

Medicine

One step educational program

Faculty of Medicine and Stomatology

Degree awarded: Medical Doctor (MD)



2024

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General Content of the Educational Program

Program Title	Medicine
Education Level	One – Step Educational Program
Qualification Degree	Medical Doctor
Study Duration	6 Years
Study Duration	360 ECTS credits (1 ECTS credit - 30 hours)
Instructional language	English
Tuition Fee	7000 USD; 10000 GEL for citizens of Georgia

Prerequisites for admittance to the educational program

Persons who have a high school or equivalent education and have passed the Unified National Admission Exams and are in possession of the relevant certificate are eligible for admission to the program. Also, admission requirements include results from Unified National Admission Exams, in prioritized subjects with their appropriate grades predetermined by the university.

The required grade for English language for Georgian citizens is >70%, in Georgian language, Biology, Chemistry, Physics and Mathematics – >60%.

The right to study without passing Unified National Exams on the program is determined by the Law on Higher Education - Article 52. Paragraph 3. Specifically:

Due to supporting prospective students and students' needs for mobility, studying in educational institutions without passing Unified National Exams is governed by the regulations of the Ministry of Education and Science of Georgia in a predetermined period. Students eligible for National Exam waiver must belong to one of the following groups:

- a. Foreign citizens and non-citizens who have received full high school or equivalent education abroad;
- b. Georgian citizens who have received full high school or equivalent education abroad and completed the last 2 years in a foreign, English Speaking country;
- c. Persons who study/studied and have accumulated ECTS credits from a foreign country's high educational institution recognized in accordance with the legislation of the country.

Enrolling in the program through the mobility process is permitted after the completion of one academic year of study. Mobility is possible twice a year, in the periods established by the Ministry of the Education and Science of Georgia, compulsory procedures approved by the Act of the Director of National Centre for Educational Quality Enhancement and in accordance with the rules established by the University.

Highlights of the MD Program

- The program is in English, which increases the degree of competitiveness of the graduates worldwide;
- The program is integrated - integration is achieved throughout the basic, preclinical and clinical disciplines of both horizontal, vertical and spiral principles.
- The program structure provides the training to pass two steps in the US Medical License Examination. In addition, on the basis of the agreement between KWIU and Emory University, any student of the program, which will pass the first level of USMLE exams during the course, has the potential to participate in clinical rotations at Emory University Medical School.
- It considers the elements of general university education - the program includes a set of humanities subjects: History of civilizations, Anthropology, Art history, World literature, etc. All these disciplines are integrated taking into account the so-called "Axis of Time" and are under the umbrella of the humanities module „Alpha to Omega”.
- A strong research component that comprises a significant portion of the curriculum, which involves students in a basic science, epidemiology or clinical medicine, health care organization and other areas of medicine. Graduates have the experience of completing their own research project; writing an academic paper and acquiring presentation skills.
- Longitudinal development of clinical skills, ethical and professional attitudes during „Physician, Patient and Society”.
- A strong and structured support system for student: each course (mean of 50 students) has a course advisor – mentor, coordinator, who helps the student during the full course of the program starting from the process of adaptation to the academic environment and providing academic and career development counseling.
- Program also provides extracurricular activities as in Georgia and abroad. The aim of these projects is to introduce KWIU's students medical and healthcare systems of different countries.

Goal of the Educational Program

The strategic goal of the program is to train internationally competitive and competent, highly-skilled physicians having knowledge, ability, and behaviors required for postgraduate training and specific training courses in the health professions, while being inspired to develop compassion, curiosity, tolerance and commitment to patients and society, dedication to life-long learning and an understanding of the vital role of research in healthcare.

More detailed purposes of the program are presented below:

- 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 diagnosis, management and emphasis 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 that a 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 clinical problems of societal importance.
- Continuous improvement of one's activities/enterprise and professional development based on the principles of continuous professional development

The goals of the program are achieved step by step during the implementation of the program.

Learning Outcomes

The learning outcomes are based on specifications of the program's field of study and accreditation standards for educational programs at institutions of higher education.

Field-Specific Knowledge

Biomedical, Behavioral, Clinical, Social Sciences and Fundamental Principles of the field (LO 1)

Graduates demonstrate knowledge of the established and evolving core of basic medical sciences, application of basic medical sciences to patient care, and investigatory and critical thinking approaches.

Graduates will be able to:

- Demonstrate knowledge of the normal and abnormal structure and function of the body as a whole, and of each organ system, over the lifespan.
- Identify the structure and function of relationships and social dynamics.
- Demonstrate knowledge of the molecular, cellular and biochemical mechanisms of homeostasis.
- Identify genetic mechanisms and risks in health and disease (diagnosis, treatment and prevention) of individuals and populations.
- Consider the cognitive, affective and social growth and development of a patient in formulating plans of care.
- Apply principles of epidemiology and statistics to patient care.
- Recognize patient-focused care that considers a patient's diversity
- Apply foundations of therapeutic intervention, including concepts of outcomes, treatments, and prevention, and their relationships to specific disease processes.
- Analyze, explain and discuss medical knowledge as it applies to effective patient care.

Field-Specific Competencies

Carry out a consultation with a patient (LO 2)

By the time of graduation, students are expected to:

- Perform a complete and accurate patient history that includes belief systems, psycho-social and cultural issues and incorporate these into the comprehensive care of a patient.
- Perform an accurate and relevant screening and general and focused physical and mental status examinations.
- Perform common clinical procedures.
- Select appropriate physical examination techniques, laboratory tests, radiologic, and other clinical studies.

- Perform appropriately timed clinical assessments with recommendations that are presented in an organized manner
- Communicate using a patient-centered approach that encourages patient trust and autonomy and is characterized by empathy, respect, and compassion
- Communicate with patients and their families in a clear, timely and accurate manner regarding their health, treatment plans, needed health services or resources and provide explanation, advice, reassurance and support for the care and management of their health.
- Recognize when the values, biases, or perspectives of patients, physicians, or other health care professionals may have an impact on the quality of care, and modify the approach to the patient accordingly

Assess clinical presentations, order investigations, make differential diagnoses, and negotiate a management plan (LO 3)

By the time of graduation, students are expected to:

- Interpret findings from the history, physical examination and mental-state examination, appreciating the importance of clinical, psychological, religious, social and cultural factors.
- Assess clinical presentation, make an initial assessment of a patient's problems and a differential diagnosis.
- Understand the processes by which doctors make and test a differential diagnosis.
- Interpret the results of investigations, including growth charts, x-rays and the results of the diagnostic procedures in Appendix 1.
- Synthesize a full assessment of the patient's problems and define the likely diagnosis or diagnoses.
- Formulate a plan for investigation, treatment, management and discharge, according to established principles and best evidence, in partnership with the patient, their careers, and other health professionals as appropriate.
- Respond to patients' concerns and preferences, obtain informed consent, and respect the rights of patients to reach decisions with their doctor about their treatment and care and to refuse or limit treatment.
- Contribute to the care of patients and their families at the end of life, including management of symptoms, practical issues of law and certification, and effective communication and teamworking
- Employ opportunities for early intervention to educate patients about disease prevention taking into account barriers to change.
- Make clinical judgements and decisions, based on the available evidence, in conjunction with colleagues and as appropriate for the graduate's level of training and experience. This may include situations of uncertainty.

Providing first aid in emergency medical situations (First aid and resuscitation measures) (LO 4)

By the time of graduation, students are expected to:

- Assess and recognize the severity of a clinical presentation and a need for immediate emergency care (DRSABCDE).
- Diagnose and manage acute medical emergencies.
- Apply appropriate initial care to life-threatening conditions: provide basic first aid considering age-related constraints;
- Provide cardio-pulmonary resuscitation or direct other team members to carry out resuscitation in compliance with the guidelines.
- Conduct the activities for enhanced lifetime maintenance in accordance with the guidelines
- Treatment and management of traumas according to the guidelines.

Drug prescription (LO 5)

By the time of graduation, students are expected to:

- Establish an accurate drug history, covering both prescribed and other medication.
- Plan appropriate drug therapy for common indications, including pain and distress.
- Provide a safe and legal prescription.
- Calculate appropriate drug doses and record the outcome accurately.
- Provide patients with appropriate information about their medicines.
- Access reliable information about medicines.
- Detect and report adverse drug reactions.
- Demonstrate awareness that many patients use complementary and alternative therapies, and awareness of the existence and range of these therapies, why patients use them, and how this might affect other types of treatment that patients are receiving

Conducting Practical Procedures (LO 6)

By the time of graduation, students are expected to:

- Be able to perform a range of diagnostic procedures, as listed in Appendix 1 and measure and record the findings.
- Be able to perform a range of therapeutic procedures, as listed in Appendix 1.
- Be able to demonstrate correct practice in general aspects of practical procedures, as listed in Appendix 1.

Communicate effectively in a medical context (LO 7)

By the time of graduation, students are expected to:

- Communicate clearly, sensitively and effectively with patients, their relatives or other caregivers, and colleagues from the medical and other professions, by listening, sharing and responding.
- Communicate clearly, sensitively and effectively with individuals and groups regardless of their age, social, cultural or ethnic backgrounds or their disabilities.
- Communicate by spoken, written and electronic methods (including medical records), aware of significance of non-verbal communication in the medical consultation.
- Communicate appropriately in difficult circumstances, such as breaking bad news, and discussing sensitive issues, such as alcohol consumption, smoking or obesity.
- Communicate appropriately with difficult or violent patients.
- Communicate appropriately with people with mental illness.
- Communicate effectively with any person regardless of his/her social, cultural, religious and ethnic background

The use of Ethic and Legal Principles in Medical Practice (LO 8)

By the time of graduation, students are expected to:

- Keep confidentiality
- Use ethical principles and analytical skills in treatment processes
- Obtain informed consent and make an appropriate record
- Issue a death certificate
- Require an autopsy (in compliance with the Georgian Legislation)
- Apply Georgian and international legislation during treatment

- Conduct medical practice in a multi-cultural environment

Evaluation of psychological and social aspects regarding patients' disease (LO 9)

- Evaluate the psychological factors of disease detection and impacts on the patients
- Evaluate the social factors of disease detection and impacts on the patients
- Recognize the stress related to disease
- Recognize drug and alcohol abuse
- Identify the signs that suggest children or other vulnerable people may be suffering from abuse or neglect and know what action to take to safeguard their welfare.

The use of knowledge, skills and principles based on evidence (LO 10)

By the time of graduation, students are expected to:

- Use biomedical information resources and appropriate consultants to support evidence-based medical care.
- Evaluate study design, methods and results as they apply to evidence-based medicine.
- Apply medical standards, clinical practice guidelines, and practice algorithms for individual patients or populations. Demonstrate the ability to use of evidence in practice.
- Conducting relevant literature research
- Undertake critical analysis of the published literature, make conclusions and apply them in practice

Use information and information technology effectively in a medical context (LO 11)

By the time of graduation, students are expected to:

- Keep accurate and complete clinical records
- Use electronic and other resources in the practice of life-long learning.
- Use Informational technologies in medical practice
- Keep personal records (portfolio)

Ability to apply scientific principles, method and knowledge to medical practice and research (LO 12)

By the time of graduation, students are expected to:

- Know the methodology, design, planning and conduct of research, processing the results;
- Use the modern achievements of biomedicine in practice
- Have an ability of reporting/reviewing biomedical scientific literature based on critical analysis.
- Apply principles of ethics in conducting scientific research.

Implementation of health promoting events, engage with public healthcare issues, efficient performance within the healthcare system (LO 13)

By the time of graduation, students are expected to:

- Analyze the role of advocacy and healthcare policy in improving patient care.
- Use system resources available to patients and communities for health education, treatment, and rehabilitation of medical and psychiatric conditions.
- Participate in health promotion events both on individual and population-wide levels
- Analyze the elements in the healthcare system that lead to disparities in health and access to healthcare.

- Interpret information about the health of patient populations and communities to identify needs and plan appropriate interventions in support of population health.
- Differentiate how culture and belief systems impact perception of health and illness, as well as response to symptoms, diseases, and diagnostic and treatment interventions.
- Apply the principles of cost-effective healthcare in patient care.
- Analyze the organization, financing, and delivery of health care.
- Relate the role of medical jurisprudence and conflicts of interest to issues that affect the different health care system.
- Analyze systems of care to enhance care quality and patient safety.

Professionalism (LO 14)

By the time of graduation, students are expected to:

- Apply the theories and principles that govern ethical decision making.
- Demonstrate ethical behavior including: compassionate treatment of patients, respect for privacy and dignity, honesty and integrity, truthfulness, patient advocacy, confidentiality, and accountability.
- Demonstrate reliability, punctuality, dependability, and integrity in all professional activities.
- Demonstrate the ability to promote ethical and professional behavior of peers.
- Analyze personal and professional conflicts of interest.
- Demonstrate the ability to work effectively and respectfully in an interprofessional team.
- Demonstrate the qualities and practices required to maintain wellness and sustain lifelong personal and professional growth.
- Demonstrate appropriate leadership approaches that enhance team functioning, the learning environment, and the delivery of care.
- Demonstrate sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender identity and expression, age, culture, race, religion, disabilities, health status and sexual orientation.
- Recognize own personal and professional limits and seek help from colleagues and supervisors when necessary.

Appendix 1.

- Vital Signs: Pulse, respiration, temperature
- Measure Blood pressure
- Venipuncture
- Venous Catheterization
- Drug injection into the vein and use of an infusion device
- Subcutaneous and intramuscular injection
- Oxygen delivery,
- Patient Transportation and Treatment
- Suturing
- Urinary Catheterization
- Urinalysis
- Electrocardiography

- Electrocardiography Interpretation
- Performing Respiratory Function Test

Methods for Achieving Learning Outcomes

Teaching and learning methods

Program is an integrated medical education program. The program consists of teaching courses/modules/clerkships in which horizontal, vertical and spiral integration is achieved. From the first days of teaching, the course "Physician, Patient and Society" is oriented to the use of theoretical knowledge in practice. This course is integrated itself, because it maintains theoretical issues (ex. Issues from History of Medicine) and practical skills (ex. Gathering anamnesis, physical examination and etc.) and professional issues as well. On the other hand, the course helps (theory-based modules) to enrich them with practical components.

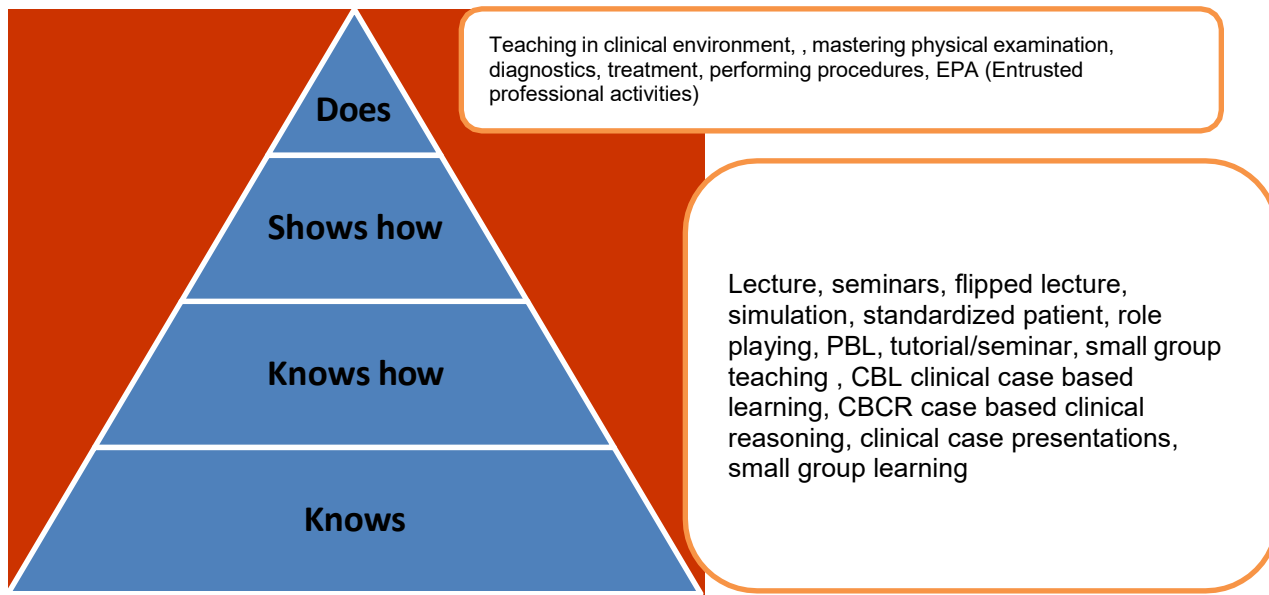
It is notable that from the first semester, the course "Physician, Patient and Society" sends students to different medical organizations (hospitals) for observing clinical practice, (i.e. shadowing). Therefore, achieving the learning goals in the frame of the program is reached by integration of theoretical and practical teaching, development of clinical and communication skills: in the beginning by using simulators (manikins) and simulated patients and later in the clinical environment. While teaching, applying modern technologies is chief priority.

A student-oriented teaching approach assures students' active involvement in the study process.

The pre-clerkship block of the curriculum uses interactive lectures and other forms of active learning (small groups, flipped classrooms, team-based learning, discussions, empirical studies, projects, etc.) to fully engage students in the educational process. There is a focus on case-based solving and problem-based learning. Early clinical work allows students to apply classroom learning at the bedside. A clinical simulation and standardized patient program provide opportunities for our students to further refine their clinical skills.

Creating small groups (10-12 students, in clinical years 4-6 students) is a helpful opportunity to engage student by using of different forms of teaching: interactive lectures, seminars; teaching in clinical environments; use of simulated scenarios and equipment, as well as standardized patients; role playing; laboratory teaching; presentations, etc.

Bedside teaching is the main teaching format during clinical phase of the curriculum alongside to the didactic lectures, small group discussions, CBL, PBL, PICO Presentation, etc.

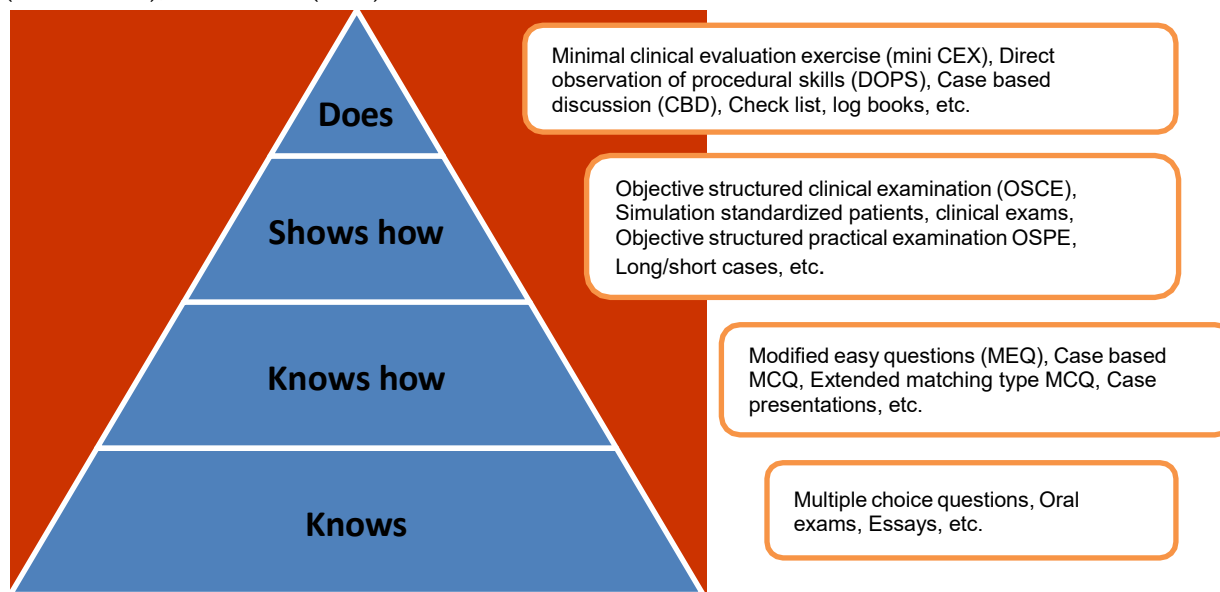


Pic. 1 Learning and teaching methods used to achieve the knowledge, skills and professionalism defined by the program learning outcomes

Assessment methods

Assessment of skills and performance of the students in the program is based on the conception of Millers pyramid:

At the lowest level of the pyramid is knowledge (knows), followed by competence (knows how), performance (shows how), and action (does).



Pic 2. Methods used to assess the knowledge, skills and professionalism defined by the program learning outcomes

A wide range of assessment methods are used in the different courses according to the level of Millers pyramid: oral examinations/vivas, essay questions, modified essay questions (MEQs) checklists, MCQs (Multiple choice questions), EMQs (extended matching items), student presentations, projects, critical reading papers, rating scales, patient management problems, OSPE, OSCE, short case assessment and long case assessment, log book, trainer's reports, simulators, self-assessment, standardized patients, etc. (list of commonly used methods of assessment in the program see in the Table below).

Assessment of student's performance during the clinical years is accomplished by various methods, especially the components of 360° assessment -WPBA (workplace-based assessment) - Mini-CEX (Mini-Clinical Evaluation eXercise), SCO (Structured Clinical Observation), DOPS (Direct Observation of Procedural Skills), CBD (Case-based Discussion), OSCE.

For the past decade, the EPA (entrusted professional activities) has been very popular in leading medical schools around the world for the assessment of teaching and learning level and quality of students and residents, EPA is being implemented as a pilot in the program. The EPA involves evaluating an individual student ability at different stages of instruction by academic staff to identify a learning (knowledge, skills) deficit. EPA is used not only for assessment but also as a teaching method.

Student's Performance Assessment System

The university uses the European system of credit transfer and accumulation (ECTS), which is based on learning outcomes, the transparency of the study process and is oriented to the student. The goal of this system is promoting planning learning units, implementation, assessment / recognition of study units, and also student mobility.

Credit reflects the amount of work (one credit is equal to 30 hours) needed to complete a specific learning component and achieve learning outcomes. Credits are distributed among all components of the educational program. Study course (subject) is for a one- semester. One academic year includes 60 ECTS. It is unacceptable that the student's annual load exceeds 75 credits. Student's assessment maintains interim assessment and final examination assessment; in total, 100 points. Student needs at least 27 points to be allowed on final exam. The final assessment for getting credit should not be less than 51. Student is rated at a maximum of 40 points on the final exam. The final exam will be considered passed, if the student will collect at least 24 points out of 40. Student Assessment System includes five types (A, B, C, D, E) of positive and two types (Fx and F) of negative assessments.

- A) Excellent – 91-100 points;
- B) Very good - 81-90 points;
- C) Good - 71-80 points;
- D) Satisfactory - 61-70 points;
- E) Enough - 51-60 points;
- FX) Did not pass - 41-50 points; The student is allowed to an additional exam with an independent work.

- F) Failed – 40 points; The student should retake the ₁₃ subject again.

In case of negative assessment, the student is allowed to have an additional exam at least in 5 days after the final exam.

During the knowledge and skills assessment process oral, test, combined exams, objective structured clinical exam (OSCE), presentations, coursework / thesis are used. Assessment of learning outcomes at the completion of basic medical education includes not only theoretical knowledge but also practical skills.

System of Ensuring of Development of Medical Educational Quality

There is a united conception of quality development at Ken Walker International University. Head of school's quality assurance service is accountable for implementation of quality development.

The quality assurance service of the university and school fully shares the cyclic paradigm of quality management/provision – known as a “Shewhart cycle” (PDCA):

- Plan=P
- Do=D
- Check=C
- Act=A

This model is most relevant to the context of continuous development of quality – of University: The end of one cycle is the start of the new one and so forth.

The quality assurance service actively cooperates to all parts of the university: Academic, Invited, administrative, supporting staff and students. Criteria developed by this service, is public and is located on the KWIU website in the category of quality assurance service. Studies' results and assessments conducted by the service of quality assurance are presented to the Academic Board and according to the content and necessity will be posted on website.

Evaluation of educational programs is conducted once in an academic year. In the evaluation process internal and external assessment forms are used. Conflict of interests is excluded in both cases.

Besides the general approach provided by the university, students are permanently surveyed during the study process and results are used to plan the modules, and to assess program's different components.

Administrative and academic personnel of Emory University School of Medicine are involved and actively take part in both content and quality analyses of the program.

Possibility of employment for graduates of the program

Possibility of independent medical practice for the graduates – Medical Doctors – is regulated by employer's country legislation.

Graduates of the program have a right for scientific and academic activity.

A person with a diploma of an academic degree of medical doctor has the right to continue his/her studies in doctoral degree or take special course of professional training (residency).

Those students, who will have passed the both steps of American Medical Licensing Exams (USMLE) will have the right to participate in the competition for the residency in United States of America.

In Georgia, by the Law of Georgia On Medical Activity (Article 17), a person (citizen of Georgia or of a foreign country) graduated from the accredited higher medical institution and obtained relevant diploma has the right to:

Take the post-graduate professional training (clinical residency) course in particular medical specialty and after successful passing unified certification examination, obtain the license for independent medical practice in this particular specialty;

Undertake research and pedagogical practice in the theoretical or other fields of health care;

Work as junior physician (junior doctor). Junior physician works in a university hospital, clinic or other approved medical institution and is supervised by a clinical tutor.