

**Approved**



**Chairman of the Advisory Council**

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**REPORT**  
**on the results of the external evaluation of the educational**  
**programme "General Medicine"**  
**«ARMENIAN-RUSSIAN INTERNATIONAL UNIVERSITY**  
**«MKHITAR GOSH» (UMG), MEDICAL FACULTY»**

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## SUMMARY OF THE PROGRAMME

The programme «*General Medicine*» is implemented by Medical Faculty and results in awarding the Doctor *qualification*. Programme management is done by the Dean of *Medical Faculty for international students* – Anait Antonyan.

«General Medicine» programme is implemented by «Mkhitar Gosh» University (UMG) since 2014. In the period of programme implementation in 2016-2018, 29 students previously transferred from other educational institutions from different countries graduated from the programme.

The site visit was made by AKKORK reviewers on April 22-23, 2019.

### *Strengths of the programme:*

1. Educational process is implemented in English
2. The most significant achievement of the University is involvement in educational process the teaching staff having competencies in the field of taught subjects and practical work experience in the institutions of Republic of Armenia.
3. Strong motivation of teachers preparing the first year students. That is reflected in implementation of creative approaches in the process of learning.
4. Starting from the first year, students are actively involved in additional activities thus raising the level of their education in the respective field (participation in conferences, competition on urgent medical aid delivery).
5. Evaluation materials submitted by UMG to check students' competencies are prepared at high methodological level and are considered as valid.
6. The University has organized and implemented performance with applicants at preparation courses successful completion of which is the background for admission to the first year of the programme in the forthcoming year.
7. The internal web site in English containing learning materials required for educational process and updated information on educational process organization has been demonstrated.
8. High level of students' preparation (first year students). The fact was confirmed by the direct assessment of competencies.

### *Weaknesses of the programme:*

The weakest points of «General Medicine» programme implemented by UMG could be considered as follows:

1. Low level of material and technical support of implemented programme. In the process of site visit the University did not

demonstrate any equipment for teaching students at 2-6 years of studying. Submitted equipment for the lab sessions in some disciplines (anatomy, physics, chemistry) should be considered as insufficient and outdated at the moment. Multimedia equipment to deliver lectures and seminars in the classrooms was missing.

2. Teaching staff of implemented educational programme at the time of the site visit does not cover the whole courses of specialist programme and represented only by teaching staff delivering classes for first year students. Not all teachers have certificates of specialists in delivered disciplines. Teachers staff reserve is not formed.
3. Teaching and learning documentation requires considerable upgrading. Documents submitted in appendices to self-assessment report and reviewed during the visit does not possess identity and succession with regard to each other and require updating and clarification.
4. Matrix of competencies and submitted disciplines syllabuses fail to cohere.
5. The sources of principal and supplementary literature mentioned in discipline programmes are mostly Russian editions, whilst educational process is delivered in English. Moreover, the literature of Soviet high school is applied; it is recommended to include articles of modern scientific journals in the respective field in the list of applied literature.
6. All teaching and learning documentation was provided in Armenian. It does not have English version and is not available for the student.
7. Lack of systematic approach with clear regulations, procedures, and requirements in such fields like education quality and education quality assurance on this programme is observed. This results in difficulties with regard to feedback between programme coordinator, students, and teachers.

### ***Main Recommendations:***

1. Provide logically structured and coherent programme documentation with inclusion of higher education National Standard «General Medicine», curriculum, competency matrix, disciplines syllabuses, practices programmes, State Final Examinations questions, etc. All documents should be provided in Armenian and teaching language (English) and be available free at learning resource of the University.
2. Put in place the teaching staff for all curriculum disciplines with specialists having the basic education, certificate of specialist in delivered disciplines, and knowledge of teaching language (English). Prepare the staff reserve for all disciplines of programme.
3. Material and technical support of the programme should be adjusted to the complete package of minimum required appliances and equipment

for all disciplines, starting from university laboratories to assimilation classroom.

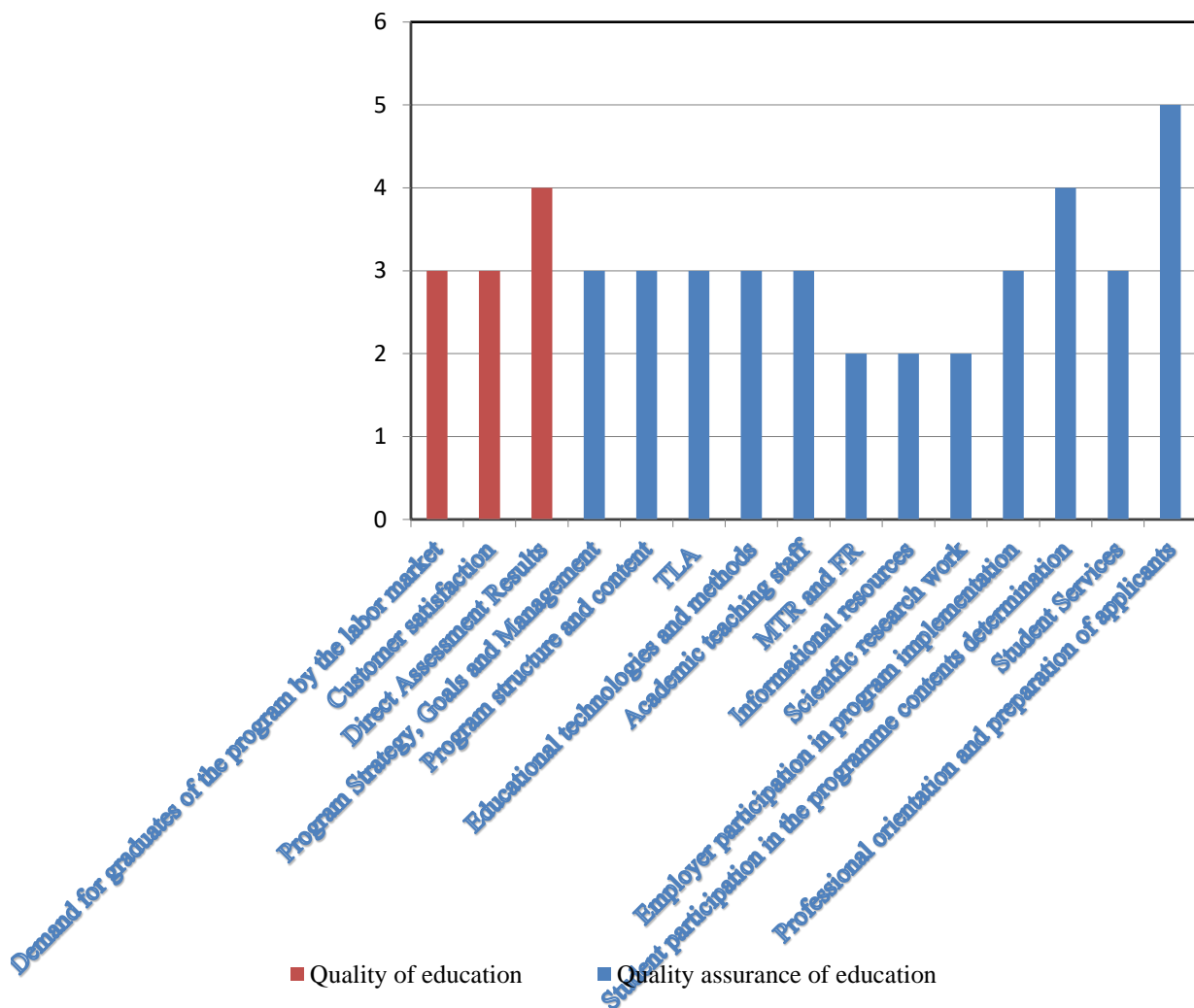
4. Scientific educational literature should be updated (published over the last 10 years), recommended by scientific society (peer-reviewed), and provided in teaching language (English). Ensure access to international electronic library internet resources (for example, Springer Nature - international publishing house, publishes journals, encyclopedia, books, and electronic products for the whole spectrum of field of knowledge. Elsevier — one of four largest scientific publishing houses of the world, which annually publishes about one fourth of all scientific articles published all over the world. Univadis - international information and education medical portal).
5. Modern educational process should be supplemented by the opportunity to master different teaching modules by means of own information and telecommunication system provided at learning resource in Internet.
6. Supplementing of printed materials with video and audio lectures in electronic resource is recommended.
7. Contracts with existing medical organizations are of general nature and do not ensure systematic educational process for 2-6 years of education. It is necessary to update Contracts with employers by detailing the cooperation conditions (what students do on the base of organization, number of students, and who is supervising their activities).

***Assessment profile of the learning outcomes and quality assurance of education***

No.	Criterion	Assessment	
<i>I</i>	<i>Quality of the learning outcomes</i>		
	1.	The demand for graduates of the programme on the labor market	3
	2.	Satisfaction of all consumers	3
	3.	Results of direct assessment of competencies	4
<i>II</i>	<i>Quality assurance of education</i>		
	1.	Strategy, aims and programme management	3
	2.	Programme structure and contents	3
	3.	Teaching and learning aids	3
	4.	Educational technologies and methods	3
	5.	Academic teaching staff	3
	6.	Material, technical and financial resources	2

7.	Information resources	2
8.	Scientific-research work	2
9.	Employer participation in the programme implementation	3
10.	Students participation in the programme contents determination	4
11.	Student services	3
12.	Professional orientation and prospective applicants' preparation	5

**Profile of learning outcomes and educational quality assurance**



## QUALITY OF THE LEARNING OUTCOMES

### ***1. Demand for the graduates of the programme on the federal and regional labor market***

***Criterion assessment: 3***

***Analysis of programme role and place (with indication of statistical data, research agencies data, HR agencies data etc.)***

UMG did not provide the information on this section in self-assessment report. Taking this into consideration, the superficial analysis was done by reviewers based on results of health care system open sources in Republic of Armenia by means of Internet.

Health care system of Republic of Armenia has some difficulties, among which main difficulties are financial, material and technical, and professional.

80,1 billion drams which is 1,4% of GDP and 5,4% of the budget was allocated for health care system in 2018. Based on recommendations of World Health Organization (WHO), medical expenditures should be not less than 5% of country GDP. In other case, in the opinion of this organization specialists, the medical care sphere will not be able to perform its functions efficiently.

Salary of doctors and medical staff in Armenia is very low, especially in state medical institutions. Average salary of the doctor is 200-300 USD. Minimum consumer basket/subsistence level in Armenia is 123,4 USD. The majority of doctors is concentrated in Yerevan where labor market is saturated, whilst acute shortage of doctors of all professions in the regions persists. As per the source (<https://visasam.ru/emigration/perezdsng/rabota-v-armenii.html>) Armenia suffers from shortage of doctors of different professions.

Currently (following the website [www.doctors.am](http://www.doctors.am)) education in the programme «General Medicine» is delivered by the following higher institutions of Republic of Armenia:

1. Mkhitar Geratsy Yerevan State Medical University
2. Armenian Medical Institute (AMI)
3. Yerevan University HAYBUSAK
4. YEREVAN MEDICAL UNIVERSITY NAMED AFTER SAINT THERESA
5. University of Traditional Medicine

Graduates of above mentioned educational institutions receive diplomas which allow employment in Armenia upon completion of education.

***Analysis of information indicators submitted by the higher education institution (conclusions)***

• *The percentage of students combining study at the higher education institution with work in their specialization field: 0%.*

- *The percentage of graduates who found employment within one year after the graduation from the educational institution in the field of education (specialization) within the programme: 96,5%.*
- *The percentage of graduates employed on request of corporate employers: 0%.*
- *The percentage of students trained on request of employers, for example, under tripartite (target) agreements: 0%.*
- *The percentage of graduates working in their specialization fields within the region: 0%.*
- *The percentage of graduates working in their specialization fields outside of the region: 96,5%. No confirmations from employers were provided.*
- *Number of complaints on graduates: 0.*
- *Number of positive feedbacks on graduates from organizations: 3.*
- *The percentage of students in the programme admitted for Master's programmes who have completed training under Bachelor's programmes: 0%.*
- *The percentage of graduates of the educational institution in the programme as related to that of graduates of all other regional higher education institutions in the programme: no data.*

Students of the programme «General Medicine» are not able to combine teaching in the higher educational institution and work in their occupational field. Based on UMG self-assessment report, 28 graduates of 29 (96,5%) employed in Israel. During site visit, the University afforded an opportunity to interview 2 graduates. One of them is now living in Armenia and is in maternity leave. Upon completion of maternity leave she is planning to pass an exam to confirm higher education diploma with further admission to clinical residency of the state university. Passing of exam is required due to lack of state accreditation of UMG «General Medicine» programme in Republic of Armenia.

Interview with second graduate was done by means of video conference. As a result of communication we learned, that at the moment the graduate is not employed by profession, as far as to confirm diploma he should pass an exam before which he is planning to take 5-6 months preparation courses. Upon successful passing of exam, one year internship in the state hospital is required.

Comments on efficiency and quality of programme graduates work were not provided.

Based on the results of self-assessment carried out by the educational institution, the data on graduates placement was provided. Data provided by educational institution was not confirmed in the process of examining of respective documents and interview with graduates of «General Medicine» programme.

## ***2. Satisfaction of consumers with the learning outcomes***

***Criterion assessment: 3***



*The percentage of employers who believe that the competencies of graduates of the programme:*

- *fully comply with the requirements to modern specialists in the industry: 0%.*

- *substantially comply with the present-day requirements to specialists in the industry with minor remarks: 0%.*

- *there are few graduates whose competencies comply with the present-day requirements to specialists in this field:*

- *do not comply with the present-day requirements to specialists in this field: 0%.*

- *The percentage of graduates satisfied with the learning outcomes: 100% of interviewed (2).*

It was not possible to contact direct employers of graduates of UMG «General Medicine» programme during site visit as far as 28 of 29 graduates are in Israel at the moment. Interview with employers, who employ UMG graduates of other professions (dentistry, management, legal science etc.) demonstrated full compliance to requirements placed to present-day specialists by all interviewed employers.

### **3. Direct assessment of competencies by reviewers**

#### **Criterion assessment: 4**

Direct assessment of students competencies was conducted during site visit. 10 2nd term students took part in the direct assessment, which is 38.5% of the first year course. Assessment of all doctor competencies in «General Medicine» profession was problematic because only first year students were available.

The test and the exam materials developed by the educational institution were used in the process of the direct assessment as these materials are recognized as valid by the reviewers. At the same time the interview with 15 (57,7%) students was conducted on the subject of one of disciplines (first aid treatment) studied in the previous term

To carry out competences formation analysis, experts selected the following competences based on educational standard of the field of education 060101 - General Medicine of Higher Professional Education:

- Assessment of competencies characterizing the personal qualities of a person, which are an integral part of his professional competence: (AC-1); (AC-5); (AC-7);

- Assessment of competencies aimed at the development, maintenance and improvement of communications: (PC-26); (PC-31); (PC-32).

- Assessment of professional competencies ("competence core"), including the competencies reflecting the need (requirements) of the regional and/or federal labor market, depending on the main consumers of programme graduates: (PC-4); (PC-21);

On performing the direct assessment of competencies, the following test and exam materials have been used by the reviewers: tests on disciplines «**Human Anatomy**» and «**First Aid**», questions, case problems.

***EXAMPLES OF TEST CASES:***

**Please list the branches of sympathetic trunk thoracic ganglions:**

1. pulmonary nerves;
2. esophageal nerves;
3. phrenic nerves;
4. thoracic cardiac nerves

**Please list organs from which the venous blood flows to lower mesenteric vein:**

1. straight intestine;
2. urinary bladder;
3. sigmoid colon;
4. descending colon

**Please list zones of adrenal gland, which cells release hormones called as glucocorticoids**

1. zona glomerulosa;
2. brain matter;
3. reticular zone;
4. zona fasciculate

**Please list structures located behind the vaginal opening**

1. sigmoid colon;
2. straight intestine;
3. round ligament of uterus;
4. abdominal membrane

**Please list structures forming the femoral triangle**

1. femoral arch;
2. tailor's muscle;
3. rectus muscle of thigh;
4. adductor longus

**How to administer aid in case of burn with hot water?**

1. Smear the burned section with uncture or lotion, and apply sterile dressing.
2. Wash burned section with cold water for 10 minutes, apply sterile dressing, administer pain medications.
3. Dust burned area with baking soda, apply sterile dressing.

**How does fatigue influence the concentration and reaction of the driver of vehicle?**

1. Concentration impaired, reaction stays the same.
2. Reaction impaired, concentration increases.
3. Reaction and concentration impair.

**How to provide aid in case of fracture of upper arm bone?**

1. Hang the hand on scarf bandage, administer pain medication.
2. Fix the hand to the body.
3. Put the swab in axillary region, shorten arm in elbow joint, and apply a splint from health shoulder girdle to finger tips, administer pain medication.

**Hot to start bandaging of chest in case of its injury?**

1. During expiration, from the lower part of the chest.
2. During inspiration, from the middle of the chest.
3. During expiration, from axillary cavities.

**Ho to apply transportation splint in case of fracture of forearm bones?**

1. From finger tips to elbow joint.
2. From finger tips to upper third of the arm.
3. From wrist joint to upper third of the arm.

**To reduce blood flow in case of blood issuance from a wound on limbs of the victim, the following should be done:**

1. Settle the victim.
2. Lay the victim down and lift the limb.
3. Set the victim on his legs.

**What is the purpose of MAH traumatic bandage with dioxydine in the car first aid kit?**

1. To arrest bleeding.
2. To bathe untidy wounds.
3. To reduce pain in case of fractures.

**How to provide aid in case of first degree burns?**

1. Open the burn blister, apply salve dressing.
2. Do not open blisters, process skin with 5% iodine alcohol solution.
3. Cool down the burned area, do not open blisters, apply sterile gauze and cotton dressing.

**How to provide aid in case of fracture of clavicle?**

1. Apply two splints on the shoulder.
2. Fix the hand to the chest.
3. Apply Default's gauze bandage.
- 4.

***EXAMPLES OF CASE TASKS:***

**Deviation of the tongue from the midline while putting out. This occurs in case of effect of:**

1. lingual nerve;
2. cord of tympanum;

3. mandibular nerve;
4. hypoglossal nerve

**Thoracic girdle of the patient is sunken from the one side. Palsy of which nerve could be assumed:**

1. vagus nerve;
2. glossopharyngeal nerve;
3. transverse nerve of neck;
4. suprascapular nerve;
5. accessory nerve

**Which nerves palsy effect injury of the core or the stem of facial nerve:**

1. masticatory muscles;
2. tongue muscle;
3. eye bulb;
4. face muscles;
5. soft palate

**Patient with phlegmon in digastric triangle was not provided with timely and complete medical aid. After some days pain in swallowing appeared. Examination showed redness and evagination of pharyngeal wall. To which cellular space the purulence was expanded?**

1. submaxillary space;
2. parapharyngeal space;
3. episternal space;
4. space of neurovascular tract of the neck;
5. front mediastinal space

**Annular cartilage of patient was damaged due to wrong tracheotomy manipulations. After some time, the disturbance features of food transit through the pharynx were observed. Functions of which pharynx muscles at that were impaired?**

1. superior constrictor muscle of pharynx;
2. middle constrictor muscle of pharynx;
3. inferior constrictor muscle of pharynx;
4. stylopharyngeal muscle;
5. palatopharyngeal muscle.

Based on results of direct assessment of competences reviewers identified enough level of competencies related to personal qualities and connected with communication abilities development. However, assessment of professional competencies demonstrated lower level of knowledge. Detailed assessment of competences mastery level is given in the table below.

Level	Sufficient level (students coped with 80 % of the proposed tasks)	Acceptable level (percentage of the solved tasks is from 50 to 79 %)	Low level (percentage of the solved tasks is less than or equal to 49
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Share of students			%)
Results of direct evaluation of competencies characterizing the individual's personal qualities as an integral part of their professional competence			
90%	+		
10%		+	
The results of direct assessment of competencies aimed at the development, maintenance and improvement of communications			
90%	+		
10%		+	
The results of direct assessment of professional competencies ("competence core"), including the competencies reflecting the need (requirements) of the regional and/or federal labor market, depending on the main consumers of programme graduates			
70%	+		
20%		+	
10%			+

**Writing of graduate qualification works while preparing of specialists in «General Medicine» programme is not foreseen.**

#### *Conclusions and recommendations of reviewers*

##### **Conclusions:**

Firm conclusions concerning demand for graduates of «General Medicine» programme at labor market could hardly be made as far as there was no opportunity to interview direct employers of this programme graduates during site visit, and documented comments were also not provided. Objective cause of that could be the fact, that all employers are in Israel.

Interview and testing of first year students of educational programme demonstrated sufficient and acceptable levels of competences mastering, satisfaction with educational process, and strong motivation in receiving of education.

Interview of two graduates showed the verbal complete satisfaction with received education and its quality, at the same time none of graduates is employed by profession at the moment.

The most significant difficulties related to employment of «General Medicine» programme graduates in the region is missing of state accreditation of the programme in Republic of Armenia, missing of intentional learning contracts with employers (legal entities) related hereto, as well as necessity of diploma confirmation in other countries. Nevertheless, the management does not set the task for graduates employment in the region.

**Recommendations:**

1. Receiving of state accreditation of «General Medicine» programme in Republic of Armenia.
2. Performing analysis and assessment of demand for doctors at national labor market.
3. Opening and state accreditation of clinical residency in the most demanded medical professions.
4. Signature of specific contracts for preparing of medical specialists with national employers.
5. Signature of specific contracts for preparing of general practice doctors with peripheral medical and preventive treatment facilities of Republic of Armenia.
6. Cooperation with international student services specializing in selection of educational institution (QS World University Rankings, Shanghainese Ranking etc.).
7. Conducting of PR campaigns of «General Medicine» educational programme among potential employers in rapidly grown regions (South-East Asia etc.).

Survey data results submitted by educational institution was not confirmed by reviewers during full-time visit while conducting random survey of students due to the fact that at the moment of visit to UMG only first year students received education. For this reason it was difficult to evaluate the level of mastering of majority of competences. However, direct assessment of the quality of available competences mastering showed sufficient and acceptable level of knowledge.

This allows reviewers making conclusions on acceptable level of teaching at the first year of «General Medicine» programme in UMG.

## QUALITY ASSURANCE OF EDUCATION

### *1. Strategy, aims and programme management*

*Criterion assessment: 3*

#### *Strengths:*

The mission of educational programme «General Medicine» is to create conditions for fundamental and practical education of specialists based on international standards, national traditions of higher medical education, and to ensure competitiveness of UMG graduates at national and foreign labor markets.

#### *Recommendations:*

The peculiarity of specialists education in «General Medicine» programme is a low demand of graduates without further training in clinical residency.

Several directions in development strategy with regard to involvement of graduates in postgraduate training and/or employment could be emphasized:

- In-depth mastering of practical competences for employment as general practice doctor with parallel conclusion of contracts with national employers;
- In-depth training of graduates for admission to state clinical residencies most demanded at labor market;
- Opening and state accreditation of the most demanded programmes of postgraduate education in UMG.

While emphasizing the strategic development in the field of international labor market, the following is required:

- Conducting of research to identify countries and regions with high demand in programme graduates.
- After identification of potentially suitable countries for further employment of graduates, the object-oriented preparation of graduates for forthcoming confirmation exams will be required.
- Commencement of performance on promotion of UMG in different student, academic, and specialized resources of Internet.
- Conclusion of contracts with potential partner higher educational institutions in other countries concerning education of students in double degree programmes.

Employers were interviewed during the site visit. Interview with employers who employed graduates of «General Medicine» programme of UMG was not performed as far as these employers were not represented.

During site visit reviewers performed testing and interview of first year students which allow reviewers making conclusion on satisfaction of students with education quality, strong motivation of students, involvement of students and student Council in the process of education quality assessment. This approach does not have a consistency, however it's availability was proven by examples.

In the process of self-assessment by the educational institution, the data on teachers' satisfaction with the personnel policy and applicable motivation system has been presented.

In the course of the site visit, the teachers participating in programme implementation have been interviewed.

Based on interviews, reviewers made a conclusion on extremely high motivation, relatively high financial satisfaction, psychological comfort, and involvement in the evaluating of educational process quality (without consistent approach) of interviewed teaching staff and provided recommendations to make existing feedback system used by UMG management with students and teachers more transparent, as well as inform of financial and non-financial motivation criteria all employees.

## **2. Programme structure and contents**

### **Criterion assessment: 3**

#### **Strengths:**

Educational programme «General Medicine» was developed based on two educational standards: State Educational Standard in the field of higher professional education approved by the Order of Ministry of Education and Science of Armenia No. 81-N dated 03.04. 2010 and State Educational Standard in the field of education 060101 - General Medicine of Higher Professional Education.

#### **Recommendations:**

A set of documents required for educational programme implementation should be structured and all its sections should be coherent with one another:

- A set of documents should include standard based on which the programme was developed;
- Curriculum should include disciplines which are actually delivered in the process of programme mastering;
- Availability of elective part of the curriculum is preferable;
- Competency matrix should only include competences mastered within the definite discipline;
- Disciplines syllabi should contain competences mentioned in competency matrix;
- Disciplines syllabi should correspond to academic block of curriculum;
- Disciplines syllabi should be cited in accordance with curriculum;
- Implementation of disciplines should correspond to curriculum with regard to credits, hours, and terms;
- Disciplines syllabi should contain the volume of discipline in accordance with curriculum as well as types of academic work;
- Documents containing teaching, learning and information resources for disciplines should contain modern English-language literature and information network resources;
- Information on material and technical resources used by disciplines should contain updated data on classrooms with their numbers, availability of equipment for seminar, lecture, and lab sessions with indication of equipment model and its quantity;
- "Laboratory data sheet" for laboratory classrooms is preferable;
- Methodical recommendations for implementation of disciplines should contain detailed description for each class;
- Evaluation tools for each discipline should be more variable and linked to assessment of specific disciplines mastering.

This update of required teaching and learning documentation should be implemented for its further presentation to students. after familiarization with



updated documents the students will have an opportunity to understand the educational process to the full extent, be aware of its structure and coherence, understand orientation of disciplines mastering for both classroom and individual education aspects. Familiarization with the structure of educational process will allow developing an individual curriculums for each student considering his further career ladder and mastering of required disciplines of the elective part.

To implement above mentioned updating of documentation, the following is required:

- Using of updated State Educational Standard in the field of higher professional education «General Medicine»;
- Creation of Methodological Council from UMG teaching staff for development of University educational standard based on existing possibilities and selected development strategy;
- Creating of common sample of educational programme disciplines with adding structure description and required sections by the Methodological Council;
- Involvement of teachers with required professional specializations in development of respective disciplines syllabuses, practices, and state attestation;
- Translation of set of documents into English and its posting on UMG information resource for information of all students.

In the course of the site visit, the experts held meetings with students of the assessed programme. One of the issues discussed was the relevance of the structure and content of the programme to the expectations of direct consumers of programmes – students.

Based on meetings results, experts made a conclusion that educational programme documentation is not available for students as far as it is not posted in educational resource and not translated into English.

### **3. *Teaching and learning aids (TLA)***

#### ***Criterion assessment: 3***

#### ***Strengths:***

Educational institution developed the regulation «on teaching and learning documents» regulating development of TLA of disciplines foreseen by curriculum of educational programme

#### ***Recommendations:***

- TLA structure should have logical sequence of available documents.
- All documentation complex should be provided in the state language (Armenian), and language of educational programme implementation (English).
- TLA should be freely available on educational resource of the University.

- TLA structure should include State Educational Standard of Higher Education in «General Medicine»; educational standard developed by educational institution taking into account peculiarities of students population and UMG development strategy; curriculum; competency matrix; disciplines syllabi, practices, and State Final Attestation corresponding to curriculum and competence and developed based on regulation «on teaching and learning documents»; competences which should be mastered in the process of disciplines study should correspond to competency matrix and disciplines specific character.
- Disciplines syllabi should include methodological recommendations for students concerning study in each class.
- Curriculum should be separated into cycles which should include the basic and elective components

During the site visit, the reviewers got acquainted with the teaching and learning materials developed in the educational institution.

Reviewers make hypothesis on the low level of teaching and learning materials available. State Educational Standard based on which educational programme «General Medicine» is implemented was not provided. Curriculum does not contain elective part. Titles of programme disciplines do not comply with curriculum to the full extent. Submitted discipline programmes do not comply with the regulation «on teaching and learning documents» of UMG to the full extent. Competence matrix does not have competences represented in discipline syllabi. Discipline programmes contain outdated Russian-language literature sources, whereas programme is delivered in English.

During the site visit, the reviewers analyzed test and exam materials used by the educational institution for ongoing monitoring of academic performance. Based on that, reviewers made a conclusion on acceptable level of test and exam materials for disciplines delivered during first year of study.

Based on results of full-time visit and interview with students, experts make a conclusion that TLA are not available for students as far as it is not translated into English and are not freely available.

The opportunity to get acquainted with TLA should be provided to the student for better orientation in educational programme mastering, selection of elective disciplines, and development of recommendations on materials correction.

Due to that fact, reviewers recommend educational institution to intensify efforts on modernization of TLA, translation of documents into English, and posting of TLA on educational resource.

#### **4. *Educational technologies and methods***

***Criterion assessment: 3***

### ***Strong points of the programme***

26 students are educated on the programme «General Medicine» at the moment. Education process is separated into subgroups. Such number of students allows delivering of different orientation classes with high efficiency and sufficient involvement of each student in discipline mastering.

### ***Recommendations:***

To achieve maximum discipline mastering the following is required:

- organize an atmosphere of competition among students with regard to progress level and further encouragement of the best students;
- deliver master classes for students taking into account audience and delivered disciplines;
- ensure anytime access to Internet for students;
- ensure implementation of e-learning on programme level;
- ensure required qualification of teaching staff for e-learning implementation;
- implement computer technologies in educational process to allow simulating of different processes in virtual reality;
- ensure communication between student and teacher for consulting by means of remote access.

Such optimization of educational process will allow improving the quality of graduates training and alignment to modern requirements of labor market without gaps in mastering of modern educational methodologies.

To ensure transition to modern educational technologies it is necessary to create the own information and telecommunication system with further training of teaching staff and accessibility for students.

During the site visit, the reviewers visited the class, the analysis of which is presented below.

Full name of teacher    Magrarita Ovannisyan\_\_\_\_\_

Groups/profession    General Medicine\_\_\_\_\_

1. Discipline/module    General Chemistry\_\_\_\_\_

2. Type of learning session    Lecture

3. Theme: \_\_\_\_\_

4. Purpose: \_\_\_\_\_

5. Learning objectives

6. Material and technical resources:

7. Specify:

### **THE EVALUATION OF THE PROFESSOR**

<b>N o.</b>	<b>Analysis criteria</b>	<b>Indices</b>	<b>Mark (0,1,2)</b>
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1.	Compliance with the training schedule	Timely start, end of class, time-balanced sections.	2
2.	Organizational issues	Greeting. Topic, goal messaging (connection of the goal with the competences formed).	2
3.	Motivation of students for upcoming activities	Indication of relevance, the formed professional and / or social and personal competencies.	2
4.	Psychological climate in the classroom	The presence of positive emotional interaction between teacher and students; mutual benevolence and audience involvement.	2
5.	Quality of presentation	Structured material; the clarity of the current tasks; systematic and accessible presentation; adaptability of presentation to the peculiarities of the audience; availability of examples, relevant facts.	2
6.	Conformity of the content to the course programme	Compare with the discipline syllabus (teaching and learning materials).	2
7.	Use of visual materials	Course book, tutorial, hand-outs, tables, figures, etc.	1
8.	Declamatory skills	Audibility, intelligibility, euphony, literacy, speech tempo; facial expression, gestures, pantomime; emotional intensity of the performance.	2
9.	Audience sensitivity	The ability to respond in time to changes in perceptions of the students.	2
10.	Correctness in relation to students		2
11.	Methods of organizing attention and regulating students' behavior	Increased interest among the audience (interesting examples, humour, rhetorical devices, etc.); involvement of the audience into a dialogue, in the process of performing tasks, etc. But it is unaccepted: to call upon the attention of the audience in an open form; to demonstrate disapproval; to use the methods of psychological pressure, or blackmailing.	2
12.	Maintaining "feedback" with the audience during the class	Control of learning outcomes.	2

13.	Summarizing the learning session ( <i>reflection organization</i> )	The organization of reflection, during which students actively discuss the outcomes	2
14.	Image	Compliance with corporate style, presentability, charisma	2
15.	Final evaluation		2
16.	Remarks and proposals of reviewers – the lecture in "General Chemistry" discipline visited by reviewers demonstrated the high professional qualification of the teacher and delivering of class at sufficient methodological level. To improve educational process efficiency, use of multimedia equipment is recommended.		

While performing the desktop analysis of the self-assessment report, the analysis of the curriculum and the schedule of the classes, the experts determined that the percentage of learning sessions in an interactive form on the programme is 5% on average. During the site visit, teaching and learning documents of two disciplines were studied. Data on the learning sessions conducted in an interactive form in the context of the studied teaching and learning documents are presented below. Based on mentioned fact, reviewers make conclusions on sufficient level of delivery of such routine sessions as lectures and seminar classes, but insufficient level of involvement of advanced information and technical teaching methodologies.

## **5. Academic teaching staff**

**Criterion assessment: 3**

### **Strengths:**

At the moment of site visit, the teaching staff was presented by 13 teachers. Strong point of involved employees is their high enthusiasm in teaching and motivation in improvement of educational process. All employees are proficient in English which increase their competitive ability at labor market. University management provides employees with opportunity for qualification increase courses.

### **Recommendations:**

- Recruit teaching staff with specialists able to fully implement the program «General Medicine» in English;
- Create and maintain staff reserve for all delivered disciplines at sufficient level;

Curriculum of «General Medicine» profession developed by UMG contains 71 disciplines. To ensure successful programme implementation, involvement of

many specialists with documented proof of specialization in delivered disciplines and proficiency in English is required.

Analyzing the facts stated by the educational institution in the self-assessment report, the reviewers have arrived at the conclusion that the presented teaching staff data requires updating. At the moment of full-time visit, the teaching staff structure included 13 teachers involved to deliver first year disciplines.

Based on analysis of submitted data, reviewers made the following conclusions: the number of teachers to implement programme is not enough, there is no teaching staff reserve, programme coordinators are recommended to complete educational process with minimum required teaching staff composition.

Upon additional request of reviewers, the contracts with second year teachers as well as comprehensive list of teachers planned for involvement in further courses was provided.

## **6. *Material, technical and financial resources of the programme***

### ***Criterion assessment: 2***

#### ***Strengths:***

The building where classes are delivered is long term leased by the University. The University has distributed income sources. Apart from higher education programmes, Mkhitar Gosh University has also school and nursery school.

#### ***Recommendations:***

Minimum requirements to implement educational programme for specialists training includes access to

- university laboratories having all required equipment in physics, mathematics, chemistry, biology, biological chemistry, physiology, microbiology, virus science, pharmacology, pathological anatomy, morbid physiology;
- anatomy room, anatomy museum, room for dead bodies storage;
- classrooms with modern projectors to study humanitarian and social and economic disciplines, hygiene, public health and health care; or implement personal data tablets in educational process;
- rooms equipped for reception and demonstration of patients;
- doctor's offices with all equipment required for work with children and teenagers receiving disease prevention, diagnostic, medical (therapeutic and surgical), and rehabilitation treatment.
- The University has to be provided with the required package of licensed software.
- Creation of simulation classroom or signature of contract for visiting of such classroom in other higher institution if preferable.
- Building and classrooms should be equipped for physically disabled persons.

Availability of minimum comprehensive material and technical support of all disciplines, modules, and practices in accordance with approved curriculum will allow implementing educational process on «General Medicine» programme.

To ensure the proper material and technical support, the following is required: increase share of UMG expenses for this item, conclude lease contracts for different equipment, conclude contracts with external organizations to deliver educational classes with involvement of their material and technical resources.

During the site visit, the reviewers have interviewed students and professors participating in the programme implementation for satisfaction with the quality of lecture halls. Obtained data as well as personal assessment of lecture halls during site visit allow reviewers making conclusion on the abysmal level of material and technical support for the first year disciplines.

Chemical laboratories are required. As to the rest, the material and technical support for the first year of study is sufficient. Material and technical base required for implementation of next courses of study was not submitted to experts during full-time visit. However, appropriate support for implementation of educational process for 2-6 courses of study is required.

## **7. Information resources**

### ***Criterion assessment: 2***

#### ***Strengths***

Students trained on the programme «General Medicine» have an opportunity to use electronic library collection for first year disciplines of Yerevan State Medical University by means of Internet.

#### ***Recommendations:***

For comprehensive support of educational process, creation of the own information and telecommunication system is required. The functional of such resource should ensure the following:

- post organizational materials foreseen by educational standard (curriculum, discipline syllabi, learning and teaching documents etc.) in English;
- post modules of disciplines on the whole curriculum including teaching and learning materials, access to information and library collection, and evaluation tools in English;
- evaluate mastering of learning outcomes (on-line testing and performing of other tasks);
- virtual study rooms;
- personal accounts of students; structure of education quality assessment in the real-time mode;

- information management system designed to ensure technical support of processes related to e-learning.

Availability of information and telecommunication system will allow delivering educational process on «General Medicine» programme at advanced competitive level.

To ensure the proper information support, the following is required: increase share of UMG expenses for this item, conclude contracts for purchasing or lease of required number of servers and corresponding equipment, involvement of appropriate technical staff.

## **8. *Scientific-research work***

***Criterion assessment: 2***

### ***Strengths***

As of this date the Student Research Society (SRS) with involvement of first year students was founded.

### ***Recommendations:***

- Ensure comprehensive staffing of «General Medicine» programme.
- Ensure material and technical support of medical faculty
- Identify the most perspective scientific and research fields.
- Ensure targeted financing of top priority scientific and research fields.
- Agitate the student society to participate in research work.

Comprehensive research work is possible only in case of functioning departments with sufficient number of staff (teaching and auxiliary staff), required material and technical support, and targeted financing. Consequences of that should be scientific publications in top rated scientific periodicals with affiliation with UMG, defense of Ph.D. and Doctors dissertations by University employees with further implementation of advanced experience in educational process.

Documents of educational institution self-assessment contain data on results of previously executed research work by profile departments with further publication of 167 academic papers in the leading Armenian and international journals. Analysis of Scopus database did not demonstrate publications having affiliation with UMG. First year students of «General Medicine» programme are not involved in research work and were not able to evaluate the influence of research work for education quality. Experts make conclusions on low research work activity at the moment and recommend to implement above mentioned recommendations.

## **9. *Employer participation in the programme implementation***

***Criterion assessment: 3***



***Strengths:***

The programme «General Medicine» implemented by UMG is at the moment aimed at external (foreign) employers which could allow preparing the specialists of international level in the perspective.

In the process of programme implementation, master classes by representatives of professional medical community of Armenia are delivered.

***Recommendations:***

Involvement of employers in implementation of «General Medicine» programme of UMG could have two options:

- orientation of programme graduates at national employer;
- active involvement of foreign employers to deliver educational process at all levels (from improvement of educational programmes to financial support of employer-sponsored students and advanced scientific and research fields).

To implement the first option the following is required: receiving of state accreditation of «General Medicine» programme in Republic of Armenia; performing of doctors demand assessment at national labor market; opening and state accreditation of clinical residency in the most demanded medical professions; conclusion of employer-supported contracts for preparing of doctors with national employers; conclusion of employer-supported contracts for preparing of general practice doctors with peripheral medical and preventive treatment facilities of Republic of Armenia.

To implement the second option the following is required: conducting of PR-campaigns of «General Medicine» educational program among potential employers in countries with fast-growing economy (South-East Asia etc.); conclusion of contracts on preparing of specialists for different regions considering specific features of local disease rate; involvement of foreign specialists for delivering of lectures and master classes; ensuring academic mobility of students and teachers to foreign centers of potential employers.

The self-assessment report of the educational institution provides no information on the results of the survey of direct employers of "General Medicine" programme graduates regarding their satisfaction with the quality of graduate training.

At that, employers of UMG graduates of other educational programmes declared, that all their required professional competencies are developed at sufficient level.

This allows making conclusions of the poor involvement of employers of «General Medicine» programme graduates in programme implementation and recommend to implement above mentioned recommendations with receiving of feedback from direct employers of 28 graduates living in Israel at the first stage.

## ***10. Students' participation in the program contents determination***

***Criterion assessment: 4***

### ***Strengths:***

Student Council participation in education quality assessment, identification of educational process weak points in both content of different modules and teaching staff at the medical faculty is organized. Survey of all students concerning their satisfaction with educational process after each term is conducted.

### ***Recommendations:***

- Conducting of students survey on educational program content, teaching and learning documents of finished disciplines.
- Organization of system approach in implementation of education quality assurance process with clear structuring of the feedback from University management to each student is preferable.
- Control execution of decisions made by Student Council of the faculty
- Development of Code of Conduct for students and teachers regulating rights and responsibilities of the parties for early resolving of disputable issues is preferable.
- Development of students material and non-material incentives system for high progress results in disciplines mastering.

Optimization and structuring of students community participation will allow modifying content of educational program considering end users opinion.

During the site visit, reviewers analyzed participation of students in student self-governance bodies by means of interviews with Student Council representatives. Based on interview results the general satisfaction with educational process, considering requests and claims of students by UMG administration with further reacting was declared. Concurrently, the lack of system approach in organization of this process was identified. Based on analysis of submitted data, reviewers make conclusion on moderate involvement of students community in programme implementation and recommend continue further integration of Student Council in educational process modification.

## ***11. Student services at the programme level***

***Criterion assessment: 3***

### ***Strengths***

The Regulation on the mentor of academic group aimed at system work on prevention of social misconduct and promotion of healthy lifestyle is developed in the University. Creative and sport associations of students in UMG are founded.

### ***Recommendations:***

- Develop incentive system (discounts for educational programmes payment) for high progress in disciplines mastering.
- Develop complex of actions on adaptation and ensuring equal opportunities for persons with disabilities (hearing-impaired, vision-impaired, persons with defects of supporting-motor apparatus).
- Develop academic mobility system for highly motivated students in their profile training at national and international levels.
- Implement an opportunity to connect to educational resource of the University at the level sufficient for all students (making website compatible with all gadgets and devices and posting all information on students life there).

Development of different auxiliary services will increase the level of student socialization for the time of educational programme mastering, make educational process easier for students, and increase level of students motivation.

Establishment of above mentioned changes is possible in case of creation and implementation of Regulation «in incentivation of students with high performance results», Regulation «on academic mobility of students», as well as technical support of equipment providing wireless high-speed access to Internet.

During the site visit the documents confirming availability of different students services which were evidenced in the process of students interviews have been submitted to reviewers.

Based on submitted data analysis, reviewers make conclusion on sufficient level of student services and recommend to implement the more expressed differential approach to students with high performance results.

## ***12. Professional orientation and preparation of applicants***

### ***Criterion assessment: 5***

#### ***Strengths:***

Educational institution provide the whole complex of possible enrollees preparation including nursery school, secondary school, and 6 months preparation classes for admission to «General Medicine» programme. Successful completion of mentioned classes is considered as passing of entrance exams. At the moment of full-time visit, 38 enrollees from India were trained in preparation classes.

#### ***Recommendations:***

Considering orientation of educational institution at preparing of foreign specialists, intensifying of performance to improve awareness of UMG in international environment of applicants and creation of favorable conditions for admission, training, and accommodation of potential students is required.

Availability of institution profile at international platforms could increase interest of foreign students in «General Medicine» programme.

To implement mentioned changes, the University administration is recommended to start cooperating with such services as [www.topuniversities.com](http://www.topuniversities.com) and [www.shanghairanking.com](http://www.shanghairanking.com). The own information and telecommunication system for informing and remote attraction of potential students should be created in parallel.

Based on submitted data, reviewers recommend to implement above mentioned actions aimed at increasing of international rating of «General Medicine» programme implemented by UMG.

## CV OF THE REVIEWER (*REVIEWERS*)

Full name of the reviewer: Sergey Leonidovich Voznesenskiy

Place of work and position	Peoples' Friendship University of Russia, Associate Professor
Academic degree, academic title	Ph.D. Medical Science
Additional titles, degrees	
Education	higher education
Professional achievements	
Research interests	Infectious diseases, epidemiology
Practical experience in the field of the programme subject to expert evaluation	11 years

Full name of the reviewer: Vagram Araratovich Movsisyan

Place of work and position	Anesthesiologist-Reanimatologist of Research Institute of Emergency Medicine named after N.V. Sklifosovsky
Academic degree, academic title	
Additional titles, degrees	
Education	Higher Education
Professional achievements	
Research interests	
Practical experience in the field of the programme subject to expert evaluation	More than 5 years

Full name of the reviewer: Mikhail Asmankin

Place of work and position	Student of Medical Residency Moscow Clinical Scientific Center named after A.S. Loginov, profession: X-ray Radiography
Academic degree, academic title	
Additional titles, degrees	
Education	Higher Education
Professional achievements	
Research interests	
Practical experience in the field of the programme subject to expert evaluation	4 years