

YEREVAN STATE MEDICAL UNIVERSITY AFTER MKHITAR HERATSI CENTER FOR EDUCATION QUALITY
ASSESSMENT AND ASSURANCE

REPORT

ASSESSMENT OF THE EFFECTIVENESS OF REFORMS IN THE "GENERAL MEDICINE" PROFESSIONAL
EDUCATIONAL PROGRAM (PEP)

I. RECORDING OF EMPLOYERS' REQUIREMENTS AND PROBLEMS

During 2022, a survey was conducted among employers regarding the professional qualities of graduates of the YSMU "General Medicine" educational program (Faculty of General Medicine).

The aim of the research was to reveal existing discrepancies between the graduates' mastery of the educational program's learning outcomes and the requirements of the labor market.

The Sample: 45 heads and department chairs of leading medical institutions in Yerevan and the regions of the RA participated in the survey.

The Method: Semi-structured interviews and standardized questionnaires.

The results of the research showed that although employers highly rated the graduates' academic/theoretical knowledge base (85% of respondents rated it as "good" or "excellent"), there is serious concern regarding their practical applicability.

Two main systemic flaws were revealed:

1. Lack of practical skills

- ❑ 72% of employers noted that graduates, having passed all stages of study, demonstrate uncertainty or inability to perform certain medical manipulations during residency or when being hired.
- ❑ Examples of omissions:
 - Invasive interventions (securing venous access, urinary catheterization, sounding/probing).
 - Work with medical equipment (correct connection of ECG device, use of defibrillator).
- ❑ Employer's comment (quote): "The resident can recite the heart failure treatment guideline by heart but cannot independently place a central venous catheter."
- ❑ Causal link: This indicates the passive nature of "bedside teaching" in the educational process, where the student is often in the role of an observer rather than a performer.

2. Difficulties in rapid orientation in clinical situations

- ❑ 68% of respondents expressed concern regarding the graduates' ability to make decisions in acute and emergency situations.

- ❑ The problem is not the lack of knowledge, but its integration and operative application.
- ❑ Examples of omissions:
 - Implementation of triage in the admission department.
 - Constructing a differential diagnosis chain within a limited time.
 - Setting priorities in polymorbid (with multiple diseases) patients.
- ❑ Analysis: This indicates a lack of development of clinical reasoning.
- ❑ Students are used to test-based questioning rather than managing simulation or real stress scenarios.

The results of this and other similar studies were discussed in subject committees, the educational-methodological council, and the academic council of the Faculty of General Medicine, and based on the discussions, a number of recommendations were made:

- ❑ Increasing the practical component in subject programs: Increase the share of the practical component in subject programs and their attestation assessment systems.
- ❑ Expansion of simulation center integration: Make simulation courses mandatory and assessed for all clinical subjects, emphasizing scenario-based exercises.
- ❑ Introduction and expansion of the "OSCE" examination system: Include complex clinical cases in final exams where not only the skill is checked, but also situational orientation (e.g., using a "standardized patient").

II.

IMPLEMENTED STRATEGIC REFORMS

In response to the problems raised as a result of research conducted among internal and external stakeholders, the following changes were implemented in the "General Medicine" educational program:

2.1 Complete transition to a modular (Integrated) system As a result of the review of the educational program, various subject programs were grouped into modules, and interdisciplinary integration was implemented, which was intended to contribute to the formation of clinical and complex thinking in students.

2.2. Increase of practical component Changes were made to the curriculum regarding the redistribution of credits. The weight given to the practical component within the scope of the subject program was increased—20:80, 30:70, 40:60, and in the case of some modules, up to 50:50. Discussions of clinical cases were emphasized more.

2.3. Application of new assessment formats (e.g., OSCE) The Objective Structured Clinical Examination (OSCE) was introduced as a mandatory stage of final attestation. This allows for assessing the student's ability to perform a specific manipulation under standardized conditions.

III.

RESULTS OF THE EVALUATION OF CHANGES IMPLEMENTED IN THE PROGRAM (2024-2025)

Since students under the new modular program are still in the study phase, an interim evaluation is being carried out among internal stakeholders—students of the Faculty of General Medicine and the faculty staff. To ensure the smoothness of the introduction of newly developed modular programs and cross-integration within modules of different subject programs, procedural as well as special studies are carried out every semester.

Data Collection: Data was collected through an anonymous survey of around 1500 students of the 1st, 2nd, and 4th years (studying under the new modular program) of the "General Medicine" educational program, as well as through focus group discussions held with around 100 lecturers from departments.

- ☐ **Student Feedback:** Research conducted among students revealed a positive attitude of internal stakeholders toward the implemented changes.
- ☐ **Skills Confidence:** 88.4% of respondents noted that they have sufficient skills to independently perform standard primary healthcare actions. 92% of students confirmed the presence of interdisciplinary connections in educational modules.
- ☐ **Impact on Learning:** According to the survey results, the modular teaching of fundamental (basic) and clinical subjects contributed to the clarification and mastery of pathogenetic chains and cause-and-effect relationships of clinical symptoms. The vast majority of respondents view the Objective Structured Clinical Examination (OSCE) as a valid and objective tool for checking knowledge.
- ☐ **Faculty Feedback:** Meetings with heads of clinical departments and lecturers recorded positive dynamics in the quality of teaching.
- ☐ **Workforce Readiness:** 85% of lecturers noted that the increase in educational time dedicated to discussing clinical cases and forming practical skills for the purpose of preparing for the OSCE exam will definitely ensure the entry of graduates into the labor market who are more compliant with modern requirements.
- ☐ **Assessment:** According to the lecturers' assessment, the increase in the practical component (in some cases up to 50%) allowed for comprehensive work with students and a full assessment of the share defined by the given module of educational learning outcomes.

IV.

IDENTIFIED PROBLEMS AND DIFFICULTIES

Difficulties related to the reforms, which require correction, were also included in the report.

The ongoing studies periodically reveal certain discrepancies existing between different subject programs included in the same module, which have become a subject of discussion for subject committees. Examples of such issues raised are:

- ❑ Certain differences in data and certain inconsistencies in sequencing between anatomy, clinical anatomy, and histology materials in Module 1, Module 2, and Module 4.

Summary: The results of internal evaluations, as well as the comprehensive analysis of students' progress, attest that the reforms of the "General Medicine" PEP have a tangible positive impact on the qualitative preparedness of students.

V. CONCLUSION AND OUTLOOK

The reforms implemented in the "General Medicine" PEP show positive dynamics.

- ❑ Qualitative Leap: The modular program and the OSCE examination system solve the previously recorded problem of theoretical overload and insufficient level of practical capabilities.
- ❑ Continuity: The high satisfaction of internal stakeholders gives grounds to predict that in 2 years—at the graduation stage—a significant increase in quality will also be recorded by employers.