

# Program Evaluation & Quality Enhancement Report

2023-2025

Program: General Medicine (MD)

Language: Armenian

Evaluation Cycle: 2023–2025

Education Quality Assessment and Assurance Center, YSMU

Framework: Based on WFME, ANQA & ESG Standards

## 1. Executive Summary & QA Effectiveness Statement

Program Health Status:

The General Medicine program is currently undergoing a "qualitative leap" driven by two major strategic shifts: the transition to a modular (integrated) curriculum and the digitization of educational management. The evaluation period (2023–2025) demonstrates that while the program has successfully solved the issue of theoretical overload and passive learning, it currently faces "implementation gaps" regarding interdisciplinary coordination and clinical competency in senior years.

### Key QA Interventions & Impact:

- **Curriculum Transformation:** In direct response to employer feedback citing a lack of practical skills, the program moved to a modular system, increasing the practical component weight up to **50%** in select modules.
- **Assessment Reform:** The Objective Structured Clinical Examination (OSCE) was institutionalized as a mandatory final attestation stage. **85%** of graduates now rate the objectivity of OSCE committees positively.

- **Digital Infrastructure:** The implementation of the Digital Education Management System (DEMS) has been a "resounding success," achieving **99.9% uptime** and fundamentally modernizing the university's administrative infrastructure.
- **Feedback Culture:** The university has established a reliable evidence base for decision-making, evidenced by high participation rates (e.g., **2,096** students in lecturer evaluations and **308** graduates in exit surveys).

## 2. Program Description

### 2.1 General Specification of the Educational Program

|                                                                            |                                                                                                                                 |
|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| <b>Program Title</b>                                                       | General Medicine, One – Step Educational Program                                                                                |
| <b>Education Level<br/>NFQ Level/EHEA<br/>Level/Dublin<br/>Descriptors</b> | ANQF MA (7 <sup>th</sup> ) / ENQF MA (7 <sup>th</sup> ) / Dublin Descriptors MA (2 <sup>nd</sup> cycle)                         |
| <b>Program Director</b>                                                    | Prof. Konstantin Yenkeyan, MD, PhD, Dr.Sci.                                                                                     |
| <b>Qualification Degree</b>                                                | Medical Doctor (MD Physician)                                                                                                   |
| <b>Specialty</b>                                                           | “General Medicine”, Code 91201.00.7 (ISCED-F (International Standard Classification of Education) 2013 codes: “0912 Medicine”). |
| <b>Study Duration</b>                                                      | 6 Years                                                                                                                         |
| <b>Work Load</b>                                                           | 360 ECTS credits (1 ECTS credit - 30 hours)                                                                                     |
| <b>Language of Instruction</b>                                             | Armenian                                                                                                                        |
| <b>Mode of Provision</b>                                                   | Full-time                                                                                                                       |

### 2.2 Vision of the MD Educational Program

The vision of academic program is to prepare knowledgeable and competent medical graduates for general medicine – generalists –, who can easily continue his/her postgraduate training in clinical practice, biomedical research, and public health with high responsiveness to society.

### 2.3 Architecture of the Program

In concept the program is based on the following pillars:

- "General Education/Introduction to Medicine", which anchoring general educational knowledge needed for further development of university-educated person.
- "Structural Medicine", which gives main knowledge in understanding of structure of human body.

- "Functional Medicine", which gives main knowledge in understanding of physiological, biochemical and molecular processes of human body function.
- "Preclinical Medicine or Basics to Pathological Medicine", which gives main knowledge in understanding the pathogenesis of the diseases, pathomorphology and principles of treatment.
- "Clinical Medicine", which gives main knowledge in understanding epidemiology, treatment, prevention and rehabilitation.

Each pillar includes logistically organized, partially integrated with horizontal and vertical links, as well as helically continued modules (see Curriculum for the Educational Program of Certified Physician/Diploma Specialist in YSMU, attached).

During each academic year students must have both mandatory and elective courses. More than 20 elective courses are offered to students for their choice.

### 3. Deep Dive: Student Performance Analysis

The 2024-2025 academic year demonstrates a **recovery trend** for the faculty. The overall academic performance index rose to **75.56%**, surpassing the previous year's **71.3%**. However, this growth is not uniform. The program shows a "barbell" effect: strong performance at the beginning (Year 1) and end (Year 6) of the curriculum, but significant structural weaknesses in the middle years (Year 3), characterized by high attrition and stagnation in key biomedical subjects.

#### Year-by-Year Academic Performance Analysis

##### Year 1: The "Adaptation Success" Story

- **Performance Surge:** The Year 1 cohort showed the most significant year-over-year improvement, jumping from **71.5%** to **80.81%**.
- **Subject-Level Breakdown:**
  1. **Module 3 (Histology/Bio-physics):** "Good" grades (45.5%) significantly outnumber "Satisfactory" grades (19.8%) in 24-25, compared to 23-24 where "Good" was 37.3%. This indicates a deeper grasp of material, not just a higher pass rate.
  - **Module 4 (Anatomy):** The failure rate dropped from **11.4% (23-24)** to **7% (24-25)**. This suggests that interventions in the Anatomy curriculum or support systems are working.

## Year 2: Signs of Regression

- **Performance Dip:** Unlike Year 1, Year 2 saw a slight decline in overall performance, dropping from **76.8% (23-24)** to **75.38% (24-25)**.
- **The Bottleneck - Module 10:** While Module 9 had a 97% pass rate, **Module 10** lagged at **91.4%**, with a relatively high percentage of "Satisfactory" grades (22.7%) compared to other modules. This module appears to be the primary academic hurdle for this cohort.

## Year 3: The Critical "Crisis Point"

- **The "Pass" vs. "Quality" Paradox:** While the pass rate rose (63.34% vs. 56.2%), the quality of grades in key subjects stagnated or declined.
- **Pharmacology:**
  - **23-24:** 31.1% "Good" / 32.4% "Satisfactory"
  - **24-25:** 29.5% "Good" / 32.15% "Satisfactory"
  - *Analysis:* The percentage of high performers dropped. The subject remains a major barrier with a **20% failure rate** (Unsatisfactory) in 24-25.
- **Pathological Anatomy:** Despite the pass rate improvement, **22.2%** of students still failed this subject in 24-25. It remains one of the highest failure-rate subjects in the entire curriculum.
- **Pathophysiology:** Showed positive growth, with "Excellent" grades rising from 10.2% (23-24) to 16.7% (24-25).

## Year 4: The Obstetrics & Gynecology Anomaly

- **General Uptrend:** Overall progress increased to **78.05%**.
- **The Specific Concern:** In **Obstetrics & Gynecology 2**, there was a sharp decline in "Excellent" performance:
  - **23-24:** 49.6% Excellent
  - **24-25:** 37.6% Excellent
  - *Analysis:* A >10% drop in "Excellent" grades suggests either a change in examination difficulty or a disconnect in the clinical teaching of this specific module compared to the previous year.

## Year 5: Clinical Specialization Success

- **Pediatrics Recovery:** **Pediatrics 1** saw a significant reduction in failure rates, dropping from **10.6% (23-24)** to **8.6% (24-25)**.
- **Nephrology Spike:** This subject saw an anomaly in high grades. "Excellent" grades jumped to **51.8%** in 24-25, compared to 47.6% in 23-24. While positive, such a high "Excellent" rate (over 50%) might warrant a review of assessment rigor.

## Year 6: High Performance Variance

- **Overall:** Highest faculty performance at **89.16%**.
- **Subject Variance:**
  - **Pulmonology vs. Nephrology:** In 23-24, Nephrology had a 97.7% pass rate. In 24-25, it maintained this with a massive **52.21% Excellent** rate.
  - **Reanimation/Intensive Care:** "Excellent" grades nearly doubled from **24.2% (23-24)** to **44.97% (24-25)**. This is a drastic improvement that deserves investigation to see if it's due to better training or easier grading.

## Retention & "Liquidation" (Retake) Efficiency Analysis

This section analyzes how well the system recovers students who fail the initial exams (based on Page 27 data).

| Metric                       | 2023-2024<br>(Year 3) | 2024-2025 (Year<br>3) | Trend                                                  |
|------------------------------|-----------------------|-----------------------|--------------------------------------------------------|
| Students entering 1st Retake | 227 (43% of cohort)   | 202 (36.7% of cohort) | <b>Positive:</b> Fewer students failing initially.     |
| Students needing 2nd Retake  | 85                    | 98                    | <b>Negative:</b> More students failing the 1st retake. |
| Final Dismissals             | 37                    | 41                    | <b>Negative:</b> Higher final attrition.               |

**Key Finding:** The "**Liquidation Efficiency**" decreased in Year 3.

- In 23-24, out of 227 initial failures, only 37 were dismissed (16% attrition rate of the failing group).
- In 24-25, out of 202 initial failures, 41 were dismissed (20% attrition rate of the failing group).
- *Conclusion:* Once a student falls into the "debt" cycle in Year 3 during 2024-2025, they were **less likely to recover** than in the previous year.

### **Recommendations for Program Development**

1. **Year 3 Intervention Plan:** The data proves Year 3 is the "leak" in the pipeline. The increase in attrition despite fewer initial failures suggests the **1st Retake period is ineffective**.
  - *Action:* Introduce mandatory tutoring sessions for Pharmacology and Path. Anatomy specifically for students entering the 1st Retake phase.
2. **Audit of "Excellent" Spikes:** The drastic rise in "Excellent" grades in Year 6 Reanimation (+20%) and Year 5 Nephrology suggests potential grade inflation.
  - *Action:* Conduct a random audit of exam papers in these subjects to ensure learning outcomes match the high grades.
3. **Investigation of Obs/Gyn (Year 4):** The sharp drop in high-performing students needs to be addressed to prevent it from becoming a trend in the 2025-2026 cycle.
4. **Year 2 Support:** With the slight regression in Year 2, early warning systems should be put in place for Module 10 to prevent these students from becoming the "at-risk" Year 3 cohort next year.

### **4.Evaluation of Learning Outcomes (Interim Analysis)**

Status: Ongoing / Pre-Graduation Phase

Methodology: Comparative analysis of "Old Program" baselines vs. "New Modular Program" interim indicators.

### **Mapping of Learning Objectives and Learning Outcomes**

|  |   |   |   |   |   |   |
|--|---|---|---|---|---|---|
|  | 1 | 2 | 3 | 4 | 5 | 6 |
|--|---|---|---|---|---|---|

| Learning Objectives |                                                                                                                                                    | Learning Outcomes                                                                                                                                                               |                                                                                                                                          |                                                                                      |                                                                                                                                                                                                                                            |                                                                                                                          |                                                                                                                                                   |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
|                     |                                                                                                                                                    | Ability to apply deep and substantial knowledge of biomedical, behavioral, social, clinical sciences and fundamental principles of medical fields in high quality patient care; | Appropriate, relevant and effective diagnosing, management and promotion of patient health problems with effective patient-centered care | Effective communication applying interpersonal and professional communication skills | Participate/Cooperate in improving public health effectiveness through patient and population-centered effective care, student provides in accordance with current professional and ethical values within the existing/current legislation | Independently obtain, critically analyze and apply scientific and clinical innovation to deal with the clinical problems | Continuous improvement of one's activities/enterprise and professional development based on the principles of continuous professional development |
| LO 1                | Demonstrate theoretical and practical in-depth knowledge and critical understanding in the field of medicine.                                      | V                                                                                                                                                                               | V                                                                                                                                        | V                                                                                    | V                                                                                                                                                                                                                                          | V                                                                                                                        | V                                                                                                                                                 |
| LO 2                | Participate in management of health care institutions.                                                                                             | V                                                                                                                                                                               |                                                                                                                                          | V                                                                                    | V                                                                                                                                                                                                                                          |                                                                                                                          |                                                                                                                                                   |
| LO 3                | Perform data collection, documentation and analysis of the patient's health condition.                                                             | V                                                                                                                                                                               | V                                                                                                                                        | V                                                                                    | V                                                                                                                                                                                                                                          | V                                                                                                                        | V                                                                                                                                                 |
| LO 4                | Apply algorithm to conduct modern clinical and paraclinical examinations, treatment and preventive measures.                                       | V                                                                                                                                                                               | V                                                                                                                                        | V                                                                                    | V                                                                                                                                                                                                                                          | V                                                                                                                        |                                                                                                                                                   |
| LO 5                | Carry out diagnosis and urgent medical aid in pre-hospital and hospital stages, and prediction of possible outcomes of the pathological condition. | V                                                                                                                                                                               | V                                                                                                                                        | V                                                                                    | V                                                                                                                                                                                                                                          |                                                                                                                          |                                                                                                                                                   |
| LO 6                | Make patient's preliminary diagnosis and refer to narrow specialist if necessary.                                                                  | V                                                                                                                                                                               | V                                                                                                                                        | V                                                                                    |                                                                                                                                                                                                                                            | V                                                                                                                        |                                                                                                                                                   |
| LO 7                | Perform collection and analysis of information on community health; health programme                                                               |                                                                                                                                                                                 |                                                                                                                                          | V                                                                                    | V                                                                                                                                                                                                                                          | V                                                                                                                        |                                                                                                                                                   |

|      |                                                                                                                                                                                                                     |   |  |   |   |   |   |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|--|---|---|---|---|
|      | design, implementation and evaluation; as well as prediction of possible developments.                                                                                                                              |   |  |   |   |   |   |
| LO 8 | Carry out patients, family members and community education and teaching in professional educational institutions.                                                                                                   | V |  | V | V | V | V |
| LO 9 | Provide profession related counselling and expertise to state and non-state institutions.                                                                                                                           | V |  | V | V | V | V |
| LO10 | Analyze and apply didactic, scientific, normative documents, informative and other literature sources -including in a foreign language for professional self-directed-learning and creation of new knowledge.       | V |  |   | V | V | V |
| LO11 | Conduct scientific research work on biomedical and health care issues.                                                                                                                                              | V |  |   | V | V | V |
| LO12 | Demonstrate effective communication, teamwork, decision-making skills in standard and non-standard situations, and ability to take responsibility for teammates consistent with ethical and proper behaviour norms. | V |  | V | V |   |   |

#### 4.1. Context & Measurement Strategy

As the cohort studying under the new modular (integrated) curriculum is still in the study phase, this evaluation focuses on interim learning milestones rather than final graduate competencies. The assessment strategy measures the acquisition rate of key competencies that were previously identified as "systemic flaws" in the traditional program.

#### 4.2. Achievement of Practical Competencies (Skill Acquisition)

The primary learning outcome targeted for improvement was "Practical Applicability" of knowledge.

- **Baseline (Old Program):** In 2022, 72% of employers noted that graduates demonstrated uncertainty or inability to perform standard medical manipulations (e.g., catheterization, ECG).
- **Interim Outcome (New Program):**
  - **Self-Efficacy:** 88.4% of current students in the modular program report having sufficient skills to independently perform standard primary healthcare actions.
  - **Faculty Validation:** 85% of lecturers confirm that the increased practical component (up to 50% of module weight) is successfully preparing students to meet modern labor market requirements.
- **Conclusion:** Early indicators suggest a significant reversal of the "theoretical overload" trend, with students demonstrating higher procedural confidence earlier in their training.

#### 4.3. Achievement of Cognitive Competencies (Clinical Reasoning)

A key Intended Learning Outcome (ILO) is the ability to form cause-and-effect chains in clinical diagnoses.

- **Baseline (Old Program):** 68% of employers reported graduates had difficulty making decisions in acute situations or constructing differential diagnosis chains.
- **Interim Outcome (New Program):**
  - **Integrated Thinking:** 94% of students surveyed confirmed that modular teaching contributed to the clarification and mastery of pathogenetic chains and cause-and-effect relationships.
  - **Interdisciplinary Connections:** 92% of students confirmed the presence of strong interdisciplinary connections, indicating that the siloed learning of the past is being replaced by integrated clinical reasoning.

#### 4.4. Validity of Assessment Methods

To ensure Learning Outcomes are actually being met, the assessment tools themselves were evaluated for alignment.

- **OSCE Effectiveness:** The vast majority of respondents view the Objective Structured Clinical Examination (OSCE) as a valid and objective tool for checking knowledge, shifting focus from memorization to skill demonstration.
- **Digital Tracking:** The "Progress Dashboard" in the new digital system allows 94% of students to view real-time progress, enabling immediate self-correction of learning trajectories before final exams.
- **Area for Improvement:** Students noted an overreliance on summative testing and limited use of formative (oral) assessment methods, suggesting that while the final check is good, ongoing checks could be improved to better support outcome attainment.

#### 4.5. Predicted Trajectory vs. Risks

- **Prediction:** Based on the high satisfaction of internal stakeholders and the successful interim acquisition of practical skills, it is predicted that at the graduation stage (in 2 years), a significant increase in quality will be recorded by employers compared to the 2022 baseline.
- **Risk to Outcomes:** The 4th-year cohort reported that the modular format does not yet sufficiently support clinical competencies due to restricted patient-based learning. If unaddressed, this "clinical gap" poses a risk to the final achievement of "Advanced Clinical Competence" outcomes.

### 5. The Quality Assurance Process (The "Engine")

This section details the mechanisms used to monitor quality and the "PDCA" (Plan-Do-Check-Act) cycles executed during the evaluation period.

#### 5.1. Monitoring Mechanisms Implemented

- **Lecture Quality Audits:** A pilot assessment evaluated five key components: structure, content, methodology, ability to present, and presence. The audit confirmed that the absolute majority of lectures have clearly formulated goals and tasks.

- **Large-Scale Student Surveys:** The "Lecturer Through the Student's Eyes" survey covered **50%** of the total student body (**2,096** participants), ensuring statistically significant data regarding teaching quality.
- **Graduate Exit Surveys:** A comprehensive survey of **308** graduates (232 Local, 50 English-speaking, 16 Russian-speaking) was conducted to measure satisfaction with the final assessment process and resource availability.
- **Digital Analytics:** System usage analytics were utilized to measure the efficiency of the new Digital Education Management System, tracking metrics such as login uptime and report generation speed.

## 5.2. The PDCA Cycle (Plan-Do-Check-Act) Reporting

### Cycle 1: The Practical Skills Gap (2022–2025)

- **Issue Identified (Check):** A 2022 employer survey revealed a systemic flaw: while **85%** of employers rated theoretical knowledge as "good," **72%** noted that graduates demonstrated uncertainty in performing medical manipulations (e.g., catheterization, ECG). Furthermore, **68%** expressed concern regarding graduates' ability to make decisions in emergency situations.
- **Action Taken (Act):**
  - **Modular Integration:** Subject programs were grouped into modules to foster clinical thinking.
  - **Curriculum Weighting:** The practical component was increased to ratios of **30:70** and **50:50**.
  - **Simulation:** Simulation courses were made mandatory and assessed for all clinical subjects.
- **Result (Re-Check 2024-2025):**
  - **Student Confidence:** **88.4%** of current students in the modular program report sufficient skills to independently perform standard primary healthcare actions.
  - **Faculty Assessment:** **85%** of lecturers noted that the increased practical time will ensure graduates are more compliant with labor market requirements.

### Cycle 2: Administrative Efficiency & Transparency (2023–2026)

- **Issue Identified (Check):** Prior to 2023, processes involved manual paperwork, fragmentation of assignments, and delays in retrieving student files.
- **Action Taken (Act):** Implementation of a centralized Digital Education Management System (DEMS).
- **Result (Re-Check 2026):**
  - **Transparency:** 94% of students cited real-time progress tracking as a major stress reducer.
  - **Efficiency:** The Dean's Offices reported a **70% reduction** in time spent retrieving student files.
  - **Management:** Lecturers reported improved classroom management due to instant access to student lists and profiles.

## 6. Stakeholder Feedback & "Closing the Loop"

### 6.1. Graduate Satisfaction Survey (2024-2025 Cohort)

- **Assessment Objectivity:**
  - **OSCE:** 85% of graduates rated the objectivity of committees as positive.
  - **Oral Exams:** 82% rated objectivity highly.
  - **Grades:** 74% were satisfied with the grades they received.
- **Resource Assessment:**
  - **Literature:** 85% noted the sufficiency of literature.
  - **Time:** 52% confirmed having sufficient time to prepare for exams.
- **Constructive Suggestions (The "Mandate"):**
  - Graduates provided concrete professional guidelines for curriculum updates, specifically requesting in-depth coverage of:
    - **Gynecology:** "Sex cord-stromal tumors," "placenta and fetal membranes," and "thyroid gland pathology".
    - **Surgery:** "Gallbladder empyema" and "biliary drainage".
    - **Pulmonology/Cardiology:** "Emphysema" and "atypical forms of myocardial infarction".

## 6.2. Modular System Feedback (Years 1, 2, & 4)

- **Strengths:**
  - Students generally perceive the modular format as conceptually sound.
  - **92%** of students confirmed the presence of interdisciplinary connections in educational modules.
- **Critical Weaknesses (Implementation Gaps):**
  - **Integration issues:** Students reported thematic overlaps and **contradictory content** delivered by different departments within the same module.
  - **Workload Imbalance:** Short teaching cycles for extensive subjects negatively affect deep learning and retention.
  - **Clinical Training (Year 4):** In the clinical phase, students reported that the modular format sometimes **does not sufficiently support** the development of practical and clinical competencies, citing restricted patient-based learning opportunities.

## 6.3. Teaching Staff & Lecturer Evaluations

- **General Performance:** Out of 834 lecturers rated, only **16 (1.9%)** received a low average score (<3.5).
- **Student Segment Analysis:**
  - **Local Students:** The primary complaint is passive delivery. **15** lecturers (Years 1-3) and **17** lecturers (Years 4-6) were rated low for "Giving exhaustive answers".
  - **International Students:** The primary issue is **attitude**. **12** lecturers across junior and senior years were rated low for "Benevolent and respectful attitude".
- **Problematic Departments:**
  - **Department of Disaster Medicine:** Rated low by international students.
  - **Department of Medical Genetics:** Rated low by RA (local) citizens.

## 7. Curriculum & Resource Review

### 7.1. Curriculum Matrix Updates

- **Structure:** The program has transitioned to a fully modular system.

- **Practical Component:** The curriculum was revised to increase the practical component's weight to **20:80**, **30:70**, and **40:60** ratios.
- **Case-Based Learning:** Discussions of clinical cases have been emphasized more heavily in the curriculum design.

## 7.2. Resources & Infrastructure

- **Digital Ecosystem:** The new system is functioning as the "vital central nervous system" for educational processes.
  - **Mobile Accessibility:** High satisfaction reported with mobile responsiveness.
  - **Assignment Portal:** Centralized submission has removed the fragmentation of email/paper submissions.
- **Clinical Resources:**
  - **Standardized Patients:** Graduates appreciated the preparedness of actors during OSCEs.
  - **Equipment:** Availability of X-ray images and simulators was rated positively.

## 8. SWOT Analysis (Focused on Quality)

| Strengths                                                                                                                                  | Weaknesses                                                                                                                               |
|--------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| <b>High Stakeholder Engagement:</b> 50% student participation in lecturer surveys and 308 graduates in exit surveys ensures reliable data. | <b>Horizontal Integration Gaps:</b> Minor lack of coordination between departments within modules, leading to contradictory information. |
| <b>Digital Infrastructure:</b> 99.9% system uptime and 94% student satisfaction with transparency.                                         | <b>Workload Distribution:</b> Mismatch between content volume and allocated instructional time in multi-discipline modules.              |
| <b>Assessment Validity:</b> 85% of graduates trust the objectivity of the OSCE format.                                                     |                                                                                                                                          |
| <b>Skill Confidence:</b> 88.4% of students in the new program feel confident in performing primary                                         |                                                                                                                                          |

| Strengths                                                                                                                                                         | Weaknesses                                                                                                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| healthcare actions.                                                                                                                                               |                                                                                                                                                                                    |
| Opportunities                                                                                                                                                     | Threats                                                                                                                                                                            |
| <b>Curriculum Precision:</b> Graduates have provided a specific list of topics (e.g., "gallbladder empyema") for immediate curriculum updates.                    | <b>Implementation Fatigue:</b> Students support the <i>concept</i> of modules but dissatisfaction with <i>implementation</i> (overlaps/contradictions) poses a risk to engagement. |
| <b>Targeted Faculty Training:</b> Specific data allows for focused training on "Interactive Teaching" for locals and "Academic Ethics" for international streams. | <b>Clinical Competence Standards:</b> Failure to address 4th-year clinical gaps risks falling short of international medical education standards.                                  |

## 9. Implementation of results / General and structural changes

As a result of some significant inconsistencies identified through ongoing evaluation and periodical researches, immediate modifications were made to the syllabi after appropriate discussions, without deferring to the end of the reporting period.

### General Structural Changes

- **Renumbering:** The numbering of modules across years 1–6 has been modified.
- **differentiation:** Distinct numerical designators have been established for subjects sharing the same title across years 1–6 (e.g., Module 1: Human Anatomy 1; Module 3: Human Anatomy 2; Module 4: Human Anatomy 3, etc.).

### Year 1 Changes

- **Module Restructuring (Semester 1):** Module 2 has been removed and merged into Module 1. Additionally, the subject "Clinical Anatomy" has been renamed **Topographic Anatomy**.

- **Subject Clarification:** The subject "Foreign" has been specified as **Foreign Language (English)**.
- **Biochemistry/Chemistry (Semester 2):** The subject "Medical biochemistry/Medical chemistry-2" has been renamed **Medical Chemistry-2**.
- **History Module (Semester 2):** The course "History of Armenian Civilization with History of Medicine in Armenia" has been separated into two distinct components:
  - History of Armenian Civilization (1 credit)
  - History of Medicine in Armenia (1 credit)
- **Elective Courses 1 (Semester 2):** The following electives have been introduced:
  1. Public communication skills in medicine
  2. Representational skills in medicine

## Year 2 Changes

- **Renaming (Semester 3):** The subject "Physiology" has been renamed **Human Physiology**.
- **Renaming:** "Medical Parasitology" has been renamed **Basics of Parasitology**.
- **Curriculum Migration (Semester 4): Module 8 - Social Science 1** has been added to the 2nd year (moved from the 3rd year). It includes:
  - Basics of Psychology (1.5 credits)
  - Medical Psychology (1.5 credits)
- **Elective Courses 2 (Semester 4):** The following electives are available:
  1. Basics of Sexology
  2. Communication skills in Medicine

## Year 3 Changes

- **Clinical Medicine 1 Consolidation (Semester 5):** Two separate modules were merged into a single module containing the following subjects:
  - Propaedeutics of Internal Diseases I (4 credits)
  - General Surgery with Surgical Technique I (4.5 credits) (*Note: Surgical technique corresponds to Operative Surgery*)
  - Propaedeutics of Childhood Diseases (1 credit) (*Moved from 3rd year, 6th semester*)

- **Curriculum Migration (Semester 5):** The subject **Health Law** has been added (moved from the 6th year). Components include:
  - Human Rights (0.5 credits)
  - Medical Law (1 credit)
- **Clinical Medicine 2 Consolidation (Semester 6):** Two separate modules were merged into a single module containing the following subjects:
  - Propaedeutics of Internal Diseases I (5 credits)
  - General Surgery (6 credits)
- **Elective Courses (Semesters 5 & 6):**
  - *Elective Courses 3 (Semester 5):* Advanced research skills, Leadership in medicine, Conflict management in medicine, Herbal treatment in medicine.
  - *Elective Courses 4 (Semester 6):* Artificial intelligence in medicine, Basics of Neuroscience, Herbal treatment in medicine, Developmental psychology.

#### Year 4 Changes

- **Subject Clarification (Semesters 7 & 8):**
  - **Surgery I:** Sub-units clarified as Abdominal Surgery I and Abdominal Surgery II.
  - **Obstetrics and Gynecology I:** Sub-units clarified as Obstetrics I and Obstetrics II.
- **Renaming (Semester 7):** "Clinical neurosciences" has been renamed **Clinical Neurology**.
- **New Module (Semester 8):** A new **Urology and Andrology** module has been established, comprising:
  - Urology (2.5 credits)
  - Andrology (0.5 credits)
- **Elective Courses 5 (Semester 8):**
  1. Clinical Sexology
  2. Health of Child

#### Year 5 Changes

- **Subject Clarification (Semesters 9 & 10):**
  - **Surgery II:** Sub-units clarified as Thoracic Surgery, Cardiac Surgery, and Vascular Surgery.

- **Obstetrics and Gynecology II (Semester 9):** Sub-unit clarified as Gynecology I.  
*Requirement: 1 day attendance at the Simulation Center.*
- **New Module (Semester 9):** A distinct **Traumatology and Orthopedics** module has been created, comprising:
  - Traumatology (3 credits)
  - Orthopedics (1.5 credits)
- **Children's Diseases 2 (Semester 9):** *Requirement: 1 day attendance at the Simulation Center.*
- **Module Restructuring (Semester 10):** The **Head and Neck Diseases** module now includes:
  - Head and Neck (1.5 credits)
  - Eye Diseases (3 credits)
  - ENT Diseases (3 credits)
- **Elective Courses 6 (Semester 9):** Medical ecology, Yoga, Emotional Intelligence, Nutrition, Sports medicine, Gerontology.

## Year 6 Changes

- **Subject Clarification (Semesters 11 & 12):**
  - **Surgery III:** Sub-units clarified as Abdominal Surgery III, Abdominal Surgery IV, Colorectal surgery and small proctology, and Endocrine Surgery.
  - **Obstetrics and Gynecology III:** Sub-units clarified as Gynecology II, Obstetrics III, and Gynecology III.
- **Forensic Medicine Modifications (Semester 11):** Changes implemented to the Forensic Medicine course:
  - Forensic Medicine (3 credits)
  - Clinical Morphology (1.5 credits)
- **Elective Courses 7 (Semester 11):** Laboratory diagnostics, Virology, Medical tourism, Tropical diseases.
- **Simulation Center Requirements (Semester 12):** Students are required to attend the Simulation Center according to the following schedule:

1. Cardiology (1 day)

2. Pulmonology (1 day)
3. Abdominal Surgery (1 day)
4. Thoracic Surgery (1 day)
5. Obstetrics and Gynecology (1 day)

#### 10. Action Plan for Improvement (2025–2026)

Based on the "Closing the Loop" analysis, the following targeted actions are mandated:

| Identified Issue              | Proposed Action                                                                                                                                                                | Responsible Body                                     | Timeline  | KPI for Success                                    |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|-----------|----------------------------------------------------|
| <b>Module Incoherence</b>     | Strengthen curriculum governance at the <b>module design level</b> to harmonize content and remove contradictions.                                                             | Program Director, educational-methodological council | 2025-2030 | >80% student satisfaction with module coordination |
| <b>Passive Teaching</b>       | Conduct training on " <b>Interactive Teaching</b> " (Q&A techniques, critical thinking)                                                                                        | QA Center / Faculty development center               | 2027-2028 | Reduction in "low" ratings for Q&A from 17 to <5   |
| <b>Faculty Ethics (Intl.)</b> | Conduct seminars on <b>Intercultural Communication and Academic Ethics</b> for lecturers with low attitude ratings.                                                            | Dean's Office/ Faculty development center            | Fall 2026 | Zero "low" ratings for "Benevolent Attitude"       |
| <b>Clinical Gaps (Year 4)</b> | Increase hours for <b>Case-based learning</b> and practical discussions; Review patient access protocols. Improvement of interdisciplinary vertical and horizontal integration | Program Director, educational-methodological council | 2026-2030 | Improved feedback on "Practical Skills" in Year 4  |
| <b>Literature Gaps</b>        | Update textbooks/materials for <b>Gynecology</b> (placenta, tumors) and <b>Surgery</b> (biliary drainage).                                                                     | Departments, educational-methodological              | Immediate | 100% topic coverage in syllabi                     |

| Identified Issue | Proposed Action | Responsible Body | Timeline | KPI for Success |
|------------------|-----------------|------------------|----------|-----------------|
|                  |                 | council          |          |                 |

### References (Evidence)

- Graduate Satisfaction Survey Report (2023-2024, 2024-2025).
- Assessment of the Effectiveness of Reforms Report.
- Digital Education Management System Evaluation
- Lecturer Through the Student's Eyes Analysis.
- Evaluation of the Modular Education System
- Students performance analyzes report
- Focus group semi structured discussion results