



NATIONAL CENTER FOR
EDUCATIONAL QUALITY
ENHANCEMENT

Annex №1

Self-Evaluation Report on Accreditation
of Higher Education Programme

GENERAL MEDICINE

YEREVAN STATE MEDICAL UNIVERSITY AFTER MKHITAR HERATSI
FOUNDATION



1. Information about a Higher Education Institution¹

Name of the HEI	Yerevan State Medical University After Mkhitar Heratsi
Organizational-Legal Form	Foundation
Type of Institution	HEI
Identification Code	10047830

2. Contact Information

The HEI Address (street N, city/municipality, postal code, country)	Koryun 2, Yerevan, RA 0025
The HEI Website	https://www.ysmu.am/
The HEI e-mail Address	info@ysmu.am
Head of the HEI	Armen Muradyan
Phone	+37410540505
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Head(s) of Main Educational Unit(s) (Faculty/School):	Karine Baroyan
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Programme Head(s)	Konstantin Yenkovyan
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E-mail Address	konstantinyenkoyan@gmail.com
Head(s) of Quality Assurance Department of the Institution or/and Main Educational Unit(s)	Aram Hayrapetyan
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3. Information on the Higher Educational Programme

¹ In case of joint educational programme: The institutions implementing a joint higher education programme shall be indicated, in case of a higher education institution recognized in accordance with the foreign law, the title in English shall also be indicated. In case of a higher education institution recognized under the foreign law, it is not mandatory to indicate the institution's "identification code" and "institution type".

Name of Educational Programme	General Medicine
Previous name of the programme in case of re-accreditation	---
Level of higher education	Second (according to Dublin descriptors)
Qualification level according to the National Qualifications Framework	7th level
Language of instruction	Armenian
Qualification to be awarded ²	MD Physician
Indication of relevant secondary education subject/subjects/group of subjects (In case of integrated Bachelor's and Master's Teacher Training Educational Programme and Teacher Training Educational Programme)	---
Name and code of the detailed field according to the Classifier of Fields of Study	ref. code: 91201.00.7 (Armenian classification)
Name and code of the detailed field according to ISCED-F-2013	0912
Number of ECTS credits	360
Location(s) the program is carried out at (№, street, campus building, city/municipality, postal code, country)	Koryun 2, Yerevan, RA 0025
Programme status (New/Non-accredited/Accredited/Conditionally Accredited/International Accreditation ³)	Non-accredited
If the programme is non-accredited or accredited, the date and number of the relevant decision shall be indicated	---
Expiry Date of the accreditation/conditional accreditation	---
Additional requirements for the programme admission (in case of an art-creative and/or sports educational programme, passing a creative tour/internal competition, or in case of another programme, specific requirements for admission to the programme/implementation of the programme)	---

***The quantitative data of the educational programme shall be filled out in accordance with the Annex 1 attached to the Self-Evaluation Report**

4. Brief Review of the Educational Programme

²In case of implementing a joint higher education programme with a higher education institution recognized in accordance with the legislation of a foreign country, if the title of the qualification to be awarded differs, it shall be indicated separately for each institution.

³ In case of accreditation granted by a foreign organization with the relevant competence recognized by the National Center for Educational Quality Enhancement, the information on the accreditation granted by the foreign organization, as well as the recognition of the relevant decision by the Center shall be indicated.

Please indicate how long the HEI runs the programme, when was it accredited or added through authorization, as well as when the programme started functioning. Please describe main/ distinctive features of the educational programme, indicate how the programme has been modified since its previous accreditation (no more than 500 words).

5. Self-Evaluation Team and Description of the Self-Evaluation Process

Please, describe the composition of the self-evaluation team, areas of their responsibilities and the entire process of the self-evaluation (no more than 500 words)

YSMU has successful experience of self-evaluation and relevant field experts for its management. The university

- *received institutional accreditation in 2015, and was re-accredited in 2020*
- *implemented self-evaluation of the “General Medicine” educational program in 2013, coordinated by the Netherlands and Flanders Accreditation Organization (NVAO)*
- *carried out various self-assessments within the frame of internal quality assurance.*

By the YSMU rector’s order to prepare the “General Medicine” educational program for international accreditation, part of which is a self-evaluation report, a working group was formed.

The members of the working group were appointed according to their positions and experience in internal and external quality processes.

The working group members are presented below:

	<i>Name, Surname</i>	<i>Position</i>
1.	<i>Larisa Avetisyan</i>	<i>Vice-Rector for Academic Affairs, Self-Evaluation Project, Coordinator</i>
2.	<i>Konstantin Yenkovyan</i>	<i>Vice-Rector for Science, “General Medicine” Education Programme, Director</i>
3.	<i>Karine Baroyan</i>	<i>Faculty of General Medicine, Dean</i>
4.	<i>Rafayel Mesropyan</i>	<i>Faculty of General Medicine, Deputy Dean</i>

5.	<i>Izabel Abgaryan</i>	<i>Adviser to the Rector</i>
6.	<i>Khachatur Margaryan</i>	<i>Career Centre, Head</i>
7.	<i>Aram Baykov</i>	<i>Department of Education Programmes, Head</i>
8.	<i>Aram Hayrapetyan</i>	<i>Education Quality Assessment and Assurance Centre, Head</i>
9.	<i>Irina Hovhannisyan</i>	<i>Faculty of General Medicine, Quality Assurance Officer</i>

Self-evaluation procedures were carried out in the following steps:

- 1. The plan-schedule of work implementation was developed*
- 2. The responsibilities of the working group members and the mode of interaction between them has been discussed and defined according to the WFME standards.*
- 3. Sources of the required documents, statistical, quantitative and qualitative data and other information have been specified.*
- 4. The list of relevant documents to be included in the self-evaluation comprehensive package has been defined.*
- 5. The required criteria have been described and SWOT analysis has been made according to the initial distribution of the fields and following the requirements of the self-assessment format. Then this was presented to the internal stakeholders for discussion.*
- 6. Based on the received feedback, a preliminary analysis has been made. The analysis was translated into English and sent to both stakeholders and the external experts for reviews.*
- 7. The final draft of the self-evaluation report has been completed, considering the feedback of all the stakeholders and external experts.*
- 8. All documented evidence and other required documents referenced in the analysis have been collected.*
- 9. The comprehensive package of self-evaluation was reported to the scientific councils of the faculty of General Medicine and YSMU.*

6. Assessment of Compliance with the Standards

A self-evaluation report shall reflect the institution's thorough description, analysis and critical vision of the educational programme, as well as the ways and means of the improvement of the educational programme and

performance of the institution. A self-evaluation report should be analytical, written in a clear and comprehensible manner. Statements presented in the self-evaluation report by the institution must be proven with arguments and based on relevant evidences, and quantitative and qualitative data. In order to present the statistical data and factual information in a clear manner, the institution can include relevant graphic images/tables, and links in the text.

In order to recognize the institution as an applicant for accreditation, the presented self-evaluation report template must be completely filled out. The template is considered as completely filled out if:

- All of the compulsory fields indicated in the self-evaluation report are filled out (in case the institution does not have information to be specified by the time self-evaluation report is submitted, an appropriate explanation shall be presented);
- The information presented in the self-evaluation report directly refers to the requirements of the evaluation criteria of particular standard component;
- When confirming the information presented in the self-evaluation form, a list of documents and types of information specified in the column of evidence/indicators of the standards document is provided;
- Strengths and areas for improvement shall be presented regarding all standards, considering the components of each of them.

Please, note: Presenting an incomplete self-evaluation form shall serve as the basis to recognize the application as deficient, and sent back to the institution for re-submission.

1. Educational Programme Objectives, Learning Outcomes and their Compliance with the Programme

A programme has clearly established objectives and learning outcomes, which are logically connected to each other. Programme objectives are consistent with the mission, objectives and strategic plan of the institution. Programme learning outcomes are assessed on a regular basis to improve the programme. The content and consistent structure of the programme ensure the achievement of the set goals and expected learning outcomes.

Educational programmes grouped in a cluster are logically interrelated to each other in line with the study fields and evolve according to the respective levels of higher education.

1.1 Program Objectives

Programme objectives consider the specificity of the field of study, level and an educational programme, and define the set of knowledge, skills and competences a programme aims to develop in graduate students. They also illustrate the contribution of the programme to the development of the field and society.

Pursuant to the mission of the University and the Faculty of General Medicine and taking account of the Armenian and international market demands, the goal of the continuing and integrated MD programme is to educate and train qualified and competitive specialists, having earned “MD Physician” qualification in General Medicine. These specialists should possess thorough, systematized and in-depth specialist knowledge, skills and competences that meet the criteria under the 7th level of qualifications within the Armenian National Qualifications Framework (NQF) and the “Medicine” Sectorial Qualifications Framework in the Republic of Armenia (SQFs), as well as international standards of

World Federation for Medical Education (WFME) (see the Strategy for Development of General Medicine Faculty 2021-2025, relevant frameworks and standards). The Strategy for Development of General Medicine Faculty 2021-2025 also enshrines these approaches and stipulates that “... the Faculty of General Medicine strives to become a regional bastion in training of specialists with the qualification of “MD Physician”, gaining international acclaim in the fields of education, science and healthcare.” (see the Strategy for Development of General Medicine Faculty 2021-2025).

The graduate of the continuing and integrated MD programme is awarded “MD Physician” qualification (ref. code: 91201.00.7; see the Decision of the Armenian Government N1191-N, dated 23 October 2014, and ISCED-F (International Standard Classification of Education) 2013 codes: 0912 Medicine). The qualification “MD Physician” is awarded to a graduate who demonstrates comprehensive and systematic professional in-depth knowledge, skills and competence to engage in professional practice in medicine, perform research, teach in higher and vocational educational institutions and pursue studies at the next educational level. The programme features a modular design and is offered as a full-time programme only, with a statutory length of 6 years (360 ECTS credits prescribed), taught in Armenian.

Upon earning the MD Physician degree, the programme graduate has the right to engage in professional medical practice with exposure to following activity:

- 1) preventive,*
- 2) diagnostic,*
- 3) therapeutic,*
- 4) scientific and research,*
- 5) educational,*
- 6) organizational-management.*

These activities are enshrined in the the objectives of continuing and integrated MD programme which clearly define the set of requisite knowledge, skills and competences (see the degree programme). They are realistic in terms of achievability on account of the programme structure, organization, management, teaching-learning approaches and assessment strategies, as well as human and logistics resources and quality assurance (see also Criterion 2, 3, 4, 5 for further details).

The objectives of the degree programme correspond to the requisite learning cycle, i.e., the 7th level per the Armenian NQF, the “Medicine” specialization (the Armenian SQFs), the Georgian NQF, the sectorial benchmark of the Republic of Georgia and the European Qualifications Framework (see

relevant documents and web-links).

Programme objectives also consider the trends and demands of the regional and international labour market (see Criterion 5) and reflect major dimensions of institutional internationalization. To note, the programme also runs in two foreign languages, i.e., in Russian and English; and more than 1/3 of programme beneficiaries are overseas (international) students. The programme policy towards internationalization is reflected in certain goals of the University Strategic Plan. In particular, Goal 1 defines the necessity to “Increase the number of overseas students through targeted improvements and transform into a preeminent centre of medical education in the region”; Goal 2 defines the need to “Undertake international accreditation of degree programmes”, “Ensure student and faculty mobility through developing and running partnership projects with higher education institutions of the region and European Higher Education Area”. The policy towards internationalization also embraces the following strategy defined in Goal 6: “Promote intercollegiate academic mobility of students, clinical residents, teaching faculty, develop mutual recognition of learning outcomes and credit transfer mechanisms based on the European Credit Transfer and Accumulation System (ECTS)”.

In addition, internal and external stakeholders and relevant boards complete periodic comparative reviews of programme curricular contents with similar programmes of internationally acclaimed medical institutions, which also promotes internationalization. Through making amendments to curriculum contents, this comparative analysis also aims at promoting student mobility and ensuring recognition of awarded qualifications (see Criterion 1.4 for details).

The objectives illustrate the programme novelty and its contribution to the development of the healthcare sector and society. Internal and external stakeholders are aware of and involved in the design and achievement of the objectives of the degree programme. It can thus be claimed that programme is publicized and accessible (see the university website).

Evidences/Indicators

1. *University Strategic Plan 2021-2025.*
2. *Strategy for Development of General Medicine Faculty 2021-2025.*
3. *MD degree programme description.*
4. *Armenian National Qualifications Framework,*
<https://www.arlis.am/documentview.aspx?docid=107371>
5. *Armenian Sectorial Qualifications Framework.*

1.2. Programme Learning Outcomes

- The learning outcomes of the programme are logically related to the programme objectives and the specificity of the study field.
 - Programme learning outcomes describe knowledge, skills, and/or the sense of responsibility and autonomy which students gain upon completion of the programme.
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MD programme learning outcomes comprehensively describe knowledge, skills, and sense of responsibility and autonomy which students shall gain upon completion of the programme consistent with the Armenian Sectorial Qualifications Framework “Medicine” (see SQF vs LO alignment template).

Programme outcomes are shaped on the basis of the module outcomes envisaged by the programme curriculum, emphasizing the importance of shaping outcomes using Bloom’s taxonomy (see the alignment model for programme outcomes and module/course outcomes, module/course description). The alignment of achieved learning outcomes with the intended learning outcomes is ensured through due assessment methodology and approaches (see para. 19-25 of programme module description) and the systematic alignment of the teaching-learning-assessment framework (see Constructive Alignment, the “A guideline for aligning academic programmes to the Armenian national qualifications framework”).

To note, programme learning outcomes and its objectives are logically interrelated and stem from the University Mission, the Strategic Plan, and the Strategy for Development of General Medicine Faculty (see the University Strategic Plan 2021-2025, Strategy for Development of General Medicine Faculty 2021-2025). Programme learning outcomes are clear-cut, measurable and correspond to the 7th level per the Armenian NQF, the “Medicine” specialization (the Armenian SQF), the European Qualifications Framework, the Georgian NQF and its sectorial benchmark. The programme outcomes also ensure field knowledge and field competences defined by the Georgian Medicine Sector Benchmarks of Higher Education.

These outcomes are aligned with the learning outcomes of modules, which is reflected in the alignment model (see the alignment model).

In 2022, the outcomes of the continuing and integrated MD programme and its modules were compared to the sectorial benchmark of Georgia (Medicine), resulting in certain amendments, while ensuring compliance with appropriate statutory standards under the Armenian legislation.

The University periodically reviews the programme outcomes which is thoroughly reflected in Criterion 1.3, 1.4 and Criterion 5. The latest review was conducted on 21 October 2022, given the adoption of the Armenian SQF, the need to harmonize the outcomes with the latter and the introduction of external experts' recommendations (see the former and new/reviewed lists of MD programme learning outcomes, the new Armenian SQF and experts' recommendations).

Below is the description of MD programme outcomes, knowledge, skills and competences.

Intended Learning Outcomes of Continuing and Integrated MD Programme.

- 1. Demonstrate in-depth theoretical and practical knowledge and critical understanding in medicine.*
- 2. Participate in the management of preventive and sanitary-epidemiological services and institutions.*
- 3. Collect, record and analyze patient health data.*
- 4. Master the algorithm of prescribing clinical examinations, deciding on treatment and preventive measures.*
- 5. Take measures related to diagnosis at pre-hospital and hospital stages, emergency medical care, prediction of disease/pathology prognosis.*
- 6. Make a pre-clinical diagnosis of diseases and conditions which require sub-specialized approach and refer the patient to a sub-specialist.*
- 7. Ensure that actions are designed and introduced to address health promotion and disease prevention; ensure that collection, analysis and prediction of population data on health is in place.*
- 8. Educate patients and their family members about personal hygiene and basic sanitation practices; perform pedagogical activities in vocational educational institutions; achieve health promotion and advocacy through media coverage.*
- 9. Provide professional consultation and expert assistance to governmental and non-governmental institutions, organizations and investigative bodies.*
- 10. Analyze and make use of academic, research, statutory and informative literature and other resources (inter alia sources in a foreign language) for purposes of professional practice, self-*

development and generation of new knowledge.

11. Conduct research on biomedical and healthcare issues.

12. Demonstrate skills of effective communication in both native and foreign language, teamwork skills, situational and non-standard decision-making, assume responsibility for teammates, demonstrate ethical behaviour and due conduct (see MD programme description).

Upon successful mastery of the MD programme, the graduate (doctor) shall demonstrate:

- 1. In-depth understanding of the structure and function of the human body, integrating current specialty-specific knowledge across molecular, cellular, tissue-related, organ-specific, system-specific and behavioral levels.*
- 2. Advanced knowledge and understanding of the healthcare professional practice, current and fundamental concepts, theories and methods, as well as profound knowledge of the latest advances in medicine, which are employed within the work, study and research.*
- 3. Knowledge of the basics of performing research in the field of healthcare and biomedicine.*
- 4. In-depth knowledge of the development, theories and leading principles of medicine and health care.*
- 5. Knowledge and understanding of biomedical, clinical, public health research, as well as teaching methods and related theories and current approaches.*
- 6. Knowledge of human diseases, pathologies and cause-and-effect relationship of structural and functional changes in the body, basic clinical and para-clinical manifestations, modern approaches to diagnosis, treatment and prevention coupled with the theoretical foundations of medicine and clinical reasoning.*
- 7. Innovative and advanced approaches, employing acquired knowledge and understanding, as well as key professional skills which are necessary in:*
 - Resolving unpredictable issues arising during professional practice or study in the field of medicine and healthcare, in performing research and conducting innovative activities in order to amalgamate the knowledge of healthcare and allied fields with a view to creating new knowledge, to resolve medical issues in new and unfamiliar situations across theoretical and practical*

dimensions.

- 8. Capacities to research, analyze, evaluate issues in field of professional practice through critically-mediated thinking; propose and employ modern scholarly approaches to their solution; and to anticipate the most likely developments.*
- 9. Ability to work in a team and collaborate effectively with team members.*
- 10. Ability to make use of statutory legal framework of the field of practice.*
- 11. Skills needed to design innovative and creative solutions aimed at expanding professional knowledge and practice.*
- 12. Ability to engage in professional practice and perform research in an international environment.*
- 13. Effective communication skills with patients, colleagues, health professionals and the community, providing consultation and ensuring dissemination of information about health-related issues, ideas, problems and solutions thereof.*
- 14. Advanced abilities to collect, store, process, analyze, evaluate, interpret and present information (through proficient use of specialized computer software) for the purpose of settling specialty-specific complicated issues.*

The doctor shall demonstrate autonomy and responsibility (competence), in particular:

- 1. Competence to engage in full and autonomous professional practice* in the field of medicine and health care, applying in-depth specialty-specific knowledge, competences, skills, observing professional ethics and demonstrating proper conduct.*
- 2. Innovative and creative approaches to management and control, ability to make decisions in a working environment, inter alia, in unpredictable, complicated and unfamiliar situations, assuming responsibility for individuals in teamwork.*
- 3. Ability to assess his/her needs for continuing education and further professional advancement, and ability to continue studies in a rapidly changing environment.*

The doctor shall be able to: perform the full range of practice-based skills and competences listed in the MD programme (see the MD programme description).

Evidences/Indicators

1. MD degree programme description.
2. SQF-LO (Sectoral QF vs LO) model.
3. Alignment template with Medicine Sector Benchmark of Georgia.
4. Former and new (reviewed) lists of MD programme outcomes.
5. Alignment model of programme outcomes and its module-specific learning outcomes.

1.3 Evaluation Mechanism of the Programme Learning Outcomes

- Evaluation mechanisms of the programme learning outcomes are defined. The programme learning outcomes assessment process consists of defining, collecting and analyzing data necessary to measure learning outcomes.
- Programme learning outcomes assessment results are utilized for the improvement of the programme.

The logic behind the selection and usage of strategies for assessment of teaching and learning outcomes of MD programme lies in ensuring the interdependence of outcomes, evaluating the dynamics of outcome achievement and improvement of the programme.

The assessment is carried out by separate institutional departments consistent with the policies and procedures currently in force.

Building on the Policies on Organization and Implementation of a Process towards Assessment of Job Responsibilities, the following dimensions of the process are well defined: the objective of the concept towards organising and running the assessment, stages of assessment, principles, standards, methods and procedures of determination thereof.

The following principles of assessment are observed to achieve the goals of the assessment system:

- *Principle of Validity: any method used to measure validity shall measure performance against a list of set requirements.*
- *Principle of Objectivity: assessment is based on solid evidence generated through medium of a valid instrument, in accordance with clear-cut criteria; identical in different situations, largely intact over time.*
- *Principle of Practicality and Cost-Effectiveness: time and available resource assessment.*
- *Principle of Reliability: assessment and generated certification must be reliable for stakeholders.*

The assessment process draws on the following sequential steps:

- *Planning*
- *Implementation*

- *Feedback retrieval*
- *Decision making*
- *Result recording*

Building on this methodology, the following issues are regularly considered for the purpose of assessing programme learning outcomes:

1. *Does the programme ensure the achievement of programme learning outcomes?*
2. *How is the assessment of teaching (methods utilized to guide the student) and learning (methods utilized to learn) carried out?*
3. *Does the programme employ ongoing formative and summative assessment of short-term and long-term outcomes?*
4. *How is the programme internal and external stakeholders' feedback considered?*

For purposes of considering these issues, the university academic departments, discipline-specific councils, department of degree programmes, programme director, programme quality assessment officer and the academic council of the General Medicine Faculty (using direct and indirect assessment strategies), consistent with the policies in force and where deemed necessary, conduct the following research and studies:

1. *Assessment of the discipline-specific residual knowledge (after one semester once the final assessment is over) among students and analysis of findings afterwards,*
2. *Ensuring feedback through appeals and a "Teacher through students' eyes" opinion survey,*
3. *Assessing employer and graduate satisfaction levels with programme outcomes through surveys; reviewing outcome-specific wishes and recommendations; further utilizing assessment results for the improvement of the programme,*
4. *Unveiling academic assessment findings to the programme teaching faculty; holding relevant discussions thereon, and ensuring that the faculty members are directly involved in the programme improvements.*

The mentioned activities are thoroughly covered in relevant criteria below (see Criterion 2, Criterion 3, Criterion 4 and Criterion 5).

The findings are made available to both internal and external stakeholders, since these findings are regularly presented and discussed in the Academic Council of General Medicine Faculty and the University Science Council (where necessary, external stakeholders are invited), and are further posted on relevant sections of the university website (see the Minutes of the Science Councils and the university website).

*Making recourse to the above policies towards evaluation, the monitoring of the learning outcomes per the MD programme, as well as the MoESCS's approval of the SQF, coupled with the experts' recommendations served a foundation for the degree programme review in 2023. **This has significantly improved the integration level through embracing modules-based strategy.***

This improved/revised programme reflects the connection between the programme outcomes and discipline-specific programmes, the methods of measuring the achievability level of learning outcomes among students, as well as the strategies towards qualitative assessment of learning outcomes.

Evidences/Indicators

1. *Revised MD degree programme.*

1.4. Structure and Content of Educational Programme

- The programme is designed according to HEI's methodology for planning, designing and developing of educational programmes.
 - The programme structure is consistent and logical. The content and structure ensure the achievement of the programme learning outcomes. The qualification to be awarded is corresponding to the programme content and learning outcomes.
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The MD degree programme is developed pursuant to the University strategies for planning and design of degree programmes (see the University Procedure on development and approval of degree programmes).

The licensure, review and approval of a degree programme form part of the major strategies for quality assurance throughout the design of a degree programme. Accordingly, the programme is first granted a development license (i.e., a tentative approval); afterwards, the programme-related documentation package is created, followed by a programme review and compilation of expertise opinion and programme approval (see the University Procedure on development and approval of degree programmes).

Throughout the programme design and approval, the following issues are addressed:

1. *Identifying if programme is expedient to run/implement; the social demand for the programme through local and international market analysis, identifying programme competitive strengths and weaknesses compared to similar programmes implemented at other higher education institutions of Armenia.*
2. *Analysing the feasibility of the proposal from the perspective of the programme team's expertise in developing the programme.*

3. Assessing the programme logistics resources and identifying the need for additional resources.

The programme proposal is submitted by the University Faculty consistent with the standards for degree programme design and proposal form. The proposal for a programme design is submitted to the Faculty Scientific Council for approval, based on the positive decision of the Faculty Quality Assurance Committee. Afterwards, the working group, involving experienced industry specialists and lecturers, designs the proposal. The latter specifies the direction of the proposed programme and the goals to be achieved. The proposal also substantiates the needed logistics resources and outlines the potential market. When reviewing and approving the programme, it is also assessed to what extent the programme goals, learning outcomes, curriculum structure, programme content and modules, and logistics resources are compliant with the requirements of the Armenian national and sectorial qualifications framework.

The relevant conclusion is submitted as a report for the discussion at the University Council on Academic-Methodical Affairs. In case of a positive decision, it is then submitted to the University Science Council for further consideration (see the University Procedure on development and approval of degree programmes).

The programme has a clear-cut structure featuring a modular design. For a highly effective outcome, the modules include courses which are better suited from a horizontal integration perspective. Traditionally, the courses are also divided into educational blocks: 1 - theoretical, i.e., humanities and social-economic sciences, natural sciences and mathematics, biomedical sciences; 2 - clinical (educational block in surgical diseases, educational block in internal medicine, educational block in pediatrics and ob-gyn courses, educational block in other clinical courses, educational block in field practicum/internships); 3 - educational blocks in preventive medicine courses. Sequencing of course content is based on a prerequisites principle (see the programme description). The programme curriculum has a model structure whereby natural sciences and biomedical modular courses are mainly taught in 1-3 years of study, and clinical courses are taught in 4 - 6 years of study (see the programme curriculum). The programme structure is consistent and logical and considers the admission prerequisites and programme learning outcomes (see the degree programme).

There is a clear logic behind the arrangement of courses in modules and educational blocks, ensuring the gradual development of content, depth and professional orientation. Thus, for instance, from the 1st and 2nd year of study, courses on structural and functional features of a healthy human body are taught across molecular, organ-specific, system-specific and behavioral levels: Anatomy 1,2,3;

Histology 1,2; Physiology 1,2 and other biomedical courses (Biochemistry 1,2; Medical Biology 1,2; Microbiology 1,2) and medically-specific foundational courses in natural sciences. 3rd year curriculum provides for increased number of in-depth biomedical preclinical courses dedicated to human pathology (Pathological Anatomy 1,2; Pathophysiology 1,2) and treatment fundamentals (Pharmacology 1,2). Concurrently, starting with the 3rd year of study, introductory clinical courses of therapeutic (Propedeutics of Internal Medicine 1,2) and surgical diseases (General Surgery 1,2) are taught, thus preparing students for specialty (clinical) courses in 4-6 years of study. The natural sciences and biomedical courses in lower years of study ensure the required pre-clinical theoretical knowledge of medicine which lays the groundwork for in-depth specialty knowledge, analytical thinking and clinical reasoning, analysis, synthesis and creative approach.

Internships and practical skills classes commence in early stages of the programme; in particular, during the 1st year of study. They continue onto the next years of study and embrace the competence-based approach (see the degree programme description, educational block (and components) of internship courses). Practice-based (clinical) skills are developed through the medium of clinical internship courses. From the perspective of enabling student's individual preferences, the programme provides for elective courses on the curriculum along with mandatory courses. Programme content and structure ensure the gradual achievement of programme learning outcomes (see the List of Learning Outcomes). The formation of knowledge, skills and competences is finalized upon completion of the 6th year of study (certified by a multi-stage final attestation).

The program is structured in line with similar educational programmes awarding the MD qualification (see comparative analysis findings per 19 higher medical education institutions of different countries).

The programme is regularly monitored for improvement. The monitoring is aimed at continuous improvement of the programme, ensuring the credibility of awarded qualifications, creating sufficient grounds for external expert evaluation and accreditation of the programme. The programme is subject to internal monitoring once a year within a period of 6 months following the completion of the academic year. The monitoring is conducted by the University Faculty and institutional quality assessment and assurance bodies, department of degree programmes and the programme director. The monitoring draws upon tools ranging from surveys, discussions, observations to performance of approved action plan and application of specifically designed indicators. The purpose of the periodic monitoring is to evaluate the programme based on end-result scenarios, and to make a decision on the continued expediency of the programme or on amendment and improvement thereof (see the

University Policies on Programme Monitoring and Review, studies and reports of the University Centre for Education Quality Assessment and Assurance, reports submitted by the Dean of the Faculty and the Vice-Rector for Academic Affairs). On another note, programme development and its further improvement is a collaborative process which runs in accordance with the University Policies on Programme Monitoring and Review, maintaining the internal and external monitoring format and directly engages stakeholders from academia, research, the visiting staff, students, alumni, employers, etc. (see the University Policies on Programme Monitoring and Review).

To note, the issues raised in reports of external experts play a key role in the programme review and improvement (see comparative analysis findings per 19 higher medical education institutions and external experts' recommendations enclosed). Thus, modular teaching strategies have been designed and improved, between 2022 and 2023, the University amalgamated and expanded several specialty courses (for instance, Haematology courses, Traumatology and Orthopedics courses), increased the scale of research component therein, increased the credit load of Paediatrics course, designed a novel, discrete course on practice-based skills, expanded thematic scope of Medical Psychology and Public Health 1 courses, improved the assessment system in courses of Propaedeutics of Internal Medicine 1, 2, Topographic Anatomy and Operative Surgery 1 and other courses; introduced and formalized the multicomponent system of assessment of practice-based skills in specialty-specific clinical courses (DOPS and/or mini-CEX, etc.). Starting with the 2023 academic year, the MD programme final attestation is achieved in three stages and embraces the Objective Structured Clinical Examination approach along with the multiple-choice question tests and oral examinations.

The programme course-content is supported through the literature generated by the University academic departments and also through modern and international sources of literature (see the list of works published by university faculty between 2018 and 2023, library database replenishment documents).

The University ensures the publicity and availability of programme description. This succinct description is publicized on university website and, where necessary, full description is provided to the programme graduates (see the university website).

Evidences/Indicators

- 1. MD degree programme description.*
- 2. Alignment template of programme learning outcomes and course-specific learning outcomes.*
- 3. University Procedure on Development and Approval of Degree Programmes.*

4. *University Policies on Programme Monitoring and Review.*
5. *Armenian National Qualifications Framework.*

1.5. Academic Course/Subject

- The content of the academic course / subject and the number of credits ensure the achievement of the learning outcomes defined by this course / subject.
 - The content and the learning outcomes of the academic course/subject of the main field of study ensure the achievement of the learning outcomes of the programme.
 - The study materials indicated in the syllabus ensure the achievement of the learning outcomes of the programme.
-

*For the purpose of designing the MD programme modules and courses, a novel institutional format is employed which is consistent with the general ideology of the European Higher Education Area (EHEA) and corresponds to the principles of the European Credit Transfer and Accumulation System (ECTS) (see the Institutional guide on University course description). This format emphasizes the formation of module-specific outcomes using Bloom's taxonomy, their alignment with the programme outcomes and with the alignment methods (Constructive alignment) along vertical and horizontal dimensions (as per teaching, learning and assessment) (see enclosed Institutional guide on University course description, alignment template of programme learning outcomes and module-specific learning outcomes). The National Alignment Guide is also used when designing the programme modules and courses (see enclosed A guideline for aligning academic programmes to the Armenian national qualifications framework). This guide is institutionally introduced as a user-friendly guide on course description. Over the last years, actions towards the improvement of programme learning outcomes proved that introduction of a fully modular learning is a necessity. Thus, in April of 2023, based on findings of a relevant self-evaluation (which detailed successful learning practices in several discrete modules) and on account of external experts' recommendations (see the relevant document), the Science Council of General Medicine Faculty, the Council on Academic-Methodical Affairs and the University Science Council made a decision to fully modularize the programme, building on commitment to introduce **one-step, spiral and integrated** learning. Thematic syllabi, learning, teaching and assessment methods and strategies were accordingly modified and introduced in a modular dimension.*

The content of each module stems from its learning outcomes and is consistent with the student's academic workload which is necessary for topic mastery. The module-specific/componential credit load, distribution ratio between the contact and independent learning hours is defined considering the

specifics of the course and the content volume of the discipline (inter alia, number of standard pages of required module literature). To note, we have conducted various studies which proved that the module-specific credit load is largely comparable to similar indicators of the EU and CIS universities (see various studies, inter alia, the findings per 19 higher medical education institutions).

The programme modules and its course-content is supported through the literature generated by University academic departments and through modern and international sources of literature (see the list of works published by university faculty between 2018 and 2023). Each academic year, the Council on Academic-Methodical Affairs and the University Scientific Council approve 5-8 new textbooks and up to 20 updated manuals in three languages; in addition, modern pieces of literature in English and Russian are acquired (see relevant documents on replenishment of library collection).

To note, the University has defined clear-cut criteria towards the content, scale, methodical and format dimensions of the academic literature and its peer-review strategies (see enclosed the selection criteria for academic literature). The uniqueness of the MD programme and its course-content is supported through the medium of required uptodate manuals, textbooks and recommended materials that correspond to the language of instruction (per institutional mandatory requirement for running the courses). During lectures, reference is also made to the published research authored by university scholars.

Evidences/Indicators

- 1. MD degree programme description.*
- 2. Guide on Course Description Completion Form.*
- 3. Policies on monitoring and review of programme modules.*
- 4. Alignment template of programme learning outcomes and course-specific learning outcomes.*
- 5. External experts' recommendations.*

Strengths and Areas for Improvement

Please, provide the strengths of the educational programme, and areas to be improved as well as the activities planned for the areas to be improved according to the requirements of the components of this standard.

Strengths

-
- ✓ Building on century-old practices, the MD degree programme is currently in high*
-

demand across local (per students enrolled through an annual competition) and international markets (30 percent of programme learners are overseas students).

- ✓ *The programme runs in a modular design; the content and credit load of modules are compatible to similar indicators of recognised international higher education institutions.*

Areas for Improvement

- ✓ *The need to review overall credit load and components under educational blocks of the programme foundational courses in natural sciences, humanities and social-economic sciences.*
- ✓ *Diversification of strategies towards measurement of outcomes, emphasizing the need to test clinical practice-based skills and competences.*

Planned activities and timelines for the areas to be improved

- ✓ *Development and implementation of an action plan following the adoption of the new Armenian Law on Education (by 2025).*
- ✓ *Improvement of the system of assessment of practice-based skills and competences (by 2024).*

2. Methodology and Organisation of Teaching, Adequacy of Evaluation of Programme Mastering

Prerequisites for admission to the programme, teaching-learning methods and student assessment consider the specificity of the study field, level requirements, student needs, and ensure engagement the achievement of the objectives and expected learning outcomes of the programme.

2.1 Programme Admission Preconditions

The HEI has relevant, transparent, fair, public and accessible programme admission preconditions and procedures that ensure the engagement of individuals with relevant knowledge and skills in the programme to achieve learning outcomes.

Enrollment planning (planning on the pool of eligible students) within MD programme makes reference to the analysis of internal and external demand, the institution's resources in terms of its intake capacity, programme development strategy, financial policy and its ability to ensure smooth management (Goal 1 and Goal 3, University Strategic Plan).

Since 1991, the University has been ensuring the admission of Armenian citizens into the Armenian-taught MD programme collaboratively with the Armenian Ministry of Education, Science, Culture and Sports (hereinafter referred to as the MoESCS). The admission is organized in accordance with the

“Procedure on Admission to State and Non-State Higher Education Institutions of the Republic of Armenia”, established by the Armenian Government.

The applicant, in accordance with the stated procedure, based on specifics of the specialty, may choose to take 2 from amongst 3 examinations (upon prior university proposal submitted to the ministry) in subjects of natural sciences; namely, physics, chemistry, biology. The applicant submits the required documents to the University, and the Assessment and Testing Centre of the Republic of Armenia (hereinafter referred to as the ATC) administers examinations in a unified form (see the Procedure on Admission to State and Non-State Higher Education Institutions of the Republic of Armenia).

MD programme admissions preconditions are as follows: presence of a certificates of secondary (12-year school education), primary and secondary vocational education. The unified exams are held in one round, through written tests. Applicants take the unified exam of each subject on the same day throughout Armenia; exams are held in unified exam centres, the list of which is approved by the ATC.

In furtherance, exam test package is submitted to people appointed as exam proctors/invigilators by lot one and a half hours before the exam, and only afterwards, the applicants can enter exam rooms. The applicant may not have other objects with him in the exam room, except for the identity document and the pass permit entitling to take exam. The Procedure on Admission to State and Non-State Higher Education Institutions of the Republic of Armenia also describes the organization of the examination process and the appeals process, the involvement of public stakeholders in the course of examinations, and other details that testify to the transparency of the admission examinations. The unified exams are based on subject-specific syllabi, textbooks and special manuals approved by the MoESCS for mandatory use in public education institutions. The ATC defines the exam tasks and knowledge assessment criteria.

The University Admissions Committee supports the process of the university admission exams and the application process through relevant activities. Competition results are summarized by the MoESCS and are then forwarded to the University.

The admission can take place in two ways: free of charge (full state scholarship in form of student allowance) and charged in the amount approved by the Government of the Republic of Armenia.

Each year, taking account of the university intake capacity (see the MD programme capacity policy) and consistent with the number of seats defined by the Armenian Government, an average of 430 students matriculate in the University and enroll to the MD programme. The number of students

enrolled to first-year studies free of charge (full state scholarship) constitutes, on average, 55 persons (see the end of this Criterion for data on admitted students over the past five years). The ratio of the number of applicants to MD programme and the number of admitted students is on average 1.5:1; for free seats - 10:1. The passing threshold (on a 20-points scoring system) for two exams was 28 points out of 40; 39 points for free seats, on average, over the past five years. It should also be noted that university-led studies for the last 5 years showed that only 3-5% of the students fail in the exam of the subjects that coincided with admission exam subjects (see the Dean's reports). This comes to testify to the importance of sustainable knowledge essential for succeeding in the programme initial stages.

The University Career Centre and the Student Parliament implement a number of activities aimed at career orientation in Armenian schools and colleges within the framework of the projects "from School to University" and "A Specialist". This is a way to introduce to prospective applicants certain information on different medical specialties, the university history, and illustrate opportunities and successful practices. Visits to University museum, laboratories and university clinics are organized. Psychologists involved in these initiatives carry out professional testing among the learners, identifying and presenting their inclinations towards the given profession.

Enrollment data (per years) in Armenian-taught MD programme

<i>Year</i>	<i>2018-2019</i>	<i>2019-2020</i>	<i>2020-2021</i>	<i>2021-2022</i>	<i>2022-2023</i>
<i>Number of students</i>	<i>336</i>	<i>383</i>	<i>463</i>	<i>512</i>	<i>515</i>

Data (per years) on number of students matriculated in Armenian-taught MD programme

<i>Number of students per citizenship</i>	<i>2018-2019</i>	<i>2019-2020</i>	<i>2020-2021</i>	<i>2021-2022</i>	<i>2022-2023</i>
<i>Local students</i>	<i>2705</i>	<i>2605</i>	<i>2847</i>	<i>2697</i>	<i>2807</i>

Evidences/Indicators

- University Strategic Plan 2021-2025.*
- University Capacity Policy.*

2.2 The Development of Practical, Scientific/Research/Creative/Performing and Transferable Skills

Programme ensures the development of students' practical, scientific/research/creative/performing and transferable skills and/or their involvement in research projects, in accordance with the programme learning outcomes.

The practical skills within the MD programme and its discrete modules are taught at the University Simulation Centre, University clinics and different Armenian hospitals.

University Simulation Centre has become operable since 2014. Being furnished with the equipment needed to run the practicals, it ensures an extensive coverage of the skills and abilities as per the MD programme learning outcomes. Students develop several practical skills and abilities (stemming from subject-specific outcomes) through the medium of simulators; the remaining skills throughout clinical courses at clinics, at the bedside and during the field practicum (see the programme learning outcomes, documents on completeness of Simulation Centre, the programme and the field practicum programmes).

Over the past 5 years, the Simulation Centre has been furnished with equipment annually amounting to AMD 200-250 million, on average.

Given the fact, that the first stage (assessment of practical skills) of final attestation shall run in OSCE format at the Simulation Centre, 25 classrooms were accordingly set up, furnished with relevant equipment and renovated at the university-owned “Mikaelyan Institute of Surgery” (see relevant decision issued by University Scientific Council).

In addition, clinical practicum is also instrumental in the MD programme as an important step in achieving learning outcomes. Prior to commencing the practicum, specifically designed diary is distributed to students, which involves a list of practical competencies for the expected learning outcomes across the practicum. The preceptor (being a practicing health professional himself/herself) makes relevant notes in the diary on student attainment upon completion of practicum.

Based on learning outcomes, a novel model of practicum, i.e., rotational clinical practicum / integrated internship, was introduced starting with the 2023 training year (the said model was discussed at meetings of the Scientific Council, Council on Academic-Methodical Affairs, Cyclic-Methodical Council). This will be a 12-months length rotational clinical practicum / integrated internship and will involve 11 required modules, 8 allied and 2 elective modules. The clinical block of MD programme runs at Heratsi Hospital Complex N1, Muratsan University Children’s Hospital, university-owned “Mikayelyan Institute of Surgery” (these 3 hospitals altogether possess the largest bed stock in Armenia) and in around 30 clinical hospitals and medical establishments with which the University has concluded contracts. The latter define the number of attending students and the number of technology-rich classrooms and lecture rooms (see relevant contracts).

The bed stock and completeness of these clinics ensure 100 percent coverage required for teaching programme clinical disciplines and achieving learning outcomes (see the University degree programmes capacity management policy).

Similar to the skills assessment at the Simulation Centre, the assessment of practical skills and competencies at clinics is held through specifically designed exam sheets.

The advancement of student research skills is thoroughly detailed in University 2018-28/38 concept of science development. It provides for increasing the student engagement in research as one of the target criteria of envisioned changes (see the concept of science development). Building on this commitment, “Fundamentals of Research” elective course was introduced within the programme second-year curricular content starting with the 2019-2020 academic year. The course introduces the learner to research concepts, methodologies, methods, literature use and information searching skills, reading and analyzing scientific papers and medical guidelines, as well as report writing and presentation (see the course syllabus). The course culminated with capstones so that the learner needed to successfully present and submit a capstone project.

Based on piloting and student survey on the necessity of the course, the University Scientific Council has approved the course as a 6-credit core discipline to be instructed starting with the 2023-2024 academic year.

The report of the Vice-Rector for Academic Affairs has encouraged the Scientific Council to entrust relevant institutional offices with discussing and approving newly designed research skills-developing education modules at the Council on Academic-Methodical Affairs. Thus, upon decision of the Council on Academic-Methodical Affairs (dated 24.01.23), the content and duration of research components within the confines of 3 disciplinary syllabi have changed. In particular, these changes relate to content, learning/teaching and assessment methods and the academic hours of the Fundamentals of Research discipline. Upon successful completion of the course, programme learners will have attained research literacy and skills pertinent to a broad spectrum of activities ranging from searching information, reading clinical literature and analyzing scientific papers to report presentation and research mindset. These skills and competencies are currently instilled within the confines of Pharmacology, Hygiene and Ecology, Public Health courses.

The mentorship initiative was also launched throughout the piloting of the Fundamentals of Research course. The idea behind the initiative was that the course graduates would act as mentors to assist

junior students, and would also improve their own research skills. Between 2020 and 2022, seventeen students have participated in this initiative. To note, the students who have completed the course, demonstrate increased activity in academic departments which embrace multicomponent operational format and where the research component forms part of learning and assessment.

In recent years, under the EU Horizon 2020 COBRAIN and SCAUT projects, student voluntary initiatives (“Internship”, “EDUship”, “LABship”, “COBRAINship”) have been organized with a goal to discover/identify prospective students interested in research. Across the voluntary initiatives, MD programme students engaged in the research and administrative activities and manifold events of “COBRAIN” Scientific-Educational Centre for Fundamental Brain Research. Thus, the students have attained knowledge in theory and practice, for the purpose of performing lab work such as proteins and genetic material extraction from specimen, conducting the qualitative and quantitative analysis in different methods, working with cell cultures, cellular staining, skills in using a microscope, etc. To this end, students were provided with relevant literature, lab work guidelines, equipment instructions, etc. As for the EDUship initiative (implemented jointly with the Abgarian Foundation USA), 3 of the 6 students involved are volunteers and 3 receive a scholarship. The two-months length LABship initiative enabled students’ exposure to various biomedical methods.

In 2019, young researchers’ clubs were founded - the “DANDY Neurosurgical Club Armenia” and the “COBRAINE-journal club”. Furthermore, the COBRAINE-journal club convened three meetings in 2021, with students actively engaged in discussion of several research journal articles. Students also participated in “GitArar” summer school, which was organised in July of 2021. Student research groups were engaged in developing and presenting research projects under the guidance of mentors. The best projects were acknowledged by the University leadership, and were financially awarded under the Support Programme for Young Researchers. Five researchers of the MD programme, who successfully participated in the above-mentioned projects and voluntary initiatives, are currently engaged in research at the COBRAIN Centre.

On another note, eight students of the MD programme are involved in contractual and base-funding programmes of maintaining the infrastructure of scientific and scientific-technical activities.

Over the last 5 years, eleven research papers and twenty theses have been published in international peer reviewed journals by 12 students of the University.

In addition, the Student Scientific Society (hereinafter referred to as the SSS) also exerts efforts

towards involving students into research by organizing different scientific events. Over the past 5 years, the SSS has organized and launched 39 scientific conferences, expositions and initiatives and 4 research projects.

*The University graduates' career trajectory has been observed and, accordingly, datafied by the University Career Centre since 2018. Consequently, the database enlists around 10 000 user accounts available for alumni of undergraduate and postgraduate degree programmes. This database enables observing a graduate's career trajectory on the labour market with exposure to every level of formal education, i.e., undergraduate and postgraduate education, practicum, trainings. Based on the existing evidence, about 96 percent of the MD programme graduates pursue further study in clinical residency. Conditioned by the mandatory requirements of licensing and medical education in their home countries, the overwhelming majority of university overseas students take required examinations and matriculate to postgraduate internship courses. This can be best illustrated by making recourse to Indian graduates, who make up the majority of overseas students and leave for their country upon completion of the MD programme to take the Foreign Medical Graduates Examination (hereinafter referred to as the FMGE) for enrolling in higher levels of education. To note, the Medical Council of India (National Medical Commission) has officially publicized data which evidences that the MD programme graduates place the second amongst the FMGE examinees (as per 1000 and more graduate examinees; see *Performance of Candidates in Screening Test Conducted by the National Board of Examinations, New Delhi*). Another noteworthy statistical datum is available based on information provided by the American Educational Commission for Foreign Medical Graduates (hereinafter referred to as ECFMG). In particular, over the past five years, 94,7 percent of University graduates have passed USMLE STEP 1 (the global average being 82,4 percent for the reporting year); 88,9 percent have succeeded in USMLE STEP 2 (the global average being 88,8 percent for the reporting year) (see *Aggregate Performance of Examinees Taking the United States Medical Licensing Examination (USMLE)*).*

Evidences/Indicators

- 1. Equipment list and supporting documents of University Simulation Centre.*
- 2. Fundamentals of Research discipline curriculum.*
- 3. Field practicum agenda.*
- 4. Copy of contract concluded with clinics.*
- 5. University degree programmes capacity policy.*

6. Aggregate Performance of Examinees Taking the United States Medical Licensing Examination (USMLE).

2.3 Teaching and Learning Methods

The programme is implemented by using student-centered teaching and learning methods. Teaching and learning methods correspond to the level of education, course/subject content, learning outcomes, and ensure their achievement.

Having due regard to the findings of first institutional self-evaluation of 2011-2015, the University has since 2016 adopted a policy of student-centered teaching/learning strategies (see University Strategic Plans of 2016-2021 and 2021-2025; Strategy for Development of General Medicine Faculty 2021-2025). Building on this policy, the University commits to improving the teaching methodology and activity across educational, research and practicum dimensions; and ensuring the introduction of modern information technologies into academia and research.

Over the last years, academic departments, subject-specific and academic-methodical commissions have produced and approved numerous proposals and designs on introduction of novel teaching/learning methods. The University has designed a policy and procedure for introduction and periodic modernization of teaching/learning approaches and strategies (see the Procedure on course-content development and review of degree programmes).

Concurrently with conventional teaching and learning methods (i.e., lectures, small-group instruction, practicals/workshops, lab course, paper coursework, presentations, demonstration of micro- and macro-specimens, cadavers, phantoms and moulages, employment of touchscreen-enabled anatomy table, student-notepads allowing for interpretative drawings of micro-specimens (e.g., Histology), design and utilization of flashcards (e.g. Latin), gamification (e.g., History of Medicine, Pathophysiology), bedside teaching (in particular, for all clinical courses), watching and streaming films and videos (History of Medicine, Anatomy 2,3, Hygiene and Ecology, clinical courses), journal clubs (Fundamentals of Research, Pathophysiology 1,2) team learning (Philosophy, Anatomy 2,3, Operative Surgery, "Lancet" project, Foreign Languages)), the following strategies of interactive and problem-based learning are also employed: simulated surgeries involving animals and selected skills trainers (Operative Surgery and Topographic Anatomy 1), case-based learning experience (including interactive case studies from open-access sources available at <https://www.nejm.org/doi/full/10.1056/nejmimc0902429>), flipped learning (e.g. Pathophysiology 1,2, Pharmacology 1,2, clinical courses), application-based learning (artificial intelligence tools

Dr.LEX/TerraMedicum, [https://ysmu.am/hy/page_list/drlex_terramedicum / - sthash.nIOJA6La.dpbs](https://ysmu.am/hy/page_list/drlex_terramedicum/-sthash.nIOJA6La.dpbs), major clinical courses), Mentimeter - Interactive presentations with digital tool assisted Student Response Systems (SRS), as well as employment of touchscreen-enabled anatomy table. For purposes of building research skills, research courseworks (in Fundamentals of Research, Hygiene, Pharmacology, Histology) are carried out within the degree programme which play a key role in shaping analytical reasoning, creative skills and critical thinking. E-learning elements and lecture videos are also fed into the course (for example, within the Rheumatology course available at <https://www.youtube.com/watch?v=qDUMqPLC1VA>, <https://www.youtube.com/watch?v=drmvTLHMnrI>, <https://www.youtube.com/watch?v=j1x-MdayhjE>, within the Pathophysiology, available at <https://pathphys.livejournal.com/>, <https://www.youtube.com/watch?v=rQfqSW1tiSE>). To develop critical perception of industry-related issues, special importance is attached to the learning of principles of evidence-based medicine (Fundamentals of Research, Family Medicine, Clinical Pharmacology, Pharmacology).

Within the scope of humanities courses, biomedical and clinical courses, significant importance is attached to building students' communication skills (communication skills in interaction with patients, professional community and wider society). Clinicians and theory lecturers have designed interdisciplinary lecture series where they share research on modern medical topics (e.g., Peptic Ulcer, Essential Hypertension, Ischemic Heart Disease, etc.). The meetings with and surveys among the relevant student population revealed high student satisfaction rates (about 96% of students who attended the lecture series; see excerpt from survey among attendees of Interdisciplinary lecture series, excerpt on results per Mentimeter software application). The University currently considers the feasibility of expanding these best practices (in particular, expansion of thematic scope and elaboration of a discrete educational component in the curriculum). Student performance is gauged based not only on individual student efforts and in-class participation, but on the team work as well (Anatomy).

Building on its Strategic Plan, the University (since 2014) undertook to establish and integrate an educational division (Simulation Centre) furnished with innovative and state-of-the-art teaching equipment through the World Bank grant funding (e.g., computerized robot-simulators, selected skills trainers, phantoms) and staffed by high quality personnel trained abroad and in Armenia. The choice of equipment and devices was conditioned by the feedback on controversial and necessary practical skills clarified in the meetings with the professional community, and identified through surveys among the alumni and employers, as well as taking due account of recommendations of international experts

(see the results of the surveys, recommendations of international experts). Innovative student-centered educational technologies, which correspond to the international standards, are applied in the Centre intended to building and testing practical skills and clinical reasoning. This is particularly important when taking into consideration the developments in the field of higher medical education in the region and in Western and CIS countries. Thus, within the framework of the professional clinical courses (Internal Medicine, Surgical Diseases, Obstetrics and Gynecology, Anesthesiology and Reanimatology) of MD degree programme, students attend the Centre as is defined on the syllabus.

Within the courses, the selection of the teaching and learning methods shall ensure the student's active participation, emphasizing the significance of self-reliance and responsibility. Applying the multi-component learning and testing system in some courses (e.g., Anatomy, Histology, General Chemistry, Operative Surgery and Topographic Anatomy, Hygiene and Ecology, Pharmacology) shall provide resilience from the point of view of personalized learning and shall enable the student's individual preferences and priorities. Meanwhile, the new curriculum featuring modular design allowed for introduction of electives, currently involving 10 elective courses. Considering the student's individual needs, during semesters and exam periods consultations are organized at the departments by lecturers. If needed, e-learning and distance learning elements are applied by the University upon reviewing the degree programme objectives, and intended learning outcomes of the programme and courses. This was largely the practice during the Covid-19 pandemic between 2020 and 2021, in order to ensure continuous and seamless learning process. Throughout the initial stages of the pandemic (March-May of 2020) institutional policies and procedures for distance and hybrid learning and assessment were developed (see Criterion 3.1), which were somewhat amended guided by specifics of the quarantine regime in effect.

Especially in case of repeating a year, the student's individual needs are reviewed while composing individual schedules for taking exams, academic failures and differences within the framework of the state and university statutory framework. The teaching and learning methods employed across the courses of the degree programme are regularly reviewed and improved in line with the Plan-Do-Study-Act principle. Teaching/learning methods are aligned with the intended learning outcomes of the programme and its courses, labour-market demands and global methodological tendencies towards the higher medical education.

Evidences/Indicators

1. *Procedure on development and approval of degree programmes.*

2. *Former and reviewed lists of MD programme learning outcomes.*
3. *Review and recommendations of international experts.*
4. *Distance and hybrid learning and assessment policies (employed where necessary), excerpt from survey among attendees of interdisciplinary lecture series; excerpt on results per Mentimeter software application.*
5. https://ysmubooks.am/uploads/%D5%8D%D5%AB%D5%B4%D5%B8%D6%82%D5%AC%D5%B5%D5%A1%D6%81%D5%AB%D5%B8%D5%B6_%D6%84%D5%B6%D5%B6%D5%B8%D6%82%D5%A9%D5%B5%D5%B8%D6%82%D5%B6_%D5%8C%D5%A5%D5%B6%D5%BF%D5%A3%D5%A5%D5%B6_%D5%A2%D5%A1%D5%B2%D5%A1%D5%A4%D6%80%D5%AB%D5%B9.pdf

2.4. Student Evaluation

Student evaluation is conducted in accordance with the established procedures. It is transparent, reliable and complies with existing legislation.

Students' academic performance is assessed for learning modules from 67 courses and 9 field internship modules within six-year-long MD degree programme.

In I - III years of study, student knowledge is assessed during the summer and winter term exams (i.e., in January-February and June-August).

Students are allowed the opportunity to three attestation attempts for each learning module, in particular; one attestation during the exam period and the other 2 attestations within the retake periods (see relevant order of the Ministry of Education, Science, Culture and Sports, University Regulation on Student Knowledge Assessment). In IV-VI years of study, clinical course knowledge is assessed right upon completion of cyclic classes (for this purpose, the retake period, except for the summer exam term in VI year of study, is scheduled upon completion of all cyclic classes in respective retake period; and for the second semester of VI year of study, within the next one month, once the cyclic class is over). Any amendments to the assessment policy and system are first discussed and approved at the Programme Academic-Methodical Committee, University Council on Academic-Methodical Affairs, and then submitted to the University Science Council for further consideration and approval.

Student knowledge in every learning module in MD degree programme is assessed against learning outcomes and academic honesty, which are at the core of the overall assessment policy. This is specifically done having due regard to the Armenian Law on General Education, Law on Higher and

Postgraduate Professional Education, and taking due account of the European Directives on higher-education qualifications (see relevant statutes and the directive).

University Policies and Procedures on Administering Examinations provide detailed provisions on impartial and transparent assessment of student knowledge; skills and capacities (see relevant policies and procedure). These policies were discussed and approved first at Subject-Specific Methodical Councils and the University Council on Academic-Methodical Affairs, and then at University Science Council. The approved version of the document is published on the University website and it is introduced in the “Student Guide” for first-year students in far much-comprehensive form (see relevant policies and the guide).

Based on findings of institutional self-evaluation reports (for the years 2013 and 2019, respectively), and the commentary and recommendations provided by national and foreign experts within the scope of two institutional accreditations, as well as acting on the recommendations generated through international experts’ (invited by the University in 2022) evaluations, the University has accordingly diversified assessment modes in 2015, 2020 and 2022. In doing so, the University has made a transition from test-based system of assessment (operating before 2013) to multicomponent system of assessment of learning outcomes making use of the CBE, PBE, OSCE and other tools.

The assessment for each academic course is based on the specifics of the discipline and gauges the achieved learning outcomes against the curriculum.

Currently, for certain disciplines in theoretical medicine taught at 1-3 years of study, the only assessment mode is the test-based system. At the same time, however, learning outcomes per Medical Chemistry, Anatomy, Pharmacology, Pathophysiology, Microbiology, Histology, Pathoanatomy, Propedeutics of Internal Medicine in 1-3 years of study, are assessed through the multicomponent system of assessment. In this case, the overall score involves results for thematic oral exams, research component, sectional skills, test-exams, etc. throughout the academic semester. To note, starting with the second semester of 2022 academic year, all disciplines embrace multicomponent mode of teaching and assessment.

To note, examinations per multicomponent system of assessment are authorized through the Plan, Do, Study and Act model (the Deming cycle). Once approved, it is first launched as a pilot project; afterwards, based on surveys conducted by Centre for Education Quality Assessment and Assurance

among student and faculty, and the positive dynamics of student performance, this multicomponent system of assessment is approved by the University Council on Academic-Methodical Affairs as the main mode of knowledge assessment.

Since 2016, a number of clinical departments (namely, in departments of Cardiology, Surgery, Reanimation and Intensive Care, as well as in Hygiene and Ecology department) have employed the multicomponent system of assessment. However, the number of these departments was swelled in the ensuing years, and since 2022, a multicomponent assessment system is in place in every clinical department.

Acquisition and assessment of practical skills in clinical disciplines is accordingly assessed in the Simulation Centre, in particular, at the bedside and through modern specialist equipment (skills trainers, etc.). It should also be noted that incorporation of multicomponent assessment modes has improved student performance. For instance, the performance in 2019-2020 and 2021-2022 academic years has improved by 6-9% compared to performance range in the same disciplines for 2016-2017 and 2017-2018.

In Social Sciences and Foreign Languages departments, attestation is performed through ensuring the required minimum threshold of positive scores for ongoing oral assignments and/or through completing required research project/work. To note, student knowledge questionnaires are compiled consistent with the learning outcomes and are first discussed and approved at the Departmental meeting, and then at the MD degree programme Science Council meeting.

Final attestation of General Medicine specialty is held by State Final Examination Commission in accordance with the procedure approved by the Armenian Government and consistent with the University Regulation and Procedure on Final Attestation (see relevant regulation).

Within the last decade, this final attestation (for General Medicine specialty) involved three stages and was performed in three specialized disciplines.

The first stage of each discipline tested student's clinical skills, which was gauged at the University Simulation Centre, based on the requirements for practical skills set out in the learning outcomes of the given discipline. The second stage involved administering test-based e-examinations at university computer labs for purposes of checking theoretical knowledge.

The third stage involved oral examination, where the exam board assessed student's clinical thinking and reasoning (questionnaires are approved at Departmental meetings, University Council on Academic-Methodical Affairs and the Faculty Scientific Council). Failure to pass each of the first and second stages deprived student of the right to participate in the next stage of the given discipline. In case of the third stage, irrespective of first two stage-evaluations, the result of the module was marked as "fail".

It should also be noted that in between 2020/2021 and 2021/2022, university lecturers and faculty leadership have attended trainings in Italy, Spain and Georgia under the European SAFEMED+ programme for purposes of introducing the OSCE evaluative tool at the University. Hence, based on the decision of University Science Council, the OSCE tool will be introduced in final attestation starting with the 2022-2023 academic year.

Student knowledge is gauged on a 10-point grading scale, where 9-10 is qualified as "excellent", 7-8 is "good", 5-6 counts towards "fair" and 1-4 is "fail". Several disciplines employ "pass" and "no pass" rubrics. The choice of assessment mode is conditioned by the volume of the discipline in the learning outcomes. Graduate students receive diploma supplement which records the assessment system in an internationally acknowledged and legible scores (see diploma supplement).

Based on the principle that feedback is one driving force behind academic and educational achievements, University has developed and currently has the following policy in place:

- (a) through assessment, identify the range of questions that are more difficult for students to master,*
- (b) identify students who need further support.*

The workings in these two directions are carried out as follows:

University Regulation on the Organisation of the Educational Process and the Regulation on Final Attestation comprise a separate clause, which defines the procedure of academic appeals. In accordance with this procedure, student can submit grade appeal to find out correctness of his/her answer to the given question, and/or identify the range of non-understandable questions.

*The Department of Computer-based Examinations (hereinafter referred to as the **DCBE**) conducts various studies throughout the academic year and then submits relevant reports to Vice-Rector for Academic Affairs, Centre for Education Quality Assessment and Assurance; reports are also submitted to Deans of Faculties, Heads of Departments, as well as to other internal stakeholders (where and as needed). At the end of the academic year these studies are summarized and then presented by Vice-Rector for Academic Affairs as a component incorporated into the annual report. During this reporting, various proposals and decisions are made, followed by relevant action-based instructions. Thus, for instance, examination load analysis reflected in 2018-19 annual report, which was submitted by DCBE, revealed a number of issues which warranted relevant decisions.*

According to the Regulation on Organisation of E-Exams and E-Tests, the DCBE organises grade appeals, the results of which are analysed every semester and then submitted to the Vice-Rector for Academic Affairs. In addition, where necessary, the DCBE regularly performs other analyses during the semester. Thus, for instance, when examining controversial cases of second appeal, the following targeted analyses are performed upon the instruction of Vice-Rector for Academic Affairs:

- 1. analysis of number of students who provided true/false answers to disputed test/tests; also from amongst the students who received “good” and “excellent” grades,*
- 2. correlation of student group/groups performance dynamics for given exam on given day with performance dynamics of the whole batch (where student/students dissatisfaction is about teaching-related problems during the course study, such as ‘learning/course material was not explained’, ‘not introduced’, ‘not included in the exam questionnaire’, etc.),*
- 3. seeing the bigger picture on how students complete certain types of tasks/assignments (as a rule, these are anatomy-related images, and histological and pathological content-based images, as well as tests containing computational or situational problems.*

In addition, there may also be instances when different field specialists (sometimes from allied disciplines) may be involved in the Appeals Panel during the second appeal to discuss the case and make a final decision. Thus, for example, in 2022, there was a case of second appeal on General Surgery, which was held with involvement of heads (3 heads) of surgery departments. Next, was the Histology second appeal with involvement of specialists from the Ob-Gyn Department and one appeal was on Paediatrics with involvement of specialists from Normal Anatomy and Operative Surgery

Departments. This mode of working sometimes reveals disparities (course-related, content-based, more often terminological inconsistencies) between academic departments that teach the same discipline, as well as between related disciplines. This plays a major role towards vertical and horizontal curriculum alignment. Not only does this justify the decision made on appeal (both positive and negative decisions), but it also forms basis for further assignments to departments and/or other subdivisions (for example, review test-based exam packages, revise course materials, update the existing and or/devise new academic literature, align related course curricula, etc.). Thus, the appeals process, in addition to serving its main purpose (i.e., protecting student rights and promoting equality and justice), is a mechanism that ensures the interaction of all internal stakeholders (i.e. 'student - academic department' and 'faculty - academic process coordinators') involved in the academic process. It also helps to identify any shortcomings in the university education system (academic programmes), and serves basis for planning and implementing key measures to address them.

Where necessary, the DCBE conducts analyses also for academic departments. One example is the analysis of computer-based exam data in Epidemiology discipline in 2022 (5th year of study, Faculty of General Medicine, for second semester of 2020-21 academic year). The major goal was to identify course sections which are difficult for students to master. Relevant findings were submitted to the academic department (discussed at a departmental meeting) and Centre for Education Quality Assessment and Assurance. The latter has developed a specific system towards assessment of exam-test quality, which was piloted in a number of academic departments. Starting with the 2023 academic year, this system will also be introduced into the "Electronic University" and will allow speedy assessment of tests against required criteria.

In addition, during the semester, academic departments run extracurricular consultations for students who have failed in the first or second stages of the exam.

It has been two years now since the University is working towards development, introduction into the academic process and relevant assessment of an Artificial Intelligence tool. It belongs to the Virtual Patient platform of tools operable in Simulation Centre and is viewed as an institutional priority program component. Artificial Intelligence tool was introduced and currently operates in nine clinical departments. Generating over one million clinical cases, this tool helps students analyze cases across all clinical disciplines with no hour-specific/duration-related restrictions or limitations. This way students

have opportunity not only to enhance their knowledge, but also demonstrate and assess their true potential.

In the meantime, assessment system that facilitates decision-making on student performance and final attestation is also available at the University. The study process is comprehensively analysed twice a year, i.e., at the end of each semester, by the Dean at Faculty Scientific Council; and once in academic year by the Vice-Rector for Academic Affairs at the University Scientific Council. In addition, Chairs of Summative Attestation Commissions submit report and proposals (in September of next academic year) to Faculty Scientific Council and to Armenian Ministry of Education, Science, Culture and Sports.

Based on discussions of relevant reports, University Science Council and Degree Programme Science Council adopt decisions which reflect study process evaluations, as well as proposals and recommendations (defining also the timeline and toolset) for institutional departments on area-specific improvements.

The Centre for Education Quality Assessment and Assurance conducts workings towards assessment system in following directions:

(a) During every semester, anonymous surveys (as well as focus-group meetings where deemed necessary) are conducted among students. Afterwards, the findings are submitted to academic departments (each department is provided with their own data only), to Dean of the Faculty, Programme Director and the Vice-Rector for Academic Affairs.

Thus, for example, “Teacher Through the Student’s Eyes” is the most extensive and anonymous e-survey routinely conducted by the Centre and it enables students to evaluate both departmental and teacher performance by providing answers to 8 questions; student can express their viewpoints through open-ended questions, and also make proposals. About 1500-1900 students (on average, 60% of student population) take part in this anonymous survey every semester. The findings serve as reference points to plan and introduce reforms in teaching and learning as well as in faculty and staff policy.

The fact that student negative feedback about departmental performance has twice reduced, is an evidence about the effectiveness of identifying issues with internal stakeholder involvement and the rapid response mechanisms.

(b) At the end of each academic year, the Centre for Education Quality Assessment and Assurance conducts a large-scale questionnaire survey among university graduate students on the entire study process and final exams.

(c) The University truly acknowledges the importance of cooperation with external stakeholders in terms of relevant assessments. In the last 5 years, due to various objective reasons, this cooperation has not been effective and needs to be improved. Therefore, by the decision of the University Science Council, the Career Centre was tasked with recruiting an employer council, developing its action policy and annual work plan. In 2023, after relevant decision on the council came into force, its action policy was drawn up, and since then the council is actively involved in the assessment process.

Since 2022, the University has employed a Policy on Academic Honesty and Prevention of Plagiarism for the purpose of ensuring a consistent approach to academic fairness and honesty. The Policy applies to works produced by all members of the academic community - the students, teaching faculty members, and research fellows.

The Policy pursues the following goals:

- a. inform the researcher about the promotion of academic honesty of a scholarly work and the prevention of plagiarism;*
- b. create an institutional mechanism to facilitate the conduct of research, promote academic integrity and avoid plagiarism;*
- c. develop plagiarism detectors/checkers.*

To achieve these goals, the following measures have been in place:

a. awareness programmes and courses have been developed, which shall be introduced to the researcher through seminars every semester and be incorporated as a mandatory component in degree programmes;

b. software has been designed to check the research against plagiarism at the time of submission, where a commitment document is also submitted by the researcher;

c. the 4 levels of plagiarism and the conditions for initiating proceedings have been developed;

d. an anti-plagiarism commission was set up to coordinate relevant efforts.

In addition, any mode of assessment, relevant amendments in indicators, cancellation or adoption of a new mode of assessment - all these processes are considered and approved by the University Council on Academic-Methodical Affairs.

Evidences/Indicators

- 1. University Procedure for design and review of specialties, degree programmes, courses.*
- 2. University Regulation on Student Knowledge Assessment.*
- 3. University Policies on Administering Examinations.*
- 4. Student Guide.*
- 5. Simulation Centre equipment inventory.*
- 6. University Policies on Final Attestation.*
- 7. External experts' recommendations generated at different evaluations.*
- 8. Diploma supplement.*

Strengths and Areas for Improvement

Please, provide the strengths of the educational programme, and areas to be improved as well as the activities planned for the areas to be improved according to the requirements of the components of this standard.

Strengths

- ✓ Markedly attractive MD programme based on increasingly high admittance rate.*
- ✓ University-owned three hospitals have the biggest bed capacity in Armenia.*
- ✓ University has concluded agreements with about thirty clinical hospitals and medical establishments in Armenia.*

Regular review and evaluation of internal stakeholder feedback on assessment system; relevant amendments made per feedback data.

Areas for Improvement

- ✓ *Necessity for improved assessment-related collaborative efforts with external stakeholders.*
- ✓ *Necessity for increased student engagement in research.*
- ✓ *Necessity for increased number of electives.*

Planned activities and timelines for the areas to be improved

- ✓ *Ensure increased external stakeholder involvement in programme-related improvements.*
 - ✓ *Annually increase the number of students involved in science and research by 10-20%.*
 - ✓ *Within a five-year period, increase the number of elective courses by twenty offered in the curriculum.*
-

3. Student Achievements, Individual Work with Them

The programme ensures the creation of a student-centered environment by providing students with relevant services; promotes maximum student awareness, implements a variety of activities and facilitates student engagement in local and / or international projects; proper quality of scientific guidance and supervision is provided for master's and doctoral students.

3.1 Student Consulting and Support Services

Students receive consultation and support regarding planning of the learning process, improvement of academic achievement, and career development from the people involved in the programme and/or structural units of the HEI. A student has an opportunity to have a diverse learning process and receive relevant information and recommendations from those involved in the programme.

The University Strategic Plan and the Strategy for Development of General Medicine Faculty highlight the importance of routinely reviewing and improving the process through which student educational needs are addressed, and the process-generated outcomes (see University Strategic Plan, the Strategy for Development of General Medicine Faculty).

In this regard, General Medicine programme director (head of programme), the General Medicine Faculty officers and university education quality staff conduct various studies, which are aimed at assessing student feedback on the organization and delivery of the study process, evaluating currently available classroom stock/lecture rooms and research lab facility resources (see Criterion 4 and Criterion 5).

These data are projected onto the issues identified in relevant meetings (listed below) throughout the year, and then mechanisms are designed to settle those issues coupled with making relevant decisions, which are further incorporated into the academic process. The Vice-Rector for Academic Affairs has

regularly reported to the University Scientific Council on settled issues or the dynamics of resolving issues raised by students. Thus, for example, in 2019, budget appropriation enabled setting aside a portion of the institutional budget for the improvement of material sources and premises of academic departments; mechanisms were designed for the introduction of research-based component in the academic process; a change was enacted in the list of practice-based skills within the final attestation, a new programme package was designed for students with varying degrees of foreign language proficiency, etc.

The following institutional bodies are instrumental in ensuring student support: the University administrative staff, the office of academic-methodical affairs, the officers of the Dean's Office of the Faculty of General Medicine; i.e., the dean, programme director, deputy deans, officers, the University Career Centre, the Department of International Cooperation, the Legal Clinic, academic departments, etc.

Before completion of semesters of each academic year, the Dean's Office convenes consultation meetings for students of each year of study. These meetings are also attended by the department chairs and/or the academic programme officer who are in charge of the disciplines taught for specific academic term and for defined year of study. These meetings solicit manifold issues related to the academic process. In addition, for purposes of choosing electives, relevant academic departments and the deputy dean organize consultation meetings for second-year students.

Over the past five years, Dean of the Faculty holds individual meetings with first-year students in September, and introduces them their rights and responsibilities, acceptable academic behaviour and conduct, etc. The dean also documents issues that students raise across academic, social and any other dimensions, and registering this information, the dean composes general issue-specific description and plans relevant measures to address those issues. Various issues are discussed during meetings with students and/or student groups from different years of study. For instance, these issues may evolve around discussions on alignment of exam questionnaires and exam tests, replenishment of library collection, publication of requisite books and manuals, increase in patient panel examined during the study, attending hospital rounds, certain discipline repositioning across the syllabus, providing treatment at a university hospital setting to a sick student who lacks parental supervision, convening a concilium, etc.

Twice/thrice a year, meetings with the rector are convened which allow for discussion of manifold issues such as exceeding permitted absence limit, constant updating and increasing available library

stock, international accreditation, improving the university hostel and services available therein, etc. The vice-rector for academic affairs has defined office hours twice a week; once a week the rector holds reception, which can also be attended by students. In addition, University official website and its social media platforms ensure a communication forum between a student and the rector to raise issues and receive email responses thereon. Furthermore, the University Centre for Education Quality Assessment and Assurance conducts anonymous e-surveys among students twice a year (see Criterion 5).

The Dean's Office disseminates relevant information among students through various meetings and via electronic document management system.

To note, over the last three/four years, respective amendments have been introduced after the students raised their issues and concerns regarding separate components of the MD programme, and the assessment system. Thus, for instance, amendments have been made into the course Medical Physics, separation of components within the Internal Medicine course and teaching by sub-specialists, introduction of a multicomponent teaching and assessment strategies for separate disciplines, organisation of thematic and inter-modular lectures, piloting and introduction of "Fundamentals of Research" and "Fundamentals of Sexology" study modules, etc. Most importantly, these changes have been made possible through the Plan-Do-Check-Act model. It should also be noted that representatives of student body have actively engaged in these workings.

One of the decisions which the Board of Trustees made back in 2017, was related to the structural changes within the dean's office of the General Medicine Faculty (the issue was raised by the University Vice-Rector for Academic Affairs). These changes aimed at improving the office workings in respect of students. In compliance with the number of students matriculated in the General Medicine Faculty, and student-officer ratio, the number of deputy deans was swelled; i.e., eight (8) deputy deans instead of former four (4). In particular, for purposes of organizing relevant operations and ensure full advisory role, one deputy dean and one programme inspector were assigned (this restructuring was conditioned by the large number (500-600) of students matriculated in the Faculty).

Student support tools available within the academic process are succinctly described below.

The academic departments have fixed shift schedules during each semester, and pursuant to these schedules, faculty members provide consultations throughout the academic semester on issues or concerns raised by the student. Academic departments run make-up classes at the end of each

semester, during the exam and re-exam period. These make-up classes are organized both for students who are returning to the University from military service (who have taken the course two years prior to the military service), and the students who have to sit for a re-exam/re-exams. Upon the student's choice, paid make-up classes are held for fulfilling outstanding course requirements in non-specialty disciplines (for instance, philosophy, bioethics, physics, general chemistry, etc.) in next years of study. For this purpose, individual exam and study (it can be a paid course per student's choice) plan is designed during the semester. Similar individual exam and study plans are designed for students leaving for mandatory military service, participating in short-term conscriptions (lasting 25 days), absent from exams due to illness, as well as for students who have discipline-specific differences, outstanding course requirements from previous semesters. Missed clinical module lessons are also completed through an individual study plan. Students who failed in final attestations in previous academic years can participate in the paid courses held before the certification. On another note, the Office of the General Counsel concludes installment payment plan contracts with students facing tuition-related financial problems. In addition, students may, where necessary, seek free-of-charge in-person psychological counseling/support at the Medical Psychology department available year-round. The psychologist may attend to student's/group's psychological needs on a long-term basis. As deemed necessary, the dean or deputy deans may refer students for psychological counseling/support. The deputy dean in charge of specific study year collaborates with the student when running individual student-related workings. The University demonstrates its support and commitment in issues which may require tailored approaches.

The **University provides tuition assistance** (in form of a scholarship for that specific year of study) to students admitted to the first-year paid programme with high scores (10% of the admitted students) (see the dean's statements dated 09.09.2021, 24.08.2022). The University also provides tuition assistance (in form of a scholarship) to students who have equal scores when participating in the rotation in the II-VI years of study (see minutes of the Tuition Assistance Committee). On average, the University annually provides 30-80% tuition assistance to more than 400 students. Full tuition assistance is available to students with various serious illnesses (see Annex 1).

Every year, 7 students enrolled in the sixth year of study apply for nominal scholarships available at the University. Candidates are elected on the basis of academic progress, availability of research papers, foreign language knowledge and community activity, i.e., are members of the university scientific council, faculty or other council, participate in activities of intramural or intra-faculty student bodies, etc. For purposes of fundraising, the Dean's Office and Career Centre engage external

stakeholders and bring on external resources, and then students are referred to various charitable foundations. Thus far, students have received scholarships from various foundations (e.g., Diakonia Charitable Fund, Armenian Evangelical Community, Armenian Educational Foundation, Zangezur Copper-Molybdenum Combine Charitable Fund, etc.).

For purposes of involving students in volunteering, the dean's office works cooperatively with the Student Parliament, Career Centre and other departments. Students have actively volunteered during the COVID-19 pandemic since its beginning. However, before student engagement, and for purposes of ensuring safe volunteering practices, Hygienic and Anti-epidemic department officers delivered introductory courses among volunteers, on the use of individual protection measures, hygienic rules and practices, triage and isolation of patients. The volunteers were mainly involved in the following activities: ward shifts, patient care, taking temperature at the entrances of the university and university hospitals, taking documents from 'red zone' to another zone, receiving meals and distributing to patients in wards, etc. In addition, senior year students ran series of civilian first aid trainings, as well as introduced coronavirus precautions at schools. Throughout the two years of pandemic, 460 students volunteered in various workings; amongst them 151 students were awarded appreciation letters by the University Rector. Volunteering is an ongoing practice (e.g., involvement in various workings at hospital units, soldier's home rehabilitation centre, blood donation, etc.). Students are actively involved in various volunteering programmes towards research performed at the COBRAIN centre.

Students participate in the activities of student science groups within the confines of academic departments. Thus, for instance, members of the science group at Operative Surgery and Topographic Anatomy department have the opportunity to acquire basic surgical skills. Seniors teach fellow junior students in the group. They share information about what they do on social media groups (e.g., YSMU_Surgery_Club – instagram, Telegram, Facebook). Students attending the group have the opportunity to enhance the acquired skills within the confines of the Lancet surgical skills-transfer programme. This programme targets students who wish to take up surgical specialities within their residency training. It enables about 600 participants to improve their surgical skills, participate in and even perform simulated surgeries on their own.

Within the Career Orientation programme, the Career Centre and the Dean's Office refer graduate students (who have not yet enrolled to residency) to the hospital units where the graduates would wish to enroll in a clinical residency. This helps in career guidance and orientation of the graduate

students. For purposes of assessing the effectiveness of the activities aimed at career orientation, studies are conducted and the findings are later used for making relevant improvements (for example, the organization of the Lancet surgical skills-transfer program). Thus, for example, fourth and higher year students are the target group of the “University Cardiology Society” in terms of specialising in cardiology within the residency programme. Students improve their skills which are instrumental in a cardiologist’s job, along with having exposure to cardiological practices, which helps them in choosing a future career specialty.

Students also avail themselves of the opportunity to submit written requests and applications on various issues to Administration through the Department of General Services every working day. In 2022, students of General Medicine Faculty submitted about 2832 written applications via the electronic document management system. The Mandates Commission, which has been operating at the University since 2017, provides responses to student applications within a day or two. In 2021, the Commission considered and suggested settlements on issues surfaced through 214 applications which were submitted by MD programme students. In 2022, the number of applications was 230.

In addition, respective institutional subdivisions also consider and duly settle the issues, which students raise during non-formal meetings.

Within the previous institutional accreditation, one of the recommendations of the expert group was about the importance of creating a career centre. Thus, the Career Centre has been operating at the University since 2018 and its major activities are aimed at running student and graduates support programmes (see Criterion 2). The Centre runs its activities through the medium of various programmes: for each program, a target group is selected and relevant specialists are involved.

The Centre also engages in creation, management and monitoring of various databases. The analysis of this database information proves useful when planning future activities.

The Career Centre identified career-related issues based on surveys among graduates, which were compared against residency admissions data. It was revealed that career-focused students choose to take up surgical specialties, yet, change the field of specialization during the first year of residency. Following these data, the “Lancet” surgical skills-transfer programme was designed.

During the study, certain students also participate in international student exchange programmes. Thus, between 2017 and 2022, ten students have participated in the Erasmus+ mobility programme. The limited number of students is contingent upon the seats available for the university, the absence of

mobility window in curricular content, lack of English language programmes in the host university/institution, as well as the coronavirus outbreak. However, a mobility window is envisaged in the curricular content of senior years of study for purposes of boosting student mobility. Within the Erasmus+ programme, the University has partnerships with universities of different states of the European Union (for instance, Universidade do Porto, Universidade de Santiago de Compostela, etc.). Students are informed of the relevant programmes via the university website (see the website) and the electronic document management system.

Students participate in numerous intramural and off-campus scientific conferences. This is well evidenced by their certificates of attendance/participation. For instance, conferences titled “Man’s Health”, “Drug Development Dynamics: from Design to Consumption”, “Metabolic associated fatty liver disease” are few to name among the jointly organised intramural conferences.

The University organizes and runs science events where overseas experts and partners, as well as university students are actively engaged. The neurosurgery student club “Dandy” operates at the University and aims at identifying the scope of student interests, teach theory and practical skills that will help become an accomplished neurosurgeon. In addition, students may attend the schools and conferences organized within the COBRAIN project. For instance, the “GitArar” summer school enabled them get the knowledge necessary for any early-career scientist to perform research; also the four-day long “Neuroscience Initiative in Armenia”, organized collaboratively with the International Brain Research Organization (IBRO) and introducing the leaders in the field of Neuroscience, their career path, challenges and their achievements. Among other events “Covid-19-induced Anosmia Awareness Week” can be cited; also the winter school on First Steps Towards Establishing Knowledge and Technology Transfer Office. Students actively engage in scientific/research activities regularly conducted at the COBRAIN Scientific-Educational Centre for Fundamental Brain Research. In addition, students actively participated in the Covid Antibody and Covid Neuro-research groups and the Scaut project.

A series of Journal Clubs were also launched as part of the “EduShip” initiative of the COBRAIN Office of Knowledge and Technology Transfer. This initiative enabled students to discuss the most diverse and the most interesting research papers/articles with various experts.

There is a Student Scientific Society at the University which collaborates with the Science Department and Academic Departments, organising manifold events, such as the Student Scientific Day, Brain Awareness Week, Science Week, etc. During these events, students present reports some of which

have been published in the New Armenian Medical Journal indexed by SCOPUS and Web of Science database of journals with impact factor (https://ysmu.am/hy/journal/hator_11_no_3_2017_suplement_/https://ysmu.am/website/documentation/files/e2bc51f0.pdf)(see Criterion 2.2). Certain findings of research produced by COBRAIN students have also been published in a journal with impact factor (see at <https://www.nature.com/articles/s41598-022-16402-0https://www.mdpi.com/2077-0383/11/12/3313>, in Medicine, Science and Education journal (see at <https://ysmu.am/website/documentation/files/3a610e4b.pdf>).

In 2022, the Student Scientific Society submitted a grant application for Brain Awareness Week 2023 (the call was announced by Federation of European Neuroscience Societies and the DANA Foundation) which was awarded in 2023. Throughout the event, students delivered specialty lectures and seminars, conducted awareness-raising activities, and visited different schools and rehabilitation centres in Yerevan and Armenian regions. Various brain games, interactive discussions, films screening events, quest and contests were also organized (grant details are available at <https://www.fens.org/news-activities/news/brain-awareness-week-2023-winners>).

The University Student Parliament enforces and protects student rights and interests. It was created in 1992 and operates as a self-government, elective representative student body. Pursuant to the Parliament Charter, a close ballot forms the Parliament, taking account of the number of students enrolled in different years of the programme.

In addition, 10-25 percent proportional student representation is ensured across the decision-making bodies of the University and the Programme Faculty.

During the semester, the debate club conducts intramural debating, where students surface earlier identified (through surveys) manifold issues, and then discuss them with participating students.

Collaboratively with the Department of Physical Education, the Student Parliament also organizes various events. Students participate in various intramural, intercollegiate, and nationwide tournaments (e.g., tournament-style sports such as armwrestling, chess, basketball, volleyball, etc.) and place I-III in these tournaments (see Annex 2). In addition, not only the students, but also faculty members participate in the hiking trips and tours organized by the Department of Physical Education. Students also participate in numerous varsity teams/club and intramural sports at the Department of Physical Education, such as volleyball, boxing, football, table tennis, basketball, etc. On another note, University cultural life also displays vigorous student involvement. To note, the University “Masks”

theatre club garnered four nominations in different categories within the framework of Tbilisi International Theater Festival.

The Student Parliament organises meetings with accomplished physicians, thus helping students in career orientation.

One more institutional body committed to enforcement and protection of student rights is the Legal Clinic, which has been operating at the University since 2017. Over a period of one year, the Clinic runs more than 100 oral consultations and receives, on average, 102 written applications submitted by students. Meetings are also convened at the University Legal Clinic, where student needs and concerns are voiced regarding various dimensions mediating the intramural processes, such as tuition fees, tuition assistance, policies on fulfilling classes missed for no compelling reason, right to military service deferral, etc. These enquires raised by students are generally responded within a timeline not exceeding one working day. The issues raised are afterwards discussed with respective bodies (dean's office, academic departments, rector's council, science council); and relevant decisions are adopted thereon. The Clinic also submits proposals for making amendments to various study-related documents, and regulations which cover the rights and legitimate interests of learners.

Currently, there are no disabled students matriculated in the degree programme. However, the University plans to have relevant elevators installed in hard-to-reach areas to ensure that disabled students easily navigate the University buildings.

Since 2022, the electronic document management system has become fully operable at the University. It enables students to get information about every detail related to study: tuition assistance, exam results, attendance, performance dynamics/progress, e-library, study programmes, syllabi, instructor's academic profile, information on tuition fees, etc. These details are made available in different languages; meanwhile, confidentiality is also ensured.

Evidences/Indicators

- 1. University Strategic Plan 2021-2025 and the Strategy for Development of General Medicine Faculty 2021-2025.*
- 2. Position descriptions of the Faculty Dean, Deputy Dean, Officers of the Dean's Office, Regulation on Academic Departments and Teaching Faculty.*

3.2. Master's and Doctoral Student Supervision

➤ A scientific supervisor provides proper support to master's and doctoral students to perform a scientific-research component successfully.

- Within master's and doctoral programmes, ratio of students and supervisors enables to perform scientific supervision properly.

Evidences/Indicators

- *Please, list evidences/indicators relevant to the component including relevant documents.*

Strengths and Areas for Improvement

Please, provide the strengths of the educational programme, and areas to be improved as well as the activities planned for the areas to be improved according to the requirements of the components of this standard.

Strengths

- ✓ *Student engagement in institutional councils/boards and committees/commissions, at 10-25%.*
- ✓ *Clear-cut regulation and timeline for the Faculty and the administrative staff to convene meetings for students.*
- ✓ *Availability of student rights protection and support bodies (e.g. Student Parliament, Legal Clinic).*

Areas for Improvement

- ✓ *Improving institutional environments for individuals with disabilities.*
- ✓ *Enhancing coverage of the electronic management platform.*
- ✓ *Enhancing student participation and mobility in international programmes.*

Planned activities and timelines for the areas to be improved

- ✓ *Increase the number of ramps available at the University and affiliated clinics; the possibility for individuals with disabilities to easily navigate and use institutional laboratories and other spaces (2026).*
- ✓ *Actions consistent with the timeline defined by the University electronic management policy (2026).*
- ✓ *Creation of mobility window in the curricular content (2025).*

4. Providing Teaching Resources

Human, material, information and financial resources of educational programmes/educational programmes grouped in a cluster ensure sustainable, stable, efficient and effective functioning of the programme and the achievement of the defined objectives.

4.1 Human Resources

- Programme staff consists of qualified persons who have necessary competences in order to help students to achieve the programme learning outcomes.
- The number and workload of programme academic/scientific and invited staff ensures the

sustainable running of the educational process and also, proper execution of their research/creative/performance activities and other assigned duties. Quantitative indicators related to academic/scientific/invited staff ensure programme sustainability.

➤ The Head of the Programme possesses necessary knowledge and experience required for programme elaboration, and also the appropriate competences in the field of study of the programme. He/she is personally involved in programme implementation.

➤ Programme students are provided with an adequate number of administrative and support staff with relevant competence.

In relation to deployment of human resources in education, the 4th Goal of the University Strategic Plan stipulates the following: “Ensure that the guarantor of quality of higher medical education is a faculty comprised of members with strong professional and moral standards.” (see the University Strategic Plan 2021-2015).

Thus, toward enacting the strategic plan, the programme staff consists of qualified people who ensure systematic development of knowledge and skills and have the requisite competences to help students achieve the programme learning outcomes.

Every year, the University envisages the number of MD programme students and, accordingly, the number of teaching faculty, taking account of the state-mandated number of students, the University capacity (i.e., space-bound, academic personnel and administrative staff), as well as current policy defining the lecturers’ teaching load hours.

Building on this logic, 67 lecturers holding professorship title, 125 associate professors, 81 senior lecturers, 404 lecturers and 166 teaching assistants are involved in the instruction within the MD programme. Amongst them, 12.8 percent hold postdoctoral degree and 38.9 percent hold doctoral degree. The student-teacher ratio is 1:5. Over the past five years, 114 young lecturers (up to 35 years of age) have joined the university community, and contracts with 32 lecturers have been discontinued. Back in 2018, the University designed a policy which allowed distinguished graduate students pursue free postgraduate education at the University. This was initiated with a view to expanding the faculty and the clinical staff with new members and required specialists. The policy was introduced in 2019 followed by revision and improvement in 2022.

Core faculty makes up 87 percent of the overall teaching community, amongst them ____ percent of employees who have voluntarily signed the affiliation agreement. The Regulation Prescribing Affiliation Requirements applicable to University Personnel regulates the relationship between the

University and affiliation requirements applicable to core research/scientific staff and academic personnel (see the Affiliation Policy and the model agreement).

For purposes of smooth running of the MD programme in relation to its faculty, there is a Policy and Procedures on Academic Departments and Teaching Faculty in place. This document stipulates eligibility criteria for prospective faculty members (see Policy and Procedures on Academic Departments and Teaching Faculty).

The list of academic departments (or the list of vacancies available therein) which need to undergo competition-based elections as per semesters in the given academic year is defined pursuant to the Policy and Procedures on Academic Departments and Teaching Faculty.

The competition runs in departments where faculty members' contractually limited term has expired. Afterwards, the Human Resources Department submits the list of these academic departments to the Scientific Council Secretariat. The latter then, at least 1,5 months prior to the election date, posts the announcement on vacancy/vacancies on the university official website and publishes in press with print circulation of at least 2000 (usually in "Hayastani Hanrapetutyun"⁴ daily newspaper); the announcement also details the requirement on submission of English-language certificate. This has been the process followed for years with the exception of the period of COVID-19 pandemic. In this case, faculty members continued their employment upon Rector's decision up until announcing the call for competition.

Based on the call for faculty positions, the competition runs in either three stages (for ranks 'associate professor', 'senior lecturer', 'lecturer', 'teaching assistant') or four stages (for ranks 'professor' and 'department chair'). Once the candidate has been elected, the University Rector concludes an employment contract with the candidate for a period of up to five years.

During the competition, the faculty professional profile is evaluated through the criteria listed in two documents. The first document is the Regulation on job responsibilities and Profile description for different academic ranks (i.e., department chair, professor, associate professor, senior lecturer, lecturer). For instance, the following eligibility criteria are defined for rank 'professor': an earned postdoctoral degree in science (Doctor of Science (D.Sc / S.Dc)); at least nine years of teaching experience (of which five years at the rank of associate professor); having submitted specified number of published works, inter alia, those in journals with impact factor; being skillful in delivering lectures

⁴ translated as "Republic of Armenia".

and leading seminars/practicals/workshops/ for students, clinical residents and doctoral students; supervising doctoral theses, etc. This regulation also mandates statutory teaching load per different academic ranks.

The total work time is defined by the University, which includes the teaching load, developing and implementing new methods of teaching, conducting research activities, supporting students through advisory role, checking and assessing students' coursework, planning teaching, as well as other statutory duties. The statutory teaching load hours for full-time faculty per academic year are as follows:

- Department Chair - 400 teaching load hours,*
- Professor - 500 teaching load hours,*
- Associate Professor - 750 teaching load hours,*
- Senior Lecturer / Lecturer - 800 teaching load hours,*
- Teaching assistant - 500 teaching load hours.*

The hourly wage for different academic ranks is defined by Rector's relevant legal act. The statutory teaching load allocation is discussed and approved at the departmental meeting. The department chair further composes and submits the total hours summary timesheet for review by the University Office for Educational Affairs and the Faculty Dean.

On another note, a mandatory requirement for teaching clinical disciplines is a completed clinical residency appropriate to the discipline and clinical practice (see the relevant policies).

The second document referred to in the faculty election is the Evaluation of Lecturer Qualifications which is thoroughly covered in Criterion 4.3.

In compliance with the existing regulation, the University recruits service-contract instructors without competition, based on the contract concluded with the Rector. The work time, the teaching load and the remuneration of recruited instructors are defined in the contract concluded between the University and the instructor, and upon the Rector's decision. As of 30.10.2022, service-contract instructors constitute 13 percent of the university faculty community.

Over the recent years, not only has the University strived to maintain the student-teacher ratio, but also follow the ratio stipulated in the Regulation on Range of Subdivisions and Position Ranks, also trying to maintain the ratio of administrative and support officers.

Based on the external evaluation report produced by invited experts in 2022, the University Board of Trustees enacted a structural change within the MD programme the same year, ensuring a separate position of a programme director therein. Accordingly, the position description was developed and approved, with clear-cut assignment, rights and responsibilities (see the position description). The current programme director has the requisite educational background, knowledge and experience in programme development, delivery, improvement, tools, programme policy and strategies. The programme director is personally involved in the programme design, implementation, monitoring and evaluation and other programme-related activities. The MD programme is currently directed by Professor K.B. Yenkovyan. He graduated with honours from the Faculty of General Medicine, followed by completion of a clinical residency in Clinical Biochemistry. Prof. Yenkovyan has earned a doctoral degree in 2007, followed by a postdoctoral degree in 2011. He has worked at the Department of Biochemistry in capacity of a teaching assistant, and an associate professor and professor, afterwards. Between 2005 and 2007, prof. Yenkovyan worked in the capacity of Deputy Dean of International Students, and as a Deputy Dean of Postgraduate Education and Continuing Education between 2007 and 2008. Since 2016, he has been the Vice-Rector for Science. Prof. Yenkovyan has been part of the committee which produced the self-evaluation report toward the University international accreditation along infrastructural and programme (i.e., the MD programme) dimensions. He has participated in many conferences abroad, has been awarded and has directed a number of international research projects and has actively engaged in various EU Erasmus+ educational programmes (see the programme director's Curriculum Vitae).

The recruitment/election of support staff is organised in compliance with the Policies on Organising and Running Electoral Competition for filling Vacant Positions, dated June 27, 2017, approved by the Rector's Council Minutes N 22.7. The applicants who meet eligibility criteria listed in the position description, can participate in the competition. Building on the publicity principle, the competition ensures equal opportunities for applicants to demonstrate their professional knowledge and core competences.

Evidences/Indicators

1. *University Strategic Plan 2021-2025*
2. *CVs of the MD programme teaching faculty*

3. *CV of the MD programme director*
4. *Position description of the MD programme director*
5. *Policies on Academic Departments and Teaching Faculty*
6. *Regulation on faculty election*
7. *Copies of faculty employment contracts*
8. *Regulation prescribing affiliation requirements applicable to research/scientific staff and academic personnel*

4.2. Qualification of Supervisors of Master's and Doctoral Students

Master's and Doctoral students have qualified supervisor/supervisors and, if necessary, co-supervisor/co-supervisors who have relevant scientific-research experience in the field of research.

Evidences/Indicators

- *Please, list evidences/indicators relevant to the component including relevant documents.*

4.3 Professional Development of Academic, Scientific and Invited Staff

- The HEI conducts the evaluation of programme staff and analyses evaluation results on a regular basis.
- The HEI fosters professional development of the academic, scientific and invited staff. Moreover, it fosters their scientific and research work.

The policy toward teacher professional development encourages the evaluation of a lecturer's qualifications through a specifically designed questionnaire.

Back in 2016, based on numerous discussions, the University Centre for Education Quality Assessment and Assurance developed a model of Evaluation of Lecturer Qualifications. This model went through the prescribed four steps of 'Plan-Do-Study-Act' process (this form of evaluation was discussed at academic departments, academic-methodical commissions, University Council on Academic-Methodical Affairs, and building on their feedback, a revised form of evaluation was introduced in the faculty election in 2017).

For purposes of measuring field-specific and general activity of a lecturer, the University Centre for Education Quality Assessment and Assurance has generated cut score scenarios for different academic ranks (i.e., department chair, professor, associate professor, senior lecturer, lecturer, teaching assistant). The scores were generated building on the questionnaires completed by over 800 lecturers who participated in the competition.

This document per se displays in scores a comprehensive review of a lecturer's 5-year performance. In

other words, the lecturer submits a file of all the dossier contents on 5-year achievements in each of the following areas of evaluation: teaching/methodological work, research/scientific work, continuing education, clinical practice (if available), administrative activities (if available), community service:

A. Teaching performance and pedagogical (methodological) currency:

- *The workload,*
- *Academic-methodological works in terms of textbooks, manuals, methodological papers and presentations,*
- *Involvement in final exams and different academic-methodical committees, field practicum and research work supervision,*
- *Input from students generated through lecturer evaluation “Teacher through students’ eyes”.*

B. Research/scientific/creative work:

- *Published works detailing the title of the paper/thesis, journal for publication and its impact factor,*
- *Participation in different conferences, conference presentations,*
- *Involvement in research/innovation/scientific projects and research grants,*
- *Doctoral or postdoctoral thesis defence and/or supervision thereof,*
- *Articles and theses reviews,*
- *Membership in various scientific societies and committees,*
- *Awarded academic titles.*

C. Continuing education:

- *Participation in advancement courses held by various organizations,*
- *Participation in courses run by the University Teacher Professional Development Department.*

D. Clinical practice (if available):

- *Details on the clinical practice at a specific clinic and the patient panel size managed.*

E. Administrative activities (if available):

- *Details on the administrative position held and related work performed.*

F. Community service:

- *Details on individual engagement with various non-governmental organizations, speeches in the mass media, etc.*

G. This section identifies less successful/negative aspects within a lecturer's 5-year performance, i.e., the reprimands received, lower-than-expected practice ratings per evaluation "Teacher through students' eyes", negative departmental feedback (see the document of Evaluation of Lecturer Qualifications).

Based on the qualitative evaluation of submitted portfolio, and the interview with the lecturer during the board-convened session, the University Qualification Assessment Board makes a decision, which is then announced about and discussed at the meetings of the Faculty Council and/or University Scientific Council. To note, the Board does not issue an approval statement in 3-5 percent of applications, as a result of which the majority of applicants do not make it to the competition's final stage.

As stated above, student opinion questionnaire "Teacher through students' eyes" is designed to solicit student feedback regarding the lecturers. This online anonymous survey is conducted each academic semester and has certain impact on the lecturer's qualification. The questionnaire includes seven questions designed to evaluate professional performance and pedagogical competence of the lecturer (having taught the given course over the last semester). If the lecturer scores below the 3.5 cut score on a 5-point scale for a five-year review (10 semesters), the Board may not issue the requisite qualification approval. Thus, in 2022, performance-based ratings of five lecturers placed them near the cut score that implied ineligibility.

As part of the evaluation process (and in addition to the two documents referred to above), a third document is also added to the lecturer's dossier. This is the evaluation statement on classroom observations produced by panel of specialists who are acting upon mandate by the Department Chair or the Dean of the Faculty.

As for the science and research personnel, there are specific criteria in place for the evaluation of their qualification every 5 years. It shall be noted, that individuals with relevant medical qualification may pursue a career as a doctoral student or doctoral fellow. Based on university-led requests and state-specific needs, the government annually allocates seats for full-time and part-time doctoral admissions. For purposes of promoting an academic career of its employees, the University has mandated (by the Scientific Council decision N6, dated June 18, 2012) pursuit of research free-of-charge. Furthermore, since 2021, free-of-charge education has been offered in cases where research and collaboration agreements are concluded between the University and the individual learner.

Since 2017, having due regard to the challenges of modern science, the University has modified the criteria for selection and qualification of researchers and research projects. In the backbone lies the requirement for publications in journals with impact factor indexed by Web of Science. The University has concurrently increased the remuneration of research supervisors through recalculating their statutory teaching load.

Based on evaluation of the MD programme teaching faculty qualifications, the professional development is ensured through several schemes. First, relevant works are conducted by the University Teacher Professional Development Department. Second, there are opportunities for participating in short-term (two-week long) and long-term (six-month long, one-year long) professional trainings in local and overseas clinics.

And, third, there are measures in place to ensure improvement of the faculty research capacities.

- 1. Based on survey findings of 2012 about the need for pedagogical-psychological training among lecturers, the Teacher Professional Development Department has been operating within the university since 2013, which conducts week-long/two-week long training courses in 3 modules: “Pedagogical psychology”, “Pedagogy and new methods of teaching” and “Knowledge assessment through test administration”. It should be noted that the periodicity of training is 3 to 5 years; on average, 250 lecturers attend these trainings each academic year.*
- 2. The issue of faculty professional training is addressed within the domestic and international partnership schemes. Thus, the faculty members of clinical departments attend professional advancement courses (in the framework of professional advancement and development). Thematic scope of these courses is annually approved based on global healthcare industry trends*

and developments. Every year, 80-100 doctors/health specialists of clinical departments attend these courses; the University covers 60 percent of their participation fees.

As for international trainings, in recent years, university faculty members have attended professional trainings at the Université libre de Bruxelles, University of Münster, Ernst von Bergmann Klinikum in Potsdam, Catholic University of the Sacred Heart in Rome, the Georgia Neurosurgical Institute, Thomas Jefferson University in Philadelphia, and other universities. A total of 155 lecturers (previously, the number of lecturers was 33) of clinical departments have attended trainings in European/American universities and clinics over the last 5 years. In particular, 91 lecturers attended a week-long training course, 21 lecturers – 2-week long course, 23 lecturers – a month-long course, 11 lecturers – 2-month long and 9 lecturers participated in a year-long training course.

It should be noted that over 68 lecturers have participated in various distance-learning courses. There has also been an increase in the number of overseas industry professionals who have had guest lectureships at the University. For instance, back in 2017, three professors from University of Copenhagen (Denmark) conducted week-long courses in May, July and October on various aspects of Clinical Nutrition and Food Hygiene. Furthermore, within the framework of Global Innovation Forum 2018, professor Rafael Yuste, a world-famous scientist and the director of the NeuroTechnology Center (NTC) at Columbia University, delivered a lecture at the Medical University. In October 2018, eight lectures were delivered by industry professors of the Hamburg Nordakademie University of Applied Sciences and University Hospital Muenster. In June 2018, several lectures were delivered by Joseph Maldjian, Professor of Radiology at UT Southwestern, Chief of the Neuroradiology Division and Director of the Advanced NeuroScience Imaging Research (ANSIR) Lab. In 2019, one-week course on issues of child and adolescent health was conducted by a professor of the University of Lausanne (see relevant lecture schedules). In September 2022, Dan Valsky from Israel delivered series of lectures on “Small fetus”, “Doppler in Obstetrics”, “Placental Insufficiency”.

Between 2016 and 2022, thirty-five professors from abroad were awarded University Honorary Doctor title (amongst them, five professors are Nobel laureates), and also lectured on various topics of healthcare industry and medicine. In particular, Ara Darzi, the former Minister of Health at the UK Department of Health, pioneer of laparoscopic surgery, was awarded with University Honorary Doctor title in 2018; Mike Sarian, the President of Hospital Operations for

Prime Healthcare Services, was awarded the title in 2019; Harald zur Hausen, who was awarded the Nobel Prize for his seminal discovery of the human papilloma viruses, was awarded the title in 2019; Alexander Rumyantsev, paediatric haematologist and oncologist, member of the Russian Academy of Sciences, was awarded the title in 2019; Ardem Patapoutian, a molecular biologist, neuroscientist, and Nobel Prize laureate, was awarded the title in 2022.

However, there are still issues related to the professional training of the faculty of theoretical departments, since the training does not run on a regular basis. In October 2022, based on the report of the Vice-Rector for Academic Affairs, the University Science Council adopted a relevant decision to address this issue through organizing trainings in foreign countries.

- 3. Taking account of the recommendations generated per benchmarking analysis done with the ShanghaiRanking Consultancy in 2017-2018, the University Scientific Division submitted, and the University Science Council approved the University Science Development Concept 2018-2028/38. The latter will ensure transition from the predominantly education-oriented activity into an academically robust engagement in science and research over the next 10-20 years (see the ShanghaiRanking Agreement). Over the past 4 years, these documents have laid foundation for the organization of scholarly activities, as well as workings aimed at fostering faculty research capacities, followed by result recording. In recent years, there has been a twentyfold increase in the allocations for science under the university budget. Coupled with awarded grants, these budget appropriations have enabled to upgrade the lab resources, as well as increase the scale of funding for faculty participation in international scientific conferences. To note, between 2017 and 2022, the University has implemented 39 state-awarded (won) projects and 10 international programmes. It should be noted that starting from 2019, the University has been implementing three projects in the sidelines of EU “HORIZON 2020” (COBRAIN, ARICE, SCAUT) and three projects in the sidelines of EU Erasmus+ (MINERVA, ARMDOC, DPPHSS). Within the “YSMU Scientific Response to Covid-19” initiative, the University Neuroscience Laboratory has delivered two research projects, conducting around 12,000 SARS-Cov2 antibody tests (36400N, 5600S) among 1700+ convalescent patients, as well as a dynamic study of taste-smell dichotomy among 190 convalescent patients. At the same time, the Swiss company Roche initiated the research project “Quantitative determination of anti-SARS-Cov2 antibodies in dynamics among convalescent patients” (IIS), and within this framework, the company provided relevant materials and devices for organization of planned research works in a due manner.*

As a result of these measures, over the past 6 years, the number of scholarly/research papers published by faculty members has increased one and a half times; the total number of publications in the Web of Science database increased from 112 in 2017 to 248 in 2022, amongst which the number of research papers in journals with impact factor increased from 25 to 87. In addition, the University has developed policies on incentivizing publication of scholarly papers in impact factor journals. Thus, for instance, 352 members of the faculty were rewarded for publication of their works in impact factor journals between 2018 and 2022, where the total amount of rewards constituted AMD 26,815,974. To note, over the last three years, about 230 scholars have received monetary reward under this scheme.

In 2023, the list of incentive mechanisms will be supplemented by yet another. In 2021-2022, University Offices for Academic and Science Affairs have developed the “Indicators towards effectiveness of a lecturer’s academic and research currency”. This was approved after relevant discussions at all departments, and will be introduced as an additional remuneration setting tool starting from 2023.

Throughout the year, university faculty members also receive rewards, bonuses, allowances on various grounds (working in the summative attestation commission, teaching in English and Russian languages, emergency assignments, etc.), and also avail themselves of the university summerhouse opportunities.

Evidences/Indicators

1. *Document on Evaluation of Lecturer Qualifications.*
2. *“Teacher through students’ eyes” survey questionnaire.*
3. *Benchmarking analysis agreement concluded with the Shanghai Ranking Consultancy.*
4. *List of University Honorary Doctors.*
5. *List of state-specific and international projects implemented in the University.*
6. *List of scholarly papers published in impact factor journals (last 5 years)*

4.4 Material Resources

Programme is provided with necessary infrastructure, information resources relevant to the field of study and technical equipment required for achieving programme learning outcomes.

Student access to requisite material resources is highly important within the General Medicine programme. These resources include departmental and institutional lab facilities (designed per significance and for different divisions), experimental equipment for proper organization of the

academic process, accessibility to degree programme literature, availability of simulators and selected skills trainers for purposes of teaching clinical disciplines, discrete facilities for effectively organizing students' extracurricular classes and self-study, etc. (see Strategy for Development of General Medicine Faculty, the programme budget sheet).

The calculation of material resources, MD programme throughput and the internal university standards towards organization of education are approved by the University Council on Academic-Methodical Affairs (see relevant minutes of the Council and the capacity management policy of the MD programme).

Procuring laboratory equipment and purchasing relevant supplies is reflected in the annual budget appropriations in the amount of about AMD 120,000,000 (see the programme budget sheet). It should also be mentioned that the theoretical medicine departments are equipped with necessary lab capacities which are instrumental in smooth organization of the academic process and for full achievement of the practice-based component per programme learning outcomes. Thus, for example, during the Histology course, each student is provided with microscopes and microscopic specimens to be studied within the degree programme. Department of Anatomy and Department of Pathological Anatomy are equipped with requisite microscopes, macro- and fluid-preserved specimens, moulages, as well as modern digital devices that make teaching more spectacular (see departmental lists of books). In addition, the University houses an Anatomical Museum and the Museum History of Medicine. Covering an area of 400 square meters, the Museum of History of Medicine is a home to a collection of about 5000 artifacts/items on display at five different halls. Some disciplines (e.g., courses of History of Medicine and Philosophy) in the MD programme hold classes at this Museum which has been renovated in 2021.

Building on the University's commitment to more effective implementation of the degree programme, academic departments and related offices submit generated resource requests in the reporting year. Based on requests, the University draws up an annual procurement plan and ensures that the departments are gradually supplied with the required resources per priorities, in the ensuing year. To note, about AMD 530,000,000 has been allocated towards the fulfillment of requests between 2022 and 2023 - an amount which surpasses the annual average spending of recent years by three times (see the programme budget sheet).

For the Fundamentals of Research course, students have access to capacities of the Fundamental Brain Research Lab (Cobrain) and the Digital Lab (see Cobrain Lab capacity documents). The course on

Operative Surgery and Topographic Anatomy enhances student learning experience in a simulated operating theatre environment where students get introduced to surgical instruments and the general structure of the operating room, its hygiene management and cleaning procedures, etc. Here, simulated and responsible surgeries involving animals are also performed putting animal welfare principles and 3Rs into action.

The annual plan of surgical trainings involving animals is reviewed by the University Ethics Committee in accordance with the guidelines approved by the University Scientific Council. To note, this plan is fulfilled only if it has been approved by the Ethics Committee (see the Operative Surgery and Topographic Anatomy departmental records, the Regulations on Surgical Trainings/Experimental Surgeries, relevant minutes of University Ethics Committee). It is equally important to organize trainings towards advancing essential surgical skills in some course-modules, as well as to implement the Lancet surgical skills-transfer and professional orientation programme which is conducted by the University Career Centre (see the Lancet programme description). Back in 2020, the University has also initiated the construction of a new simulated surgery suite which is planned to complete in 2023. This surgery suite will enable students improve their surgical skills on an extracurricular basis and free-of-charge. About AMD 120,000,000 has been allocated for the construction and furnishing of the suite, which is implemented through joint funding by the University and donor/charitable organizations.

During the teaching of preclinical and clinical disciplines, high importance is attached to the University Simulation Centre. Located at the academic suite of the Mikayelyan Institute of Surgery, the Simulation Centre stands at 800 square meters. Between the 1st and 3rd years of study, several learning modules run in this Centre (e.g., First Aid, Practical skills, Patient Care, etc.).

Since its inception, the Centre has continuously been equipped with new simulators, which currently ensure almost complete coverage of practical skills in such disciplines of the degree programme as Therapy, Surgery, Obstetrics and Gynecology, Paediatrics, Disaster Medicine and First Aid (see Simulation Centre inventory). Consistent with the Strategy for Development of General Medicine Faculty, the University annually updates simulation resources by at least 10%, concurrently ensuring the updating of perishable inventory necessary for the use of operating simulators (see the programme budget sheet and financial stability paragraph with supporting documents).

One of the University achievements is the introduction of Dr.Lex platform into the teaching of clinical disciplines. This is an augmented-intelligence clinical decision support platform which is available to

students through a mobile application, and to instructors through a special digital platform. Dr.Lex is a project initiated by a Swiss Company called Sylex Group. The memorandum of understanding signed between the Sylex Group and the University back in 2020 enabled free usage of the platform paying only the technical support fee. Dr.Lex (TerraMedicum) ensures an online portal for teachers, and logging into their own account, they can instruct the artificial intelligence to generate a clinical case of any complexity (based on curriculum requirements) per nosology. The teachers can then edit the clinical case on account of learning needs and distribute it to their students. Since the student's history of solving a case study becomes visible to the teacher, the academic aspects of the case may be later discussed with the student or the group of students.

This platform is freely available to students through a mobile application and they may also use it to navigate the teacher's channel displaying clinical cases, and solve a range of cases across various disciplines. The University Council on Academic-Methodical Affairs has approved the policy on gradual introduction of Dr.Lex platform, which regulates its operation in clinical departments and its introduction into the multicomponent systems for assessment (see the Memorandum of Understanding signed between the University and the Sylex Group, policy on gradual introduction of Dr.Lex platform, Strategy for Development of General Medicine Faculty for 2021-2025).

Within the General Medicine programme, the University attaches high priority to making library resources accessible to students and faculty. Today, the University library houses about 440,000 medical books, journals and other print sources. Over the past five (5) years, the book stock and other library resources have been replenished with over 2800 print sources (see the library inventory).

In addition, about 100 books, teaching and methodical manuals have been authored/developed by the university faculty members and have been approved by the University Scientific Council with a view to continuously improving the MD degree programme (see the minutes and reports of the Office for Academic-Methodical Affairs and the minutes of the University Scientific Council). There is also a separate reading room to offer accessibility to Library's collection (operating for 14 hours on working days / 8 hours on non-working days) complete with 30 computers and tablets. The reading room currently seats 250 people at a time; on average, it serves around 500 students, daily. It also offers an access to a list of about 230 books and other materials intended as a selection guide for print literature to be used in professional and allied healthcare studies across fifty theoretical and clinical disciplines. The rest of the Library's collection and book stock is available by pre-order/advance order.

Since the General Medicine programme is also achieved through deploying resources available at the

university hospitals (e.g., Heratsi Hospital Complex N1, Muratsan Children's Hospital Complex, "Mikayelyan Institute of Surgery" CJSC), the University has established library suites therein, complete with discipline-specific literature.

Furthermore, the literature authored by university faculty members becomes available at a specifically designed web-platform at www.ysmubooks.am. The University has uploaded digital copies of latest literature sources into its electronic management system and has granted free and unlimited access to students and teachers thereto (see the digital platform integration policy).

The University Library is a full member of the KOHA Pan-Armenian library, which involves 21 major libraries. The KOHA members can exchange library resources ranging from textbooks to PhD and Masters theses/projects. The University Library also collaborates with the Republican Scientific-Medical Library of the NIH (National Institute of Health under the Armenian Ministry of Health). This partnership has enabled university students and faculty members freely use the literature sources available at this library.

Through its electronic management system, the University makes modern research platforms accessible to students and faculty members. In addition, university students and faculty access institutional digital platforms through university email ID which is assigned by the University Career Centre. Currently, every student is assigned an official email ID (@meduni.am) which can be used for communications/workings with the dean's office, related offices, faculty members, etc. It may also be used as a unique student identifier to get integrated into the electronic management system of the University. Through these valid university email addresses, students can sign up for Microsoft Office 365 for free, and get discount packages on online payment gateways.

On another note, the programme attaches high importance to fair assessment practices. Therefore, multiple choice questionnaire (MCQ) assessments run by a dedicated testing Department of Computer-based Examinations (hereinafter referred to as the DCBE) complete with 350 computers operating through software provisioning on discrete institutional servers. Software encryption is in place to prevent data leakage, and there is also a special test-administering and appeals-handling policy (see the Regulation on administration of test-based e-examinations and quizzes).

The University places emphasis on ensuring physical accessibility of learning environment and spaces. For this purpose, university campus buildings are adequately furnished with requisite amenities (i.e., ramps, elevators, special toilets, etc.) to ensure that people with disabilities can easily navigate the buildings.

Building on the University's commitment to effective extracurricular activities and self-study practices, the staff, students and faculty have access to free wireless network across the entire campus. Over the past five years, there has also been a significant growth in network of University open space.

On another note, an extension of land of 1000 square meters, the institutional sports facilities include sports halls and a gymnasium (see the campus plans). In general, University campus premises (located at 2 Koryun str., Yerevan) extend to 28,000 square meters, of which 70% houses the classrooms, and the remaining 30% is used for offices of ancillary services and for administrative purposes (see the campus plans). The University, acting in the capacity of manager/owner/shareholder of a state property - exercises control over institutional buildings standing at about 100,000 square meters.

Forming an integral part of the University campus, a 700-bed student dormitory complex (located at 10 David Anghaght str., Yerevan) provides a range of convenient accommodation options for residence and study. Designated spaces (e.g., a reading room, canteen, etc.) and services (e.g., Internet access) provide a well-rounded experience throughout studies.

For purposes of teaching clinical disciplines (that form an integral part of the MD degree programme), the University deploys not only the capacities under its management (i.e., Heratsi Hospital Complex N1, Muratsan Children's Hospital Complex, "Mikayelyan Institute of Surgery" CJSC having a total capacity of more than 600 beds), but through relevant legal regulations also makes use of resources available at about thirty Armenian medical establishments.

A recent study (relating to 2022) revealed that the non-institutional medical establishments include about 3400 inpatient and outpatient beds, which are deployed for purposes of university education (see the minutes of Faculty Council of the General Medicine Faculty, capacity management policy of the programme, model contract templates, relevant minutes of the Council on Academic-Methodical Affairs).

Evidences/Indicators

1. *Programme budget sheet*
2. *Resource availability statement, submitted by Department of Anatomy and Pathological Anatomy*
3. *Capacity Management Policy of the Programme*
4. *Simulation Centre inventory*
5. *University Library inventory*
6. *Digital Platform Integration Policy*
7. *Regulation on administration of test-based e-examinations and quizzes*

8. *University Campus plans*

9. *Policy on gradual introduction of Dr.Lex (TerraMedicum) platform*

4.5. Programme/Faculty/School Budget and Programme Financial Sustainability

The allocation of financial resources stipulated in the programme/faculty/school budget is economically feasible and corresponds to the programme needs.

Budget appropriations from the University financial resources for the Armenian-taught MD degree programme ensure its sustainability. The funds allocated towards running the Armenian-taught MD programme make up 31.8% of the revenue generated from all degree programmes (see the University budget sheet, sources of finance, relevant budget documents associated with programme expenditures). The budget for programme expenditures includes annual programme revenues, programme-related grants, and an amount allocated from discrete institutional finances (commensurate to 0.6-1.0% of programme revenues) to ensure programme implementation, sustainability, and improvement.

To note, a budget period shall not be the academic year, but the period extending from January 1 to December 31 of each year.

The major objectives and principles of the Armenian-taught MD degree programme inflows are associated with:

- *Effective resource management,*
- *Identifying budget variances; analyzing the underlying causes thereof and producing relevant resolutions,*
- *Standardization of budget forms/templates,*
- *Interconnectedness of indicators.*

Building on these principles, the following factors are referenced when producing an annual cash flow forecast for the MD degree programme:

- *Performance execution per University Strategic Plan 2021-2025,*
- *Performance execution per the Armenian-taught MD degree programme,*

- *Analysis of the budget execution of the previous fiscal year,*
- *Requests submitted by institutional departments for the given year.*

The financial expressions of the following target indicators are reflected in the forecast:

1. Cash inflows/revenues

- *Number of Armenian-speaking student population, amongst them:*
- *Number of Armenian citizen students studying with full state scholarship,*
- *Number of Armenian citizen students enrolled in paid education.*

2. Cash outflows / expenditures

- *Number of University personnel, amongst them:*
 - *Teaching faculty members,*
 - *Administrative staff, service and support staff,*
 - *Scholarships.*
- *Purchase programme:*
 - *Purchases of products reflected in inventory,*
 - *Purchases of services reflected in inventory,*
 - *Utility bills,*
 - *Acquisition cost of non-current assets.*

Over the past five years, the Armenian-taught MD programme budget has significantly increased. To note, a threefold increase has been recorded in financial expenditures aimed at improving material sources for the programme. In addition, for purposes of advancing the clinical dimension of the programme, the University acquired 90.5% of shares of the “Mikaelyan” hospital (having a capacity of 260 beds) back in in 2018. In 2022, towards improvement of the academic process, the University purchased a 1188 square meters building adjoining its campus. Concurrently, the construction of a new student hostel in 2022 ensured more housing options for another 120 students. In the reporting years,

distribution of library materials budget funds increased by 1.5%. Furthermore, in 2022, about AMD 200 million was allocated to set up an environment representative of the OSCE format to administer exams. Since 2016, there has been twentyfold increase in funding towards advancement of science infrastructure and research works. Over the past 5 years, 13% of Armenian citizen students of General Medicine Faculty have benefited from the University tuition assistance system. The financial assistance to help defray the cost of tuition has made up 7% of the revenues generated from programme fees.

Given the stated expenditures towards the improvement of the Armenian-taught MD programme infrastructures, overall University faculty pay has not not increased in recent years.

Evidences/Indicators

1. *University budget sheet.*
2. *MD degree programme budget sheet.*

Strengths and Areas for Improvement

Please, provide the strengths of the educational programme, and areas to be improved as well as the activities planned for the areas to be improved according to the requirements of the components of this standard.

Strengths

- ✓ *Competition-based election of teaching faculty in accordance with the University Regulation on Academic Departments and Teaching Faculty.*
- ✓ *Availability of sufficient number of lecturers undertaken training overseas and regulated training courses in pedagogy and psychology run at the University.*
- ✓ *Embedded model of the e-University.*
- ✓ *Twentyfold increase of financing costs aimed at the improvement of scientific infrastructures.*

Areas for Improvement

- ✓ *Necessity for complete integration of educational, teaching and student units into the e-University.*
- ✓ *Necessity for quantitative improvement of the infrastructures of students' conducting research and individual/extracurricular activities.*

Planned activities and timelines for the areas to be improved

- ✓ *Expanding requisite infrastructures by means of international and local grants, as well as*
-

through the programme annual budget reallocations (by May of 2024).

- ✓ *Increasing the University subscriptions to educational platforms; ensuring that there are more computers available on University campus (by May of 2024).*

5. Teaching Quality Enhancement Opportunities

In order to enhance teaching quality, programme utilizes internal and external quality assurance services and also periodically conducts programme monitoring and programme review. Relevant data is collected, analysed and utilized for informed decision making and programme development.

5.1 Internal Quality Evaluation

Programme staff collaborates with internal quality assurance department(s)/staff available at the HEI when planning the process of programme quality assurance, developing assessment instruments, and implementing assessment process. Programme staff utilizes quality assurance results for programme improvement.

Both the University Strategic Plan 2021-2025, and the Strategy for Development of General Medicine Faculty attach importance to the existence of the system on education quality assurance, its continuous improvement, the periodicity of self-evaluation of various institutional departments, comprehensive inclusion of education, research and finance components into the quality assurance processes, etc. (see University Strategic Plan 2021-2025 and the Strategy for Development of General Medicine Faculty 2021-2025).

For purposes of achieving these objectives, the University regularly reviews and updates/reforms the education quality assessment system and its toolset.

Institutional internal quality assurance system is represented by the permanently operating Centre for Education Quality Assessment and Assurance, education quality assurance officer of the Faculty, central and faculty committees on education quality assurance (Decision 113/M, dated 2013), Standing Committee on Accreditation Processes (Decision 118/M, dated 31.07.2017). Concurrently, where deemed necessary, support committees or working groups are also established upon Rector's decision, to assume responsibilities towards internal quality assurance (for example, commissions that develop self-evaluation report on institutional or programme accreditation, commission which reviews and makes improvements to the degree programme, etc.). These bodies are regularly reviewed in terms of their structure and composition.

For purposes of regulating the processes of internal quality assurance, the following documents are in place: the charter and policy of the Centre for Education Quality Assessment and Assurance, descriptions/profiles of positions and major responsibilities of relevant staff members, also the strategy, regulations and procedures aimed at assessing the quality of the institutional performance in various fields, relevant toolsets and work plans (see relevant documents enclosed). The mentioned documents also define interactional dimensions of officers and bodies involved in the process, also setting clear defined boundaries of responsibility. Thus, for example, the position of programme director entails also responsibilities which are fulfilled cooperatively with the officer in charge of programme quality assurance, the dean of the faculty, and other officers. The work relationships and accountability between the officer in charge of programme quality assurance and the quality assurance centre and its officers is covered in the documents which regulate their workings (see below for further details).

Internal quality assurance is based on procedures regulating the evaluation of various university-related processes, such as the evaluation procedure of the student knowledge assessment system, the procedure for developing, approving and monitoring degree programmes, the procedure for producing a self-evaluation report, the procedure for measuring self-evaluation indicators and developing measures towards quality improvement, etc. In 2018, the mentioned procedures were supplemented with periodic student evaluation on teaching faculty and academic departments, and quality assessment procedure for purposes of election and re-election of department chairs and teaching faculty; appropriate reporting forms have also been developed. The frequency of applying a procedure is warranted by relevant work plans and may range within a wide margin of appreciation. For example, lecturer evaluation (by students) is carried out twice a year, whereas the evaluation for purposes of teaching faculty election/re-election is carried out once every five years (see Procedure for evaluation of student knowledge assessment system, Procedure on development, approval and monitoring of university degree programmes, Procedure for self-evaluation report production, Procedure for measuring self-evaluation indicators and developing quality improvement measures, Procedure for self-evaluation).

The procedure of internal quality assurance of degree programmes was mainly carried out through university subdivisions (Centre for Education Quality Assessment and Assurance, department of education programmes, relevant committees). However, taking into account the expert opinion within the institutional accreditation back in 2018, the recommendation of external experts (they were invited by the university for the purpose of accreditation of the MD programme), as well as the internal analysis of relevant processes, the positions of quality assurance officers of the faculties were

approved at the meeting of the University Board of Trustees in 2022, and afterwards, the responsibilities of the faculty quality assurance officer were developed and approved, followed by appointment of relevant officers upon the Rector's decision. Building on implemented reforms, the degree programme development, monitoring, improvement and quality assurance is based on the collaborative work by and between the programme director, dean and the faculty quality assurance officer.

The faculty quality assurance officer, collaboratively with the programme director, carries out a comprehensive and periodic analysis of the programme according to the Faculty Development Strategy and performance indicators attached thereto; annually produces a closure report, identifying ongoing issues and priorities. The programme evaluation is conducted in accordance with the procedure of development, approval, monitoring and review of educational programmes, and includes the analysis of student performance, delivery of research through the medium of the QA toolset, comparative analysis of the degree programme, and external evaluation.

The programme director, taking note of the raised issues, develops strategic measures and action plans towards programme improvement. The dean, as an administrative body, guarantees the implementation of the programme, ensures communication between the mentioned two bodies and academic departments, and also information database for the analyses. The Centre for Education Quality Assessment and Assurance develops procedures and toolsets that serve basis for quality assurance of degree programmes, and also assists the faculty quality assessment officer in conducting research and analysis. Within this process, the university department of educational programmes shall be specifically noted. Any amendment and improvement to the degree programmes is carried out with the direct participation of the education programmes department. The department also conducts comparative analysis of programmes, without which the necessary foundation for reforms cannot be complete.

The process of quality assurance of degree programmes is carried out based on the procedure of development, approval and monitoring of degree programmes, faculty development strategy, and performance indicators (see documents enclosed).

Quality assurance procedures are at the core of changes implemented in programmes, as well as in other institutional processes. Any research and analysis are presented to a wide range of stakeholders, allowing for targeted changes at any level of management and implementation. For example, the findings by the Centre for Education Quality Assessment and Assurance are regularly reported to the

Faculty Scientific Councils at relevant meetings, where all the academic departments running the programme are represented. The head of the Centre for Education Quality Assessment and Assurance, and the head of the Educational Programme Department regularly make reports at the sessions of the Council on Academic-Methodical Affairs. The Council hears analysis of newly developed subject-specific programmes, knowledge assessment systems, newly introduced experimental approaches, structural comparison of similar programmes running abroad. Further decisions are made on ground of these findings. Findings of studies are submitted to relevant academic departments, as needed, where they serve as reference point for the improvement of subject-specific programmes, teaching methodology, logistics and material sources. Thus, at the beginning of each semester, department chairs submit interoffice memoranda to the Vice-Rector for Academic Affairs, the programme director and the dean, as well as the head of Centre for Education Quality Assessment and Assurance, detailing about proposals for issue-related solutions, and proposal-related discussion outcomes generated in departmental meetings. If necessary, the head of the Quality Assurance Centre and the faculty quality assurance officer participate in departmental meetings, where the existing issues and settlement approaches are discussed with the teaching faculty members. The findings of studies performed through the quality assurance system toolset are included in the reports of the Vice-Rector for Academic Affairs presented at the meetings of the University Scientific Council, and are as well reported and discussed by the head of the Quality Assurance Centre at the Rector's Council meetings, where deemed necessary (decisions and meeting minutes of the University Scientific Council).

It can be thus stated that decisions made by relevant bodies on improvement of subject-specific programme are based on studies/analyses carried out through the quality assurance system.

These practices have paved way for certain improvements showcased below:

- *By the decision of the University Scientific Council, reforms were made in Therapy Departments and to subject-specific programme in 2017/2018, which resulted in the revision of course-content and teaching methodology. Currently, discrete components of the discipline are taught by relevant subspecialists. For instance, Rheumatology, Cardiology, Gastroenterology, Pulmonology and Nephrology subspecialty modules were distinguished within the Internal Medicine curriculum component. Students complete these modules at a clinical hospital setting under instruction of relevant subspecialists.*
- *Building on relevant findings, academic departments were distinguished where ad-hoc committees have led comprehensive inspections on the academic process. Over the last 5*

years, such inspections have already been administered at Departments of Traumatology and Orthopedics, Pathophysiology, Operative Surgery. The issue was discussed at the Rector's Council and the Council on Academic-Methodical Affairs, followed by revision of subject-specific programmes and exam questionnaires.

- *Works towards lecture quality improvement are underway. In particular, the lecture delivery was enhanced by the introduction of problem-based learning and inter-modular learning methods. In addition, lecture-based learning has been reformed in recent years. University academic departments have reviewed the course-content with a view to making it more uptodate, in-demand and research-based. Concurrently, a number of inter-modular lectures were designed upon instruction of the Vice-Rector for Academic Affairs and upon proposals by several academic departments. Criterion 1, Criterion 2 and Criterion 3 showcase examples of such lectures.*
- *The studies surfaced issues existing in the scoring system, and the development and introduction of novel, more effective scoring systems (multicomponent assessment systems) were initiated. Relevant analysis afterwards, proved utmost effectiveness (e.g., an increase in residual knowledge by an average of 22%) of these assessment systems, as well as surfaced weaknesses that needed to be addressed (for instance, the interrelation of components that form part of the assessment system, or the temporary challenges of introducing such systems in some academic departments, etc.) (see the Quality Assurance webpage in university website).*
- *A set of formulas for assessing the quality of exam tests was developed, which are now occasionally used by the DCBE (see Criterion 2), and will further be used in a systematic way. This will allow to assess the quality of tests developed by academic departments, enabling distribution of tests and reflection of different components of the discipline therein more coordinated.*
- *Relevant findings serve basis for other studies and analyses being conducted by the Centre for Education Quality Assessment and Assurance.*

The above-mentioned operations showcase how studies form basis for further planning.

As mentioned above, the findings of studies conducted yearly by and under the coordination of the faculty quality assurance officer are summarized in the programme annual/self-evaluation report. The

report covers the findings of surveys, studies, focus group discussions among all stakeholders, the analysis of students' progress, the results of evaluation and comparative analysis of learning outcomes, etc. The studies conducted among students, alumni, teaching faculty, administration and employers are particularly noteworthy (see model reports, full description of quality assurance mechanisms and toolset).

For the purpose of MD programme accreditation, a representative self-evaluation committee was formed upon the Rector's Decision. The committee has conducted in-depth analysis of the programme over the last 5 years. The analysis, as well as the external expert recommendation, will form basis for further improvement of the programme and its development policy.

Thus, it can be claimed that representatives of every stakeholder-group are actively, directly or indirectly involved in the processes of producing the quality assurance and self-evaluation reports.

The quality assurance toolset and procedures enable covering all processes carried out in the programme, in general, and in subject-specific programmes, in particular. As a result of the periodic evaluation of the latter, the existing issues are identified, solutions are proposed through involvement of relevant departments, changes are introduced into the educational system as a form of an experiment, and only after a performance evaluation is carried out, they are approved or improved/amended. The quality assurance system, academic departments, the dean's office, the Council on Academic-Methodical Affairs, subject-specific commissions, as well as programme director are actively involved in this Plan-Do-Check-Act cycle.

Not only university-related processes, but also the quality assurance system is improved in the sidelines of the Plan-Do-Check-Act cycle. As mentioned above, stakeholders actively participate in process assessment, but their involvement is also visible in the earliest stages, such as the design, validation and approval of quality assurance questionnaires, checklists, other tools, procedures, etc. Thus, for example, the questionnaire and the questions of the large-scale and regularly conducted "Teacher through students' eyes" survey (see Criterion 5.3) are amended as necessary, taking due account of academic departments profile and the stakeholder feedback; drawing upon the same logic, the checklists for the lecturer's evaluation are reviewed, etc. Produced reports are also discussed with the stakeholders and their feedback is then considered to improve the quality assurance processes.

Taking into account the recent need for the use of e-teaching tools. i.e., platforms, interactive teaching methods, as well as the need to teach in a remote or hybrid format at times, some tools have been

developed to evaluate their effectiveness. For instance, studies have been conducted on the use of AI-based programme in clinical departments, on identifying issues in teaching using the Zoom, needs assessment in interactive teaching tools, etc. with the involvement of lecturers and students (see findings of studies).

Evidences/Indicators

- 1. Charter of Centre for Education Quality Assessment and Assurance and its Policy.*
- 2. Evaluation procedure of student knowledge assessment system.*
- 3. Procedure for monitoring and revisiting degree programmes.*
- 4. Templates of reports on findings per studies conducted by the Centre for Education Quality Assessment and Assurance.*
- 5. Full description of Quality Assurance mechanisms and toolset.*
- 6. Documents, toolsets, reports pertaining to quality assurance.*

5.2 External Quality Evaluation

Programme utilizes the results of external quality assurance on a regular basis.

The Armenian Law on Higher Education stipulates mandatory institutional accreditation for all higher education institutions, and mandatory programme accreditation for medical specialties. According to new statutory norms, every degree programme is subject to accreditation.

In Armenia, accreditation and external quality assurance is conducted by the National Center for Professional Education Quality Assurance Foundation (hereinafter referred to as ANQA).

Over the past five years, the University has undergone one such institutional accreditation (in overall, second in number) and has hosted an interim visit for observation and monitoring purposes.

These accreditations looked into the infrastructure. However, both the self-evaluation report and experts' recommendations made references to degree programmes, and the MD programme, in particular.

Based on the expert opinion received during the accreditation, the university developed and approved an action plan in 2021 (see action plan), which clearly describes areas for improvement, required actions, deadlines, those who are in charge and expected outcomes. The action plan was the basis for the development of the University Strategic Plan 2021-2025 and Faculty/School Development Policy.

Below are a number of examples of improved procedures that stemmed from the results of external and internal evaluations; these steps were achieved in accordance with the action plan stated above.

- Introduction of e-University system (action plan 2.4.1)

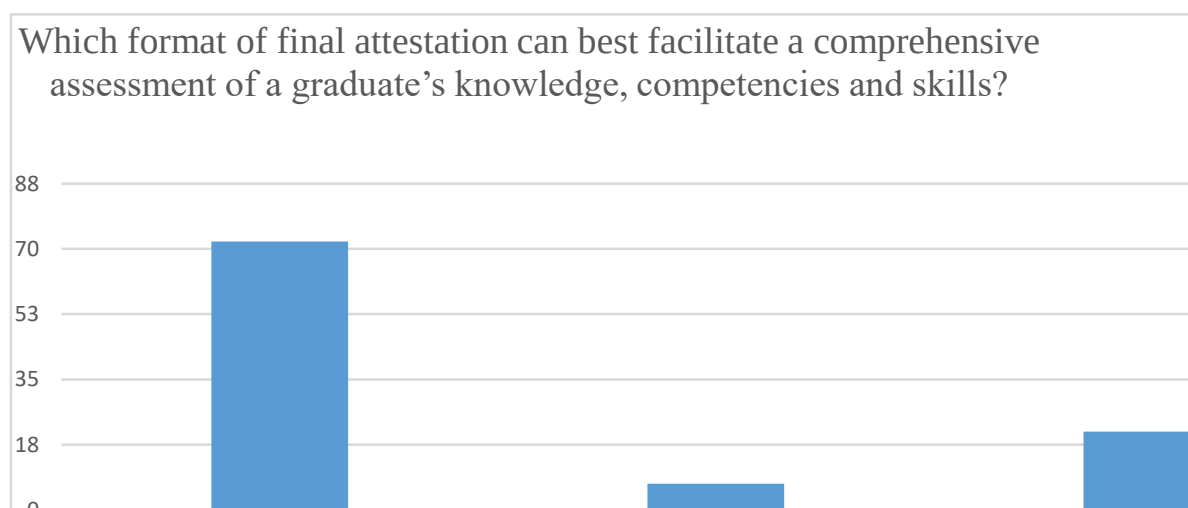
Quality assurance-related surveys among faculty and administrative staff, as well as external expert evaluations, highlighted the need to introduce a e-system for unified management. Currently, the system of university electronic management is partially introduced. A policy on introduction of an e-University is also in place. Currently, this e-University system enables students to track their academic progress online, in the real-time mode, and also provides access to necessary course literature. The electronic system will also optimize the collection of information needed for quality assurance-related processes.

- Availability of an expanded component of differentiated assessment of practical skills in ongoing examinations of the core professional disciplines (3.1.1).

In 2021/22, consistent with the learning outcomes of core clinical disciplines, “mini CEX” (mini clinical evaluation exercise) surveys were designed for the purpose of assessing the practical skills.

- Defined 1/3 componential share of practical skills within final attestation and OSCE format employed (3.1.2).

Findings on final attestation strategies at internationally acclaimed universities, as well as the Quality Assurance Centre studies among the graduates, highlighted the need for changes in the final attestation format. Thus, for example, about 72% of graduates believe that an attestation based on discussion of clinical cases and case scenarios could comprehensively gauge a graduate’s knowledge, competencies and skills (Figure 1).



Through the SAFEMED+ international project, as well as the University contribution, an OSCE format exam was developed and introduced as a form of final attestation (see other criteria for further details).

- Improving the organization of the student field practicum (3.1.3).

Novel modules of field practicum (practical skills) stemming from the learning outcomes of the MD programme have been submitted to the University Council on Academic-Methodical Affairs and have been further approved. A procedure for field practicum is in place, according to which, contingent on the modules involved, skills-based practical courses are held at the University Simulation Centre, as well as at the urban and regional medical centres.

- Updated system of measuring teacher qualification.

The procedure and indicators aimed at measuring teacher qualification have been updated for purposes of election and re-election of the teaching faculty members.

In 2013, within the NVAO, a self-evaluation of MD programme was conducted and a report was produced by panel of international experts, which served as a reference for further improvements. The expert panel was led by Dr. Prof. Harry Hille from Maastricht University, the Netherlands. The panel also involved Dr., Prof. Ben Van Camp, former Rector of Université libre de Bruxelles.

For purposes of improving the MD programme, the University conducted an external expert evaluation of the programme in 2021/22. The expert opinion (see the expert evaluation report) on programme served as the basis for amendments introduced in the degree programme and subject-specific programmes, curriculum, methods of teaching and assessment, and learning outcomes.

The expert report covered issues related to horizontal and vertical integration of disciplines, the scale of certain disciplines in the curriculum, the formats of learning outcome assessment, the connection between the subject-specific programmes and programme outcomes, etc. In addition, recommendations were made towards potential solutions to these issues. Most of the recommendations have already been taken account of (in particular, increasing the number of inter-modular lectures, a discrete practical skills module, rearrangement of disciplines in the curriculum content, etc. (see criterion 1 for details related to issues and reforms). However, the University will be entitled to introduce certain recommendations only after the approval of new statutory norms on the Law on Education. This will allow the University to autonomously manage the allocated credits, not being constrained by the republican mandatory components.

According to the University procedure for monitoring and revisiting degree programmes, external evaluation and accreditation are mandatory processes. For instance, 1.3 paragraph of this document defines that competent individuals shall submit requisite information to external bodies for purposes of external evaluation and monitoring. Where deemed necessary, the officer in charge of programme quality assurance, the head of Centre for Education Quality Assessment and Assurance, and the programme director are delegated similar responsibility by virtue of the position descriptions. The procedure for development and approval of degree programmes provides for participation of external stakeholders in related processes (see documents pertaining to quality assurance).

According to the Armenian Law on Higher Education, accreditation of medical degree programmes is a mandatory process.

Evidences/Indicators

- 1. Action plan timeline towards improvement of processes.*
- 2. External Expert Evaluation report on MD programme.*
- 3. Procedure for monitoring and revisiting degree programmes.*
- 4. Procedure for developing and approving degree programmes.*

5.3. Programme Monitoring and Periodic Review

Programme monitoring and periodic evaluation is conducted with the involvement of academic, scientific, invited, administrative, supporting staff, students, graduates, employers and other stakeholders through systematic data collection, study and analysis. Evaluation results are applied for the programme improvement.

The MD programme is regularly monitored with the involvement of a wide range of stakeholders. As mentioned previously in section 5.1 of this self-evaluation report, students, alumni, teaching faculty and administrative staff, employers and professional associations participate directly or indirectly in the quality assurance procedures and monitoring of degree programmes.

The Procedure for Monitoring and Revisiting University Degree Programmes stipulates that the university degree programmes are subject to a yearly monitoring within a six-month period, upon completion of the academic year. During the academic year, the University Centre for Education Quality Assessment and Assurance and the relevant faculty quality assurance officer conduct studies, surveys, discussions and observations consistent with the work plans. In addition to the studies defined per the work plan, the quality assurance officer may be tasked with conducting studies on ongoing issues or problems identified by the programme director. The studies shall involve both internal and external stakeholders and relate to all phases of programme implementation, offices in charge and academic environmental factors.

According to above mentioned procedures in 2021-2022 analysis of pilot implementation of modular approach in program was conducted. As it was mentioned in previous criteria, as a pilot project some interdisciplinary modules (e.g. anatomy-morphology, pathology, ertc.) were developed and implemented in syllabus. The QA analysis have shown that we had much higher level of residual knowledge and satisfaction of stakeholders. Based on mentioned researches and external evaluation university and faculty developed new modular spiral syllabus which will be implemented from 2023-2024 study year (see criterion 1).

In the monitoring and improvement of programmes, significantly large role is assigned to the stakeholder feedback regarding processual components. Surveys and studies, related analysis and publication carried out by the Centre for Education Quality Assessment and Assurance of the University ensure the participation of stakeholders in the process of evaluation, monitoring and improvement of programmes. The quality assurance system conducts both periodic surveys (semiannual, annual), and non-periodic ones (where needed, to obtain clarifications on certain topical issues or to evaluate implemented changes). The periodicity and dates of conducted studies are thoroughly detailed in the Procedure for Monitoring and Revisiting University Degree Programmes, and also in the procedures of relevant studies.

The largest survey regularly conducted among students is the e-survey "Teacher through students' eyes". Each semester, at least 52% of the students involved in the programme participate in the survey.

Identified issues always serve key reference point for planning and implementing reforms in the university educational processes, as well as personnel-related policy. The findings of the study and the identified issues are always in the focus of the University management and administrative staff, in particular, the Rector, the Vice-Rector for Academic Affairs, the Vice-Rector for Science, the dean, programme director and other institutional bodies. The students evaluate both the delivery of subject-specific programmes implemented in the academic departments, their outcomes, departmental logistics and material sources, the exam tests, and the methodological/organizational approaches by lecturers. Through narrative feedback, students identify issues in the subject-specific programme related to the relevance of the literature, interdisciplinary alignment, exam questionnaires, and issues related to the acquisition of clinical and practice-based skills per learning outcomes. A number of examples may be cited as follows: based on observations on comprehensibility of narrative in the Pathological Anatomy textbook, it was re-published garnering approval of the student population; the test database of Traumatology course was reviewed based on feedback on structural features (this review produced positive effect on students' performance). In addition, student oral and written feedback also mediated review of the componential scale within the multicomponent assessment system in Hygiene and Ecology course. This allowed, inter alia, for increased student residual knowledge by 22%.

Another periodic yearly survey is conducted among alumni and they have the opportunity to evaluate the final attestation process (objectivity, environment, relevance of questions included in the questionnaire, proportionality of components), and make their observations retrospectively about the entire academic process, degree programme, final outcomes, curriculum, etc. For example, the mean results of these surveys conducted over the last 5 years have showed that an average of 90% of students consider the final attestation procedure to be strictly objective. Meanwhile, 85% of students who failed/scored low, responded positively to the same question (see Figure 2).

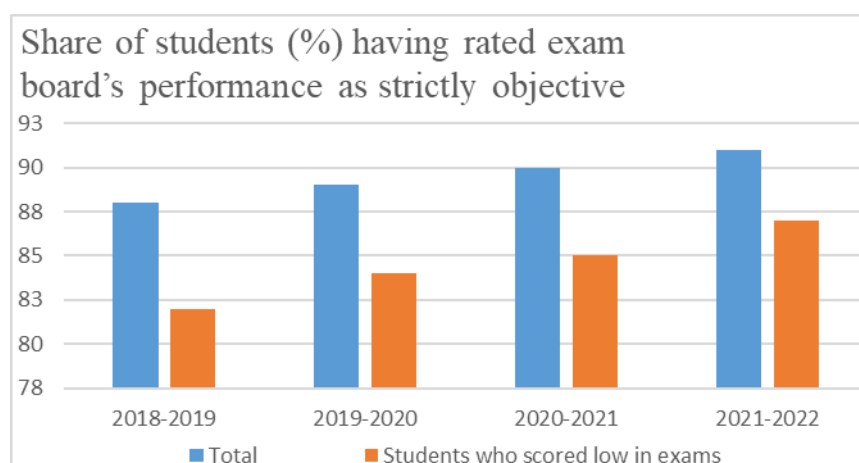


Figure 2

Issues related to format of administering the final attestation were repeatedly raised by the alumni participating in the survey. Around 72% of respondents revealed that a comprehensive assessment of knowledge and skills could only be achieved through a clinical case-based format. This also served a key point in deciding to design and introduce the OSCE format in one of the summative exam stages of 2022/2023 academic year. Based on survey findings, the body of components of the summative attestation is also reviewed. The University Academic-Methodical and Subject-specific Councils thoroughly analyse the respondents' remarks on these issues. This approach allows for constant improvement of subject-specific programme and/or examination questionnaires (see the analysis of inquiries on final examinations, reports of the Vice-Rector for Academic Affairs and the quality assurance officer in the Science Council).

Examples of non-periodic surveys conducted with students are the opinion polls related to any methodological changes, newly introduced assessment format, newly planned reform, assessment of residual knowledge in the core professional disciplines, field practicum, availability of material sources, access to international exchange programs, literature relevance, the analysis of their observations regarding performance of support services and advisory bodies.

The teaching faculty is also involved in monitoring and improvement of the degree programme through participation in surveys held by the quality assurance system aimed at evaluating process-related feedback (evaluation of effectiveness of module rearrangement in the curriculum, identifying needs per material sources/logistics, studying issues related to the use of e-platforms), as well as through direct involvement in ad-hoc working groups, representation on Academic-Methodical and Subject-Specific Councils, Faculty Council and University Scientific Council. A significant number of the teaching faculty members act as ANQA experts, have performed external expert evaluation in other universities and vigorously apply their experience in the monitoring of the university degree programmes.

In the process of monitoring and revisiting the degree programme, importance is attached to the evaluation of learning outcomes, and the matrix enclosed herewith makes this process for the quality assurance officer and the programme director easier to administer (the matrix, in particular, maps each final outcome of the programme, highlighting its clear connection with the final outcome of discrete subject-specific programme, the attestation format, the evaluation methodology). In programme monitoring and outcome evaluation, the role of the labour market is specifically highlighted. The

studies conducted by the Quality Assurance Centre and the Career Centre (questionnaire survey, focus group discussions) aim at identifying the relevance of the programme learning outcome to the ever-changing demands of the labour market. Based on the results of discussions with about twenty large employers, some inconsistencies between the final outcomes developed in graduates of MD programme and the demands of the labour market were identified, which need further study and improvement. These disadvantages may involve poorly developed practical skills, lack of awareness of some ethics-based elements in doctor-patient relationship, insufficient knowledge of the statutory framework, etc.

The effectiveness of the programme is measured through another off-campus survey conducted by the University Career Centre. This survey assesses graduates' professional employment rates and evaluates the trajectory of graduates with exposure to subspecialty in residency (see Criterion 3.1).

Since the Faculty development strategy emphasizes the international attractiveness of the implemented programme (citizens of about 35 countries are matriculated in the university), its monitoring and improvement cannot take place without the study and comparative analyses of international practices. Between 2022 and 2023, the Department of Educational Programmes, collaboratively with programme director and the quality assurance officer, carried out a comparative study of the module-specific and curricular credit share with about 20 similar programmes in universities with a high international ranking. The results of the study were reported to and discussed in the Council on Academic-Methodical Affairs, serving as basis for further reforms. Thus, for instance, the Paediatrics course was extended for a week.

As described previously in section 5.1, the findings of listed studies are published, discussed with stakeholders and form basis for reforming the programmes (see the quality assurance webpage). Narrative on identified major issues appears in the paragraph "Areas for Improvement" per criteria within this self-evaluation report. The following may be cited as examples: incompleteness of systematic indicators on qualitative assessment of programme outcomes, insufficient number of elective courses for the student population (which is an obstacle to student mobility), necessity of increasing resources towards building practice-based skills, etc. Solutions to majority of the issues are underway. It can be claimed that any changes taking place in the university and in the programme (exam questionnaires, course materials, module credits, curriculum, teaching and assessment methodology, learning outcomes) are based on the results of specific studies, surveys, discussion and observation analysis.

Consistent with the statement in the Procedure for Monitoring and Revisiting University Degree Programmes, studies and findings serve basis for the evaluation of programme viability, analysis of market demand for the programme and the reforms made by the programme director and the faculty council.

Evidences/Indicators

1. *Copies of reports on findings of studies conducted by the Centre for Education Quality Assessment and Assurance.*

Strengths and Areas for Improvement

Please, provide the strengths of the educational programme, and areas to be improved as well as the activities planned for the areas to be improved according to the requirements of the components of this standard.

Strengths

- ✓ *Amendments planned and introduced into the programme are based on findings of surveys conducted among the stakeholders; these amendments are introduced drawing on plan-do-check-act principle.*
- ✓ *All stakeholders are directly or indirectly involved in the monitoring and improvement of the programmes.*
- ✓ *The programmes are analysed through an external expert evaluation on a regular/constant basis.*

Areas for Improvement

- ✓ *The cooperation between the programme director and the QA officer, although based on clear-cut descriptions of position and responsibilities, is a new approach and needs to be developed further. The programme director shall be involved in quality assurance-related processes.*
- ✓ *Decentralization of the quality assurance system, quality assurance-related processes introduced at the faculty and academic departments.*

Planned activities and timelines for the areas to be improved

- ✓ *In the work plans of programme director and the QA officer, identify the need for joint reports and printed reports for different university offices (2024).*
 - ✓ *Extend the scope of responsibilities assumed by the Faculty quality assurance officer, set up a system of departmental quality assurance officers, oversee the collection of relevant information (2024).*
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List of information and / or documentation to be submitted ^{5,6}

EN	Self-Evaluation Report;
EN	Educational programme and syllabi; ^{7,8}
EN	List of staff implementing the educational programme with reference to teaching and research components (teaching course, internship component, doctoral dissertation, performing work and etc.) activities;
EN	Methodology of planning, elaboration and development of educational programmes;
EN	Evaluation mechanism of the programme learning outcomes;
EN	Documentation certifying the qualification of the academic, invited, and scientific staff, CVs (CV must indicate the list of scientific papers published during the recent 10 years);
	Functions and responsibilities of programme head, master's and doctoral student supervisors and administrative staff (contract template);
	In case of Master's and Doctoral programmes, the list of master's and doctoral papers defended over the last 5 years (please indicate: title, defense year, supervisor, score) (Expert Panel will request several papers before the visit to the institution, which is to be submitted by the University);
	Analysis of labour market and employers needs or/and the relevant information (except Georgian Language Preparation Educational Programme);
	Relevant agreements/memorandums with economic agents and practical training facilities;
EN	Budget of the educational programme(s) in the cluster/faculty/school;
EN	Statute of master's or/and doctoral and Dissertation Council and Rule for dissertation commission formation and working;
	Semester workload of academic, scientific, invited staff (Due to the data of Education Management Information System);
EN	Analysis of QA Internal and External Evaluations Results;
	Forms of students/graduates/employers'/staff surveys conducted by the HEI, results and information on utilization of these results;
	The evaluation report of the programme learning outcomes (if available);
	Evaluation of staff performance (quality of teaching and research, international mobility rate, etc.), including the evaluation results of master's and doctoral students supervisors.

⁵ It is advisable that the documentation is presented in such a way that it is easy to use in the evaluation process. Also, it is advisable that the documentation attached to the self-evaluation should be presented consistently according to the appendices listed on this page. It is desirable to indicate along each appendix in which document the relevant information and/or document can be found. In addition, it is advisable that the information about the educational programmes grouped in the cluster should be presented in a technically separate space, while common documentation/information should be given in one space.

⁶ The document with the mark **EN** should be presented in English.

⁷ The number of syllabi (compulsory courses) to be presented in English is 15 for BA programmes, 10 – for MA programmes, 5 – for PhD programmes, 25 - in case of an integrated/one-cycle educational programme (except for one-cycle Medical Doctor educational programme). In case of one-cycle Medical Doctor educational programme, and a joint higher education programme planned to be provided in partnership with a higher education institution/ institutions recognized in accordance with the legislation of a foreign country, syllabi in English for each individual course/subject should be attached to the accreditation application.

⁸ **Before January the 1st, 2023**, in case of regulated higher educational academic programmes submitted for (except for one-cycle Medical Doctor educational programme), English translation of the programme (without syllabi) should be provided.