Panel members

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

	Četvrtak, 7. travnja 2022.	Thursday, 7 th April 2022
9:00 – 9:15	<i>Spajanje na poveznicu ZOOM</i>	<i>Joining ZOOM meeting</i>
9:15 – 10:15	Sastanak s prodekanima za znanost, i međunarodnu suradnju	Meeting with vice deans for research and external affairs
10:15 – 10:20	<i>Pauza</i>	<i>Break</i>
10:20 – 11:20	Sastanak s voditeljima znanstvenih i stručnih projekata	Meeting with the heads of research and professional projects
11:20 – 11:30	<i>Pauza</i>	<i>Break</i>
11:30 – 12:30	Sastanak sa predstavnicima odjela za međunarodnu suradnju, studentsku mobilnost i izdavačku djelatnost	<i>Meeting with the departments for international affairs, student mobility and publishing</i>
12:30 – 12:35	<i>Pauza</i>	<i>Break</i>
12:35 – 13:35	Sastanak s vanjskim suradnicima (nastavnici)	Meeting with external associates (teachers)
13:35 – 14:35	<i>Pauza za ručak</i>	<i>Lunch break</i>
14:35 – 15:05	Sastanak s vanjskim dionicima (nenastavnim) s kojima visoko učilište surađuje	<i>Meeting with external stakeholders (non-teaching) with which the institution cooperates</i>
15:05 – 15:35	Sastanak s alumnijima	Meeting with alumni
15:35 – 16:00	Organizacija dodatnog sastanka – prema potrebi	Organisation of an additional meeting on open questions, if needed
16:00 –	<i>Interni sastanak članova stručnog povjerenstva</i>	<i>Internal meeting of the Expert Panel members</i>

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

	Petak, 8. travnja 2022.	Friday, 8 th April 2022
9:30 – 11:30	Interni sastanak Stručnog povjerenstva (izrada nacrtu završnog izvješća)	Internal meeting of the Expert panel (drafting the final report)
11:30 – 11:45	Završni sastanak s Upravom visokog učilišta	Exit meeting with the Management (dean and vice-deans)
11:45 –	Interni sastanak Stručnog povjerenstva (izrada nacrtu završnog izvješća)	Internal meeting of the Expert panel (drafting the final report)

SUMMARY

The University of Applied Health Sciences is a public higher education institution that organizes and implements professional study programs. Its' vision is to become the leading higher education institution in the field of health education, recognized for its excellence in Croatia, and beyond. The university maintains a high level of financial autonomy and manages its' budget effectively.

The mission of the University is to organize and implement the highest-quality study programs and lifelong learning programs in health education. The university boasts of study programs that are adapted to European standards, modern organization and of high-quality teaching using new medical and information technologies. This was recognised by the expert committee during the accreditation visit. There has been substantial investment in the infrastructure, equipment and digitalisation of classrooms, with plans for further expansion.

Following the previous accreditation undertaken by ASHE in 2014/2015 and activities afterwards, the university has successfully confirmed a licence to carry out scientific activities. The launch of the Centre for Clinical and Translational Research in 2017 has led to an increase of employed teachers with or studying for a doctorate, with noticeable outputs in scientific publications and projects. This has set the trajectory for this university where the professional and research activity is focused on improving individuals and community health.

The expert committee acknowledge the improvements made to the quality assurance strategy since the previous accreditation, with recommendations made for further improvements going forward. The number and qualifications of teachers are acceptable for the delivery of study programs and are selected by the criteria of excellence in their fields.

The university has worked hard to improve its' student experience and support, with special attention to vulnerable and under-represented groups. Student views are sought and acted upon and improvement to the library provision is noted. Consideration, however, to processes surrounding international students is needed. The alumni continue to flourish and its' activities are increasing with the university, its' students and the wider community.

The institution continues to contribute to the healthcare system of Croatia by the provision of high-level graduates. The largest hospitals in Croatia recruit predominantly from this institution, the institution is therefore well placed to provide lifelong learning initiatives and programmes of study.