

# **REPORT**

on the results of work of the External Expert Commission for assessment for compliance with the requirements of the standards of International Program Accreditation of the educational program

226 Pharmacy
of Odessa National Medical University

October 20-22, 2021

## INDEPENDENT AGENCY FOR ACCREDITATION AND RATING External Expert Commission

Addressed to Accreditation Council of IAAR



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#### (I) SYMBOLS AND ABBREVIATIONS

EEC -External Expert Commission

ONMedU - Odessa National Medical University

HEI - higher educational institution

MES of Ukraine - Ministry of Education and Science of Ukraine

MH of Ukraine - Ministry of Health of Ukraine

EP - Educational program

IAAR/HAAP - Independent Agency for Accreditation and Rating

AS - academic/teaching staff

NAQAHE - National Agency for Quality Assurance in Higher Education

ME - Municipal Enterprise

PRJSC - private joint stock company

ECTS - European Credit Transfer and Accumulation System

USQE - Unified State Qualification Exam

EIC ITTICE - Education-Industrial Complex of Innovative Teaching Technologies Informatization and Continuous Education ONMedU

OSCE - Objective Structured Clinical Exam

EIE - external independent evaluation

SSS - Student Scientific Society

#### (II) INTRODUCTION

In accordance with the order of the Independent Agency for Accreditation and Rating (hereinafter -IAAR) No. 114-21-OД dated 01/09/2021, on October 20-22, 2021, at Odessa National Medical University (hereinafter - ONMedU), the External Expert Commission evaluated the educational activities for compliance with IAAR standards for international accreditation of the educational program 226 Pharmacy, Industrial Pharmacy.

The report of the External Expert Commission (EEC) contains the evaluation of compliance of the educational program 226 Pharmacy, Industrial Pharmacy with the international standards of the IAAR and the recommendations of the EEC for the further improvement of ONMedU activities.

#### EEC members:

The chairman of the commission – Turdalieva Botagoz Saitovna, Doctor of Medical Sciences, Chair of the IAAR Expert Council (the Republic of Kazakhstan)

**Foreign IAAR Expert** - Kanushina Marina Alekseevna, PhD, MBA, "AC Institute of International Education", (the Czech Republic)

**Foreign IAAR Expert** – Krotkova Elena Nikolaevna, Rector of the Grodno State Medical University (the Republic of Belarus)

**Foreign IAAR Expert** - Baskakova Irina Valentinovna, candidate of medical sciences, associate professor, Kazakh National Medical University. S.D. Asfendiyarov (the Republic of Kazakhstan)

National IAAR Expert – Georgiyants Victoria Akopovna, Doctor of Pharmacy, Professor, National Pharmaceutical University (Ukraine)

IAAR employer – Kozlov Vadim Vladislavovich, chief physician of the Harmonia Zdorovya clinic, candidate of medical sciences, associate professor, honored doctor of Ukraine, urologist, andrologist, sexologist of the highest category (Ukraine)

IAAR student – Shibovskaya Lydia Nikolaevna, 4th-year student of the educational program "222 – Medicine", International European University (Ukraine)

IAAR Observer – Saidulaeva Malika Akhyadovna, IAAR Project Manager (Nur-Sultan)

#### (III) REPRESENTATION OF THE EDUCATION ORGANIZATION

Odessa National Medical University of the Ministry of Health of Ukraine has a rich history, starting from the moment of its foundation in 1900 on the basis of the Medical Faculty of Novorossiyskiy University. In 1920, the medical faculty was transformed into an independent higher educational institution - the Medical Academy, and in 1921 - into the Medical Institute named after N.I. Pirogov, which became the leading university in the south of the country. By the Resolution of the Cabinet of Ministers of Ukraine No. 592 dated August 29, 1994, the status of a University was assigned (Odessa State Medical University), and in 2010, by the Decree of the President of Ukraine "On granting Odessa State Medical University the status of national" No. 862/2010 dated 21/08/ 2010, the status of a National University was granted.

Over the years of the existence of independent Ukraine, ONMedU has become one of the leading medical universities of the IV level of accreditation at the national level (certificate of the PД-IV series No. 1626447 dated 06/03/2014 in accordance with the decision of the Accreditation Commission, Minutes No. 109, Order of the Ministry of Education and Science of Ukraine dated 06/11/2014. 2323-π) and is a member of the International and European Association of Universities. It is a member of the International and European Associations of Universities, due to which the level of student education and training of specialists is close to world standards.

The University carries out its activities in accordance with the Constitution of Ukraine dated 06.28.1996, the Laws of Ukraine "On Education" No. 2145-VIII dated 05.09.2017, "On

Higher Education" No. 1556-VII dated 01.07.2014, "On Scientific and scientific and technical activities "No. 848-VIII dated November 26, 2015 and other regulatory legal acts, as well as on the basis of local regulatory legal acts, the main of which is the University Charter.

The University carries out educational activities in the field of training specialists in the field of knowledge Healthcare (Resolution of the Cabinet of Ministers of Ukraine dated April 29, 2015 No. 266) in specialties 22 Medicine at two levels of higher education: the second (master's) level in specialties - 221 Dentistry, 222 Medicine, 226 Pharmacy, Industrial Pharmacy; and the third (Doctor of Philosophy) level in specialties - 221 Dentistry, 222 Medicine, 226 Pharmacy, Industrial pharmacy, 228 Pediatrics; 05 Social and Behavioral Sciences in the specialty 053 Psychology at two levels of higher education: the first (bachelor's) and the second (master's).

ONMedU provides pre-university training of students at the preparatory department (incl. foreign citizens), preliminary courses, and the two-year school Young Medic. ONMedU carries out postgraduate training of specialists: internship, clinical residency, postgraduate studies, doctoral studies, advanced training, specialization (license series AB No. 617403 dated 02/03/2012).

The university has a modern material and technical base for educational, scientific, medical, and diagnostic work. ONMedU has access to local and global network resources. ONMedU has formed unique scientific and medical divisions: University clinics, Research Institute of Molecular Genetics and Cellular Medicine, Research Institute of Clinical Biophysics. The following treatment and diagnostic centers, established jointly with health authorities, are successfully operating: cardiorheumatology, eye microsurgery, osteosynthesis, endoscopic and laser surgery, pediatric cardiology, toxicology, etc.

The university is licensed (license of the Ministry of Education and Science of Ukraine dated March 30, 2021 No. 37-l) and accredited (May 2021, National Agency for Quality Assurance of Education, Ukraine) the preparation of masters in the specialty 226 Pharmacy, Industrial Pharmacy in full-time and part-time forms of study for Ukrainian and foreign citizens.

#### (IV) PREVIOUS ACCREDITATION

International program accreditation for EP 226 Pharmacy, Industrial Pharmacy is carried out for the first time.

#### (V) DESCRIPTION OF THE EEC VISIT

The work of the EEC was carried out on the basis of the visit program of the expert commission for the specialized accreditation of educational programs at the Odessa National Medical University on October 2022, 2021, in a hybrid (face-to-face and remote) format.

In order to coordinate the work of the EEC, on October 19, 2021, a preliminary meeting to distribute powers among the members of the commission and to clarify the Program was held. On October 20-21, following the program of the visit, interviews, inspection of the material base of the university, visits to departments and bases for practical training, familiarization with the documents provided upon request were conducted.

To obtain objective information about the quality of educational programs and the entire infrastructure of the University and to clarify the content of self-assessment reports, meetings were held with the Rector of the University, vice-rectors, deans, heads of departments, guarantors of educational programs, heads of departments, teachers, students, graduates, employers. A total of 100 representatives took part in the meetings (Table 2).

 ${\bf Table~2} \\ {\bf Information~about~employees~and~students~who~took~part~in~meetings~with~the~EEC~IAAR}$ 

Participants	Number
Rector	1
Vice-rectors	6
Deans	6
Heads of structural divisions	19
Heads of departments	10
Teachers	20
Employers	11
Graduates	10
Students	21
Total	100

In particular, the interviews were conducted with:

the Rector of the University - Zaporozhan Valeriy Nikolaevich

Vice-Rectors of the University: Marichereda Valeria Gennadievna, Shmakova Irina Petrovna (acting Vice-Rector), Protsenko Valentina Nikolaevna, Borsch Viktoria Igorevna, Talalaev Konstantin Alexandrovich, Antonenko Petr Borisovich (acting Vice-Rector)

deans: Kotyuzhinskaya Svetlana Georgievna (the dean of the Faculty of Medicine No. 1), Davydov Denis Mikhailovich (the dean of the Faculty of Medicine No. 2), Valda Vladimir Vladimirovich (the dean of the Faculty of Dentistry), Anisimov Vladimir Yurievich (the dean of the Faculty of Pharmacy), Buryachkovsky Eduard Stanislavovich (the dean of the International Faculty), Shevchenko-Bitensky Konstantin Valerievich (the dean of the Faculty of Postgraduate Education)

the guarantor of EP 226 Pharmacy, Industrial Pharmacy Unguryan Liana Mikhailovna heads and teachers of the departments involved in the implementation of the EP "Pharmacy, Industrial Pharmacy".

645 teachers and 1055 students took part in the questionnaire survey, including 38 teachers (5.9%) and 227 students (14.7%) of EP Pharmacy, Industrial Pharmacy.

To conduct the examination, the members of the EEC used visual inspection, observation, interviewing employees of various structural units, teachers, students, graduates, and employers, questioning the teaching staff and students. Due to the epidemiological situation in Odessa, the meetings were held online on the ZOOM platform.

Meetings with focus groups were held in accordance with the program of the visit. The presence of all members of the university staff, indicated in the visit program, was ensured. During the visit, the expert commission carried out a visual inspection of the material base of ONMedU: the main building of the university, the anatomical building, the Research Institute of Translational Medicine, the Department of Simulation Medicine, the Department of the Faculty of Pharmacy (Pharmacology and Pharmacognosy, Organization and Economics of Pharmacy, General Pharmacy with a course of clinical pharmacology), the base for practical training, Gaevsky's pharmacy, was visited. The departments provided educational and methodological complexes of disciplines, teachers' individual plans, registers of academic groups, work plans of departments, portfolios of teaching staff. Meetings with students demonstrated their satisfaction with the learning process; the graduates who participated in the meetings confirmed successful employment and careers.

## (VI) COMPLIANCE WITH PROGRAM ACCREDITATION STANDARDS 6.1. Standard "Mission and Outcomes"

#### **Evidence**

Odessa National Medical University (hereinafter - the University) has the educational program "Pharmacy, Industrial Pharmacy" (hereinafter - EP) accredited in Ukraine, specialty 226 Pharmacy, Industrial Pharmacy of the area of knowledge 22 Healthcare (Certificate of accreditation of the National Agency for Quality Assurance in Higher Education (NAQAHE) No. 1548 is valid until 01/07/2026). Educational activities are carried out on the basis of a valid license issued by the Ministry of Education and Science of Ukraine (hereinafter MES) No. 37-π, dated March 30, 2021.

The mission of the University is formulated and presented in the concept of strategic development. It is published on the University website <a href="https://onmedu.edu.ua/wp-content/uploads/2021/04/strategija-ONMedU.pdf">https://onmedu.edu.ua/wp-content/uploads/2021/04/strategija-ONMedU.pdf</a> and is available to all stakeholders.

The mission of the EP of specialty 226 Pharmacy, Industrial Pharmacy is presented in the self-evaluation report. It is "aimed at the creation and practical application of the acquired theoretical knowledge and practical skills and abilities in accordance with national and international requirements and the needs of the national healthcare system."

The Concept of the educational program, presented on the university website <a href="https://onmedu.edu.ua/wp-content/uploads/2021/08/Koncepcija-osvitnoi-dijalnosti-ONMedU-Farmacija.pdf">https://onmedu.edu.ua/wp-content/uploads/2021/08/Koncepcija-osvitnoi-dijalnosti-ONMedU-Farmacija.pdf</a>, formulates the strategic goal - the creation of an organizational legal and socio-economic conditions to improve the quality of higher education in the specialty 226 Pharmacy, Industrial Pharmacy by bringing it to the standards of international and national requirements of higher medical education, the effective use of material and technical and human resources, and financial and economic resources of the University.

The EP "Pharmacy, Industrial Pharmacy" formulates the general and special competencies of the EP graduate <a href="https://onmedu.edu.ua/wp-content/uploads/2021/02/OPP-Farmacija-2020.pdf">https://onmedu.edu.ua/wp-content/uploads/2021/02/OPP-Farmacija-2020.pdf</a>. In general, they correspond to the draft national standard through training of masters in specialty 226 Pharmacy, Industrial Pharmacy, corresponds to Bloom's taxonomy and the National Qualification Framework, and reflect the requirements of the standard for accreditation of IAAR master's programs.

The procedure for the development, implementation, monitoring, and revision of educational programs at the University is regulated by the Regulations on educational programs of ONMedU <a href="https://onmedu.edu.ua/wp-content/uploads/2020/07/Polozhennja-pro-osvitni-programi-ONMedU.pdf">https://onmedu.edu.ua/wp-content/uploads/2020/07/Polozhennja-pro-osvitni-programi-ONMedU.pdf</a>. In accordance with this Regulation, a corresponding working group of the EP "Pharmacy, Industrial Pharmacy" was created at ONMedU (Minutes No. 1 dated 06/12/2019); the guarantor of EP was determined - prof. Unguryan L.M. During the accreditation, the EEC provided protocols (5 protocols in total) on the creation and meetings of the working group of EP with the participation of external and internal stakeholders, including students (K. Stepanenko). The director of CE "Odespharm" Nikoghosyan L.R., the general director of PRJSC "Pharmacy of the pharmacy "Farmacia" Lipkina A.R., and the head of the territorial body of the State Service of Ukraine for Medicines and Drug Control in the Odessa region Lyashenko-Shcherbakov V.V. were invited as external stakeholders.

Participation in the educational process of the main internal and external stakeholders is regulated by the Regulations on the Stakeholders of Educational Programs of the Odessa National Medical University. During the accreditation process, at the meeting with external stakeholders, they confirm their participation in the discussion of the mission of EP.

A mandatory requirement for all EPs in Ukraine is their publication and review by external stakeholders.

For the implementation of the educational process in EP, ONMedU has sufficient physical resources for the needs of the end-to-end training of Masters of Pharmacy, which is provided by both general-course departments and degree-granting departments. To ensure adequate fundamental medical and biological training, the departments of medical EPs are involved. The chemical and professional pieces of training are carried out at the degree-granting departments of EP (Pharmaceutical Chemistry; Pharmacology and Pharmacognosy; Technology of Drugs; Organization and Economics of Pharmacy), which are located in a separate building, as well as at the Department of General Pharmacy with a course of Clinical Pharmacology. All departments have the necessary equipment and materials. The curriculum provides for a sufficient amount of practical training at the University's bases of practical training, which makes it possible to prepare students for professional activities. The bases of practical training are pharmacies of various forms of ownership. In addition to the resources of the ONMedU departments, it is possible to use the material base of the Odesa Physical and Chemical Institute named after A.I. S.A. Bogatsky of the Academy of Sciences of Ukraine and the pharmaceutical company "Interchem" - one of the leading manufacturers of innovative pharmaceuticals and APIs.

The program learning outcomes are available on the university website. They are relevant to the indicated competencies (the correspondence matrix is provided) and the needs of the industry.

The EP provides a list and sequence of compulsory disciplines, as well as the matrix of correspondence of educational components to program learning outcomes. Curricula of the EP "Pharmacy, Industrial Pharmacy" for full-time and part-time courses are available on the university website. They highlight normative (mandatory) and selective disciplines.

#### Analysis

In general, EP "Pharmacy, Industrial Pharmacy" meets the criteria of the IAAR international accreditation standard "Mission and Outcomes".

The activities for the EP implementation are under national legislation and regulated by the system of internal documents available on the University website. The compliance with the principles and goals of higher pharmaceutical education is confirmed by the accreditation of EP by the National Agency for Quality Assurance in Higher Education (NAQAHE) in 2021.

All stakeholders (students, teachers, and external stakeholders) are involved in the development and revision of the educational program. One of the reviewers of the EP is the director of CE "Odespharm" Nikoghosyan L.R., who is, according to the information on staffing, the part-time head of the Department of General Pharmacy with a course of Clinical Pharmacology.

The mission of EP is formulated. However, according to the results of focus meetings with external stakeholders, students, and teachers, the participants of the educational process do not sufficiently differentiate the mission and strategic goal of the development of EP. At the same time, external stakeholders confirmed their participation in the formation of the mission and content of EP.

EP is compiled and structured in accordance with national standards, has all the necessary elements, and is approved properly. The program learning outcomes of EP are formed according to the competencies, general and professional, and are structured following modern trends in higher pharmaceutical education.

The resources and capabilities of the University are sufficient for the implementation of EP. However, innovations in teaching are not sufficiently involved.

Since a mandatory element of the implementation of the master's program is the master's thesis, all students are involved in scientific research in one way or another. However, many of the participants in a student focus group of EP did not see their further realization in scientific research, did not see the prospect of postgraduate study and planned to participate in scientific work only during their master's work preparation in senior years.

Strengths/best practice: In general, this standard meets the quality criteria of IAAR.

#### EEC recommendations

1.1.2. Revise the formulation of the mission of EP "Pharmacy, Industrial Pharmacy" with further posting it on the university website (by September 2022) and promoting it to the EP students; expand the representation of external stakeholders when considering and reviewing the EP.

### Area for improvement

- 1.1.8. Expand the professional competencies of EP graduates through the widespread introduction of innovative teaching methods, for example, the introduction of a compounding pharmacy, the use of software that is relevant in the pharmaceutical sector of Ukraine in the educational process
- 1.1.10. Intensify the involvement of students of the EP in scientific research in the junior years for the possibility of choosing the future direction for preparing a master's thesis.

#### Conclusions of the EEC according to the criteria:

Strong - 0
Satisfactory - 20
Assuming improvement - 3
Unsatisfactory - 0

## 6.2. Standard "Educational Program"

#### Evidence

In accordance with the national legislation (Law of Ukraine on Higher Education <a href="https://zakon.rada.gov.ua/laws/show/1556-18#Text">https://zakon.rada.gov.ua/laws/show/1556-18#Text</a>) a comprehensive training of masters of pharmacy is carried out on the basis of secondary education (300 credits) in Ukraine. A reduced period of study (240 credits) is allowed for college graduates (junior bachelor or junior specialist) majoring in Pharmacy. The EP training for masters of pharmacy, implemented at the University, was developed taking into account the draft of the higher education standard of Ukraine, which was discussed by the public, and the national qualifications framework.

EP "Pharmacy, Industrial Pharmacy" listed on the website of ONMedU meets the recommendations of the Ministry of Education and Science of Ukraine in content and structure and contains such structural components: general information, purpose of the EP, characteristics of EP, readiness of graduates for employment and further training, teaching and assessment, program competencies - integral, general and professional (special); program learning outcomes, resources for the implementation of EP - personnel, material and technical resources, information and training; academic mobility. The list of educational components and their sequence is given in EP. Required components include a cycle of general training disciplines in scope of 74 ECTS credits and a cycle of professional training disciplines in scope of 151 ECTS credits. The total amount of compulsory educational components is 225 ECTS credits (75%). 37 ECTS credits in compulsory vocational training are allocated for academic (pharmaceutical botany) and industrial practices (pharmacy drug technology, pharmaceutical chemistry, pharmacognosy, clinical pharmacy, organization and economics of pharmacy, pharmaceutical management and marketing, industrial drug technology). This ratio of practical and theoretical training allows to ensure the readiness of students for professional activities. Elective disciplines are also represented by 2 blocks - general and professional training.

The educational program contains information about the certification of graduates. Compulsory state components of certification are the Unified State Qualification Examination

Krok-1 and Krok-2. The second component of graduate certification is a comprehensive practice-oriented exam or a master's thesis defense.

EP contains matrices of program learning outcomes correspondence and competencies of the graduate, as well as providing program learning outcomes with educational components.

Compulsory components in the curriculum include such disciplines, the theoretical mastering of which is assessed by the independent unified state qualifying exam Krok-1 (microbiology with the basics of immunology, pathological physiology, organic chemistry, physical colloid chemistry, analytical chemistry, pharmaceutical botany, biology; and Krok-2 (pharmacognosy, pharmaceutical chemistry; drug technology, organization and economics of pharmacy, pharmaceutical management and marketing). The presence of disciplines that form the so-called "soft skills"- the student's ability to realize the social function of the profession – introduction to the specialty, pharmaceutical ethics and deontology, social pharmacy should be noted. The ratio of medical-biological, chemical, technological, organizational and sociohumanitarian disciplines in the curriculum is quite balanced.

The design and implementation of educational programs is regulated by the Regulations on educational programs <a href="https://onmedu.edu.ua/wp-content/uploads/2020/07/Polozhennja-pro-osvitni-programi-ONMedU.pdf">https://onmedu.edu.ua/wp-content/uploads/2020/07/Polozhennja-pro-osvitni-programi-ONMedU.pdf</a>.

An integral part of the implementation of the EP are the curricula, which are made in full compliance with the EP. The site presents plans for full-time studies https://onmedu.edu.ua/wpcontent/uploads/2021/02/Navchalnij-plan-Denna\_2020.pdf and extramural form of study https://onmedu.edu.ua/wp-content/uploads/2021/02/Navchalnij-plan-Zaochna 2020.pdf. elements of methodological support in accordance with the Regulations on teaching and methodological support of the educational process https://onmedu.edu.ua/wpcontent/uploads/2021/10/Polozhennja-pro-navchalno-metodichne-zabezpechennja-osvitnogoprocesu\_compressed.pdf are curriculum, syllabus, teaching materials. During the visit to the departments of pharmacology and pharmacognosy, organization and economics of pharmacy, guidance materials for lectures, laboratory and practical classes were demonstrated. For the focus group, students demonstrated the ability to use the information resources of ONMedU, access to which is carried out by personal login and password, which the student receives when entering the University. During the demonstration of students' use of the information resources, the presence of the necessary methodological materials in the disciplines of pharmaceutical chemistry and biochemistry was confirmed.

The list of elective courses is available on the university website <a href="https://onmedu.edu.ua/vibirkovi-komponenti-farmacija/">https://onmedu.edu.ua/vibirkovi-komponenti-farmacija/</a>. Hyperlinks from each name to the syllabus are organized. Regulations on the Procedure for the formation of individual educational trajectory are available on the website of the University <a href="https://onmedu.edu.ua/wp-content/uploads/2020/07/Polozhennja-pro-porjadok-formuvannja-individualnih-osvitnih-traiektorij-zdobuvachiv-vishhoi-osviti-v-ONMedU.pdf">https://onmedu.edu.ua/wp-content/uploads/2020/07/Polozhennja-pro-porjadok-formuvannja-individualnih-osvitnih-traiektorij-zdobuvachiv-vishhoi-osviti-v-ONMedU.pdf</a>

The organization of the educational process is carried out in accordance with the Regulations on the organization of the educational process at ONMedU <a href="https://onmedu.edu.ua/wpcontent/uploads/2020/01/osvitnij-proces.pdf">https://onmedu.edu.ua/wpcontent/uploads/2020/01/osvitnij-proces.pdf</a>, the internship training is regulated by the Regulations on the intership of ONMedU students <a href="https://onmedu.edu.ua/wpcontent/uploads/2021/10/Polozhennja-pro-praktiku.pdf">https://onmedu.edu.ua/wpcontent/uploads/2021/10/Polozhennja-pro-praktiku.pdf</a>. Classes are presented in traditional forms - lectures, laboratory and practical classes, seminars.

The internship training is regulated by the Regulations on the intership of ONMedU students <a href="https://onmedu.edu.ua/wp-content/uploads/2021/10/Polozhennja-pro-praktiku.pdf">https://onmedu.edu.ua/wp-content/uploads/2021/10/Polozhennja-pro-praktiku.pdf</a>. The internship is carried out in institutions with which contracts have been concluded as the bases for internship. During the visit, some bases of internship were visited - Gaevsky pharmacy, Simesta pharmacy, Odespharm pharmacy . It was confirmed that students complete internships at the relevant bases on a permanent basis. Supervisers of internships from enterprises are familiar with the programs of industrial trainings and positively characterized the training program for the EP "Pharmacy, industrial pharmacy".

#### **Analysis**

In preparation for accreditation and during the visit, an analysis of the educational program was carried out. In general, its structure, content and implementation meet the requirements of the standard "Educational Program".

EP "Pharmacy, Industrial Pharmacy" meets the stated goals and current trends in pharmaceutical education.

The Regulations on the organization of the educational process include, among other forms of study, such forms as seminar-discussion, research-seminar, problem-based seminar, scientific seminar, etc. However, this information was neither confirmed in the self-analysis report nor in communication with student focus groups and teachers.

The educational program clearly defines normative and elective disciplines. The list of elective courses is available to applicants for higher education, the procedure for their selection is prescribed, but during the interview some students did not know about the possibility of choosing disciplines, or chose them on the recommendation of the dean's office.

During the visit to the University, the commission was provided with the minutes of the meetings of the departments, in accordance with which changes to the educational components were made.

The relations of the Faculty of Pharmacy with the representatives and organizations of practical pharmacy in Odessa are quite close, the practitioners are involved in the teaching of professional disciplines. The number of practice bases is sufficient.

A curatorial institute has been set up to accompany students in their studies at the university, but some students did not know who the curator of their group was when being interviewed. Regulations on academic curators groups was developed as an appendix to the Regulations on the organization of humanitarian education and discipline <a href="http://files.odmu.edu.ua/site/polojvihrobot.pdf">http://files.odmu.edu.ua/site/polojvihrobot.pdf</a>.

Strengths/best practice: In general, this standard meets IAAR quality criteria.

#### EEC recommendations:

- 2.1.5. Organize a staged implementation of modern teaching methods into the educational process, in particular problem-oriented, science-oriented and team-oriented training, starting from the 2022/2023 academic year. Standardize the requirements for practical skills during the implementation of the EP
- 2.6.1. Define the duties and responsibilities of the guarantor of the EP, the dean's office in providing and assessing the individual learning environment and learning process depending on the needs of students and teachers. (Until September 1, 2022).

#### Area for improvement:

2.1.7. Post on the web page pharmaceutical faculty information about assignment of curators for academic groups of EP " Pharmacy , industrial pharmacy ». Post the regulations on the curators of academic groups as a separate regulation on the university website.

EEC conclusions on the criteria: (strong / satisfactory / suggest improvements / unsatisfactory):

Strong - 0 Satisfactory - 34 Suggest improvement - 3 Unsatisfactory - 0

#### 6.3 Standard "ASSESSMENT OF STUDENTS"

#### Evidence

The main normative document in ONMedU, regulating the principles, methods and procedure for evaluating the results of students' learning activities, is Regulations on the organisation of the educational process by applicants of the higher education at Odessa National Medical University» <a href="https://onmedu.edu.ua/wp-content/uploads/2020/01/osvitnij-proces.pdf">https://onmedu.edu.ua/wp-content/uploads/2020/01/osvitnij-proces.pdf</a> (in self-analysis Annex 15 translation) developed in accordance with the Laws of Ukraine "On Higher Education" № 1556-VII of 01/07/2014 and "On Education", the Charter of the University and other legal documents. The Regulations describe control measures of the quality of the educational process of students, types of control, evaluation criteria, the procedure for evaluating the student's educational activities. The algorithm of consideration of conflict situations and appeals at the assessment of results of training. The Regulations also provide for the possibility of transferring credits, converting learning outcomes from ECTS to the national scale and vice versa, the procedure for eliminating academic debt and working off missed classes.

In accordance with EP, the assessment of knowledge, skills and abilities of students takes place at the following levels: current - in practical and final classes; final control in disciplines - exams and tests, state final certification in the form of USQE and defense of master's thesis. The number of exams and tests is regulated by the curriculum. In accordance with the plan of the EP "Pharmacy, Industrial Pharmacy" students take 27 credit tests, 27 grading tests (including internships) and 16 exams (for disciplines being a part of the USQE).

The current control of progress is carried out by teachers during classroom studies. It can be conducted in the form of an oral or written survey (express control) in practical classes and interactive lectures, according to the results of which the student is admitted to the final control in the form of computer testing. During the visit to the departments (pharmacognosy and pharmacology, organization and economics of pharmacy, pharmaceutical chemistry) academic registers of attendance and progress of students were demonstrated. The current assessment of students is carried out systematically at each lesson. The university has an electronic journal in testing mode. Students' work is assessed constantly. The work of the student assessment system on educational modules and learning components was demonstrated. The results of the exams are evaluated according to the 4-point national ("excellent", "good", "satisfactory", "unsatisfactory") and 200-point scale, and are entered in the examination -record sheet and student's record book. If a student received grades "good" and "satisfactory", when passing the final test (exam, grading test), the exam or grading test cannot be retaken. A student who has not passed the exam has the right to retake it twice within the time limits set by the order of the rector. The second retaking is accepted by the commission - the commission includes at least two experienced teachers of the department (professors, associate professors) and a representative of the dean's office. In addition, the final computer test on the Moodle platform is conducted in all major disciplines.

The Assessment criteria are given in the programs of disciplines available to students on the information portal.

For the disciplines included in the structure of the Krok-1 and Krok-2 exams, a compulsory component of the curriculum is the final test control, including 50 test questions (in 30 minutes), as an indicator of students' acquisition of knowledge. EIC ITTICE no later than two weeks after the beginning of the semester provides students with free access to the database of test assignments, which are submitted for final control in all disciplines.

They pass the final (computer) test control at the last practical lesson on the discipline at EIC ITTICE according to the schedule approved by the rector of the University. The student must provide the correct answers for at least 90% (45 questions). During the focus group interviews, the EP students generally showed awareness of the assessment system, the possibility of re-submission and appeal.

Student surveys are conducted to obtain feedback. In January-February 2021, a survey of graduates was conducted, among the questions were questions about the evaluation of learning

outcomes. The total sample was 422 students. 9% of them were graduates of the program "Pharmacy, Industrial Pharmacy". Among the participants, 47% said that they faced a situation when they could not pass the exam or test during the session. Among the reasons they noted exactingness of teachers, complexity of the subject, corruption, inconsistency of the questions with the subject of study. The commissions were presented with the minutes of the discussion of the results of the survey of graduates at the meeting of the Academic Council of the Faculty of Pharmacy.

Certification of graduates of the specialty 226 "Pharmacy, Industrial Pharmacy" is carried out in the form of a single state qualification exam (USQE), which consists of: integrated licensed test exam "Krok-1" and "Krok-2", English language exam and defense of master's thesis. USQE is conducted by an independent Testing Center of the Ministry of Health of Ukraine. External specialists are invited during the state certification. In particular, the chairman of the examination commission in 2018, 2019, 2020 was Gromovik Bogdan Petrovych – the head of the Department of Organization and Economics of Pharmacy, Lviv National Medical University named after Danylo Halytsky. In 2021 - Nikogosyan Levon Rubenovich .

#### Analysis

In general, the methods of assessment of students in the EP "Pharmacy, Industrial Pharmacy" in ONMedU meet the requirements of the standard.

The University has developed <u>Regulations on the organization of the educational process</u> <u>by applicants for higher education at the Odessa National Medical University</u>, which lists all the basic principles of student assessment adopted by ONMedU. Students and teachers are aware of the control activities, methods and evaluation criteria. The results of the semester progress are monitored by the dean's office.

The final assessment of the discipline study and the achievement of the results stated in the program of the discipline consists of the sum of the arithmetic mean of the current assessment and the assessment obtained during the semester control. Subsequently, the average score when multiplied by 40 converts the score to 200. This method of assessment is not modern and does not allow to assess the contribution of individual elements of the educational component in the overall assessment of the discipline, does not allow to correctly rank students according to their academic performance.

The University has developed Credit Transfer Regulations, but none such examples were given in the self-analysis report or in the interview.

The report on self-analysis notes that "the University encourages external expertise in assessment methods, but at the moment this process is poorly established." An example is the invitation of external specialists to conduct the State certification. Nevertheless, in 2021 the chairman of the attestation commission was Nikoghosyan LR, who works part-time at ONMedU being the head of a Department of the EP "Pharmacy, Industrial Pharmacy". In addition, it is advisable to receive and analyze feedback from the heads of industrial practice on the results of its passage to respond to problematic issues, for example, in the form of a conference or discussion of comments of supervisers of the internship. Such events are not held at ONMedU.

The results of passing the Krok-1 and Krok-2 by students are not listed on the university's website.

Strengths/best practice: In general, this standard meets IAAR quality criteria.

#### EEC recommendations:

- 3.1.4. Use modern and differentiated methods of student assessment, which allow to objectify formal assessment, widely implement proctoring when conducting distance learning
- 3.2.4. Introduce a cumulative credit rating system for assessing students by individual educational components, determine scaled grades for individual elements within each educational component (summative assessment) by the end of 2022.

#### Area for improvement:

- 3.1.7. Conduct a correlation analysis of compliance of assessment results in the learning process with the results of the license exam Krok-1 and Krok-2, based on which to assess the validity and correctness of student assessment (at the end of the spring semester of 2022 and then regularly). Publish results and develop measures to improve results.
- 3.1.8. To motivate students to non-formal learning by crediting credits in their activities corresponding to the elements of disciplines (participation in workshops , webinars , training programs, internships in Ukraine and abroad)
- 3.1.10. Conduct a survey of managers of industrial training from enterprises on the adequacy of student training in certain educational components of vocational training and correlation analysis of compliance of the assessment of the achievement of program learning outcomes with the competencies of students. Document outcomes and make management decisions available to all participants in the learning process.

EEC conclusions on the criteria: (strong / satisfactory / suggest improvements / unsatisfactory):

Strong - 0 Satisfactory - 14 Suggest improvement - 5 Unsatisfactory - 0

6.4. Standard "STUDENTS"

#### Evidence

Enrollment to EP is carried out in accordance with the stated mission of the University. The policy of entrants selection entering universities after school is formed by the Ministry of Education and Science and the Ministry of Health of Ukraine. In accordance with the Legislation of Ukraine, the Master's Program in Specialty 226 "Pharmacy, Industrial Pharmacy" is carried out on the basis of secondary education (300 ECTS credits) or the educational level of junior specialist (bachelor) (at least 240 ECTS credits). Admission to the 1st year of study is based on the results of external independent assessment in subjects determined by the relevant Ministry and the University, which is given in the Rules of Admission:

1<sup>st</sup> subject - Ukrainian language (not less than 100 points according to the 200-point system);

2<sup>nd</sup> subject - mathematics (not less than 100 points according to the 200-point system);

3<sup>rd</sup> subject - biology, or chemistry, or physics (at the choice of applicants) - (not less than 100 points according to the 200-point system).

Since 2019, according to the decision of the Ministry of Health of Ukraine, the competitive score for admission to the specialty 226 "Pharmacy, Industrial Pharmacy" can not be less than 130 points on a 200-point system.

Summary data on the passing score to the specialty are presented in the table.

Passing score for admission to ONMedU " 226-Pharmacy, Industrial Pharmacy"

Years	2016	2017	2018	2019	2020
Passing score	112.2	119,685	115,872	130,203	130,713

The rules for admission, duly approved, are available on the university's website at <a href="https://onmedu.edu.ua/abituriientam/prijmalna-komisija/pravila-prijomu-do-onmedu/">https://onmedu.edu.ua/abituriientam/prijmalna-komisija/pravila-prijomu-do-onmedu/</a>. There is

information for entrants to the EP "Pharmacy, Industrial Pharmacy" at <a href="https://onmedu.edu.ua/abituriientam/vstup-2021/226-farmacija-promislova-farmacija/">https://onmedu.edu.ua/abituriientam/vstup-2021/226-farmacija-promislova-farmacija/</a> on admission to various forms of education and step-by-step instructions for foreign entrants <a href="https://onmedu.edu.ua/wp-content/uploads/2018/06/Pokrokova-instrukcija-dlja-vstupu-na-navchannja-inozemnimi-gromadjanami.pdf">https://onmedu.edu.ua/wp-content/uploads/2018/06/Pokrokova-instrukcija-dlja-vstupu-na-navchannja-inozemnimi-gromadjanami.pdf</a>

For entrants who have the qualification of a junior specialist in Medicine and Pharmacy the Rules of Admission provide presence of EIE certificates in Ukrainian (100 p) and any other subject (100 p), as well as passing a professional entrance test in medical chemistry and medical biology and pharmaceutical chemistry and pharmacognosy respectively.

The programs for all the entrance exams are posted on the university website <a href="https://onmedu.edu.ua/abituriientam/prijmalna-komisija/programa-vstupnih-ispitiv/">https://onmedu.edu.ua/abituriientam/prijmalna-komisija/programa-vstupnih-ispitiv/</a>

To enter the university, applicants upload documents to the electronic office. After receiving the recommendation for enrollment, applicants must submit to the admissions committee the original documents, on the basis of which the Enrollment Order is formed. Ranking lists of applicants are available on the university website <a href="https://onmedu.edu.ua/abituriientam/prijmalna-komisija/spiski/">https://onmedu.edu.ua/abituriientam/prijmalna-komisija/spiski/</a>

According to the information provided during the visit to the University, the contingent of students majoring in "Pharmacy is:

Year	1	2	3	4	5	6	Total
Full-time (Ukr)	35	30	42	16	39	) (	161
Full-time English / Ukrainian	63/12	50/33	24/16	16/11	8/8		161/79
Extramural (Ukr)	13	46	46	118	63	146	428

On average, the contingent of students in the years is comparable and allows the university to provide training facilities and teaching staff. Naturally, the number of extramural students in Ukraine is decreasing. In the first year, their contingent is only 13 people. The number of entrants is regulated in accordance with the license volume, which is determined by the Ministry of Education and Science of Ukraine based on the analysis of available resources for each EP.

There is an opportunity to teach students with special educational needs. Information about this presented on the university website in the section for applicants https://onmedu.edu.ua/abituriientam/dopomoga-osobam-z-osoblivimi-potrebami/... with disabilities have the right to choose admission either by the results of external independent testing in subjects determined by the Conditions of Admission to Universities and the rules of admission to ONMedU, or by the results of the entrance exams they can take in ONMedU in these subjects. In addition, this category of applicants is enrolled to the University under a separate quota (Quota-1 according to the Conditions of admission to universities and the rules of admission to ONMedU). Also, these applicants have the right to transfer from the contract form of education to the budget in accordance with the Terms of Admission. Such students were not studying at the time of accreditation of the Pharmacy, Industrial Pharmacy EP.

Transfers from other universities and programs are carried out in accordance with the Resolution of the Cabinet of Ministers of Ukraine of 29.05.2020 № 346 "Regulations on the procedure for transfer, expulsion and reinstatement of students of higher educational institutions of Ukraine".

In 2020, the Commission for the Promotion of Employment of Graduates was established (the main task is career guidance work among applicants and assistance in providing the 1st job). The commission monitored the demand for medical/pharmaceutical workers in the labor market. It collaborated with potential employers to conduct internships, training for applicants and provide the 1st job; attracted former graduates to work. Deans provided information on the availability of vacancies in Odesa, Mykolaiv, Kherson, Kirovograd, Zhytomyr, Volyn, Cherkasy regions; organized trainings on employment and labor relations, the procedure for entering the internship.

The website of the university contains Regulations on the appointment and payment of scholarships and financial assistance and bonuses to students, clinical residents and graduate students who study at the Odessa National Medical University <a href="https://onmedu.edu.ua/wpcontent/uploads/2018/02/">https://onmedu.edu.ua/wpcontent/uploads/2018/02/</a> Polozhennja-pro-priznachennja-i-viplati-stipendij-nadannja-materialnoi-dopomogi-ta .... pdf. According to this Regulation, social scholarships are provided for students of various categories, provided there is no academic debt. Such categories include, for example, orphans, children / persons with disabilities, combatants and their children, miners, migrants from the occupied territories and other categories defined by the legislation of Ukraine. The procedure for awarding such scholarships is given. There is an opportunity for students to participate in the competition for nominal scholarships for excellent academic performance.

The system of awarding academic scholarships to budget students is transparent and is regulated by the Regulations on the procedure for forming the academic performance rating of students studying at ONMedU by state order for scholarships <a href="https://onmedu.edu.ua/wpcontent/uploads/2018/02/">https://onmedu.edu.ua/wpcontent/uploads/2018/02/</a> Polozhennja-pro-porjadok-formuvannja-uspishnosti-studentiv-jaki-navchajutsja-v-ONMedU-za-derzh.zamovl..pdf

The Regulation also regulates the appointment of material assistance to students.

The University website has Regulations on Humanitarian Education and Dioscipline https://onmedu.edu.ua/wp-content/uploads/2017/05/polojvihrobot-1.pdf, moral and ethical code persons who study and work at **ONMedU** https://onmedu.edu.ua/wpcontent/uploads/2017/05/Moralno-etichnij-kodeks.pdf, The concept of national-patriotic https://onmedu.edu.ua/wp-content/uploads/2017/05/konczepcziya.pdf comprehensive plan of legal and educational work among students and teachers of the university https://onmedu.edu.ua/wp-content/uploads/2021/03/Kompleksnij-plan-pravovoi-ta-vihovnoiroboti-sered-studentiv-i- vikladachiv-universitetu-na-2020-2021n.r..pdf , Regulations on the policy and procedure for the prevention and settlement of conflict situations https://onmedu.edu.ua/wp-content/uploads/2020/11/Polozhennja-pro-politiku-ta-procedurizapobigannia-poperedzhennja-ta-vreguljuvannja-konfliktnih -situations-in-ONMedU.pdf

An institute of curatorship is provided at ONMedU for adaptation and support of students. Student government at the faculty is implemented through the student council. (The chairman is Stepanenko Karina) <a href="https://onmedu.edu.ua/zagalna-informacija/fakulteti/farmacevtichnij-fakultet/">https://onmedu.edu.ua/zagalna-informacija/fakulteti/farmacevtichnij-fakultet/</a>

Both Ukrainian and foreign students have the opportunity to live in a university dormitory. During the focus group, international students described the living conditions in the dormitory as good.

Students participate in the development, discussion and evaluation of the educational program and learning conditions. At the request of the commission, the minutes of the meeting of the working group on the development of the EP "Pharmacy, Industrial Pharmacy" with the participation of student K. Stepanenko were presented. Minutes of meetings of the Student Council of the Faculty of Pharmacy on discussion the results of the survey of students on the conditions of study at ONMedU (Minutes  $N_{\Omega}$  7 from 17.12.2020) and on discussion the results of the survey of students and graduates (Minutes  $N_{\Omega}$  9 from 28.03.2021)

#### Analysis

EEC notes compliance of the EP "Pharmacy, Industrial Pharmacy" with standard 4 "Students". Admission and training of students is carried out in accordance with national

legislation. The information required for admission and training is transparent and available on the website. Students are properly provided with methodological materials, have access to information resources, free access to the Internet and databases. If necessary, students are provided with dormitories. Categories of students who are provided with social support are defined. Student self-government works in ONMedU. The participation of students in the development and implementation of changes in the EP is proved. Surveys of students on satisfaction with the educational process are conducted. The site presents the results of a survey of students <a href="https://onmedu.edu.ua/wp-content/uploads/2021/02/Rezultati-opituvannja-studentiv-shhodo-umov-navchannja-ONMedU-listopad-2020-roku.pdf">https://onmedu.edu.ua/wp-content/uploads/2021/02/Rezultati-opituvannja-studentiv-shhodo-umov-navchannja-ONMedU-listopad-2020-roku.pdf</a>, however in out of 345 people, only 1.5% (7 people) who study at the Pharmacy, Industrial Pharmacy EP took part in this survey. It is incorrect to analyze this questionnaire for the EP. The presented minutes of the discussion the results of the questionnaire are not informative and do not contain specific management decisions.

Strengths /best practice: In general, this standard meets IAAR quality criteria.

EEC recommendations: no

#### Area for improvement:

4.4.5. Develop questionnaires for the sociological survey of students, allowing to assess not only the educational process as a whole, but also the educational process in individual departments. Conduct a survey of students for each EP separately for a more objective assessment.

EEC conclusions on the criteria: (strong / satisfactory / suggest improvements / unsatisfactory):

Strong - 0 Satisfactory - 28 Assume improvement - 1 Unsatisfactory - 0

6.5. Standard "ACADEMIC STAFF/FACULTY"

#### Evidence

Personnel policy of the EP "Pharmacy, Industrial Pharmacy" is consistent with the generally accepted one in ONMedU. It is consistent with the Concept of Strategic Development of Odessa National Medical University until 2025, the Constitution of Ukraine, laws of Ukraine, Decrees of the President of Ukraine, resolutions of the Verkhovna Rada of Ukraine and the Cabinet of Ministers, orders of the Ministry of Health of Ukraine, MES of Ukraine. self-government, the Charter of ONMEDU, the Collective Agreement for 2018-2022, as well as regulations of the local nature of the University.

General requirements for candidates for teaching positions in Ukraine are specified in the Law on Higher Education, Licensing Conditions for a Specific Educational Level, and the Criteria of the National Agency for Quality Assurance in Higher Education.

Information about teachers (including basic education, academic degree and academic title) is entered into the Unified State Electronic System, which prevents the possibility of providing inaccurate data. At the request of the commission, the graduating departments of the Faculty of Pharmacy provided forms from this database for teachers working at the EP "Pharmacy, Industrial Pharmacy".

### Teaching staff of graduating departments

in specialty 226 "Pharmacy, Industrial pharmacy"

Department			part-time			
Department	Prof.	Assoc.	St. prep.	Prep.	Ass.	purt time
Organization and economics of pharmacy	1	1	4	0	7	4
Pharmacology and pharmacognosy	4	2	3	0	11	0
Pharmaceutical chemistry	1	3	1	0	4	0
Drug technology	0	2	2	0	5	2
General pharmacy with a course in clinical pharmacology	1	6	1	0	7	0

Qualitative characteristics of AS are presented in the table.

Qualitative characteristics of the teaching staff of the EP "Pharmacy, Industrial Pharmacy"

Total	Scientific degree		Academic t	itle	Without a	*****		
	d.n. Ph.D.	Professor	Associate Professor	Senior Research Fellow	scientific title	Without a degree		
The total number of scientific and pedagogical workers								
67/100%	8 /11.94% 34 / 50.75%	7 / 10.45%	12 / 17.91%	0	48 /71.64%	25 / 37.31%		

The table shows that the academic degree holders rate of the AS is more than 62%, teachers with academic titles - more than 30%. Among teachers, the ratio of women to men is 80:20.

At the request of the commission, the staff of teachers for each educational component was provided. Education, degree, scientific publications meet the taught component and national accreditation criteria.

Teachers of graduating departments conduct research with students, as the EP involves the defense of a master's thesis. Part of the workload for the management of master's theses is normalized, but most of the work is performed by teachers in their free time. In accordance with the legislation of Ukraine, the study load may not exceed 600 hours during the academicl year. The analysis of individual plans of teachers at the departments of organization and economics of pharmacy, pharmacognosy and pharmacology showed compliance with this standard.

The student-teacher ratio is regulated by the legislation of Ukraine and is compulsory by universities. Workers of practical pharmacy are employed part-time to teach students, for example, assistants of the Department of Organization and Economics of Pharmacy (Razkevich O.S. -

Medical Representative of Nestle in Ukraine, Stepanova O.A. - Pharmacist of PJSC "Pharmacia", Yashchuk I.S. - Deputy Director of PE "Tira" (pharmacies AKS), Obrazenko M.S. - senior pharmacist of LLC "Medical Center MEDICAP", the head of the department of General Pharmacy with a course in clinical pharmacology - acting director of the municipal health department. In 2021, under the supervision of Yashchuk I.S. student Nosov A.A. defended a master's thesis "Quality implementation of management tools is one of the main factors in improving the efficiency of the company."

Teachers of fundamental departments of the medical faculty are involved in the teaching of medical and biological disciplines.

For the training of teachers engaged in educational activities in a foreign language, additional professional programs are implemented to improve the level of knowledge of the English language on the basis of the Department of Foreign Languages. In addition, in 2021 funds were allocated from the University fund and an agreement was concluded with Odessa II Mechnikov National University to provide educational services with the opportunity to pass a foreign language exam to obtain a certificate confirming the level of foreign language proficiency at level B2. During the interviews, the students noted a generally satisfactory language knowledge of teachers.

Teachers carry out research activities in accordance with his scientific specialty and the profile of the department. Leading scientists of the University publish the results of their research in periodicals indexed in the international information-analytical systems of scientific citations WoS and Scopus , among teachers of graduating departments of the Faculty of Pharmacy those having Hirsch index are:

Anisimov Volodymyr Yuriovych (h - index - 3)

https://www.scopus.com/authid/detail.uri?authorId=56048070600

Helmboldt Volodymyr Olegovych (h - index - 13)

https://www.scopus.com/authid/detail.uri?authorId=6603886992

Unguryan Liana Mikhailivna (h- index - 1)

https://www.scopus.com/authid/detail.uri?authorId=57192923774

Belyaeva Oksana Ivanivna (h - index - 2)

https://www.scopus.com/authid/detail.uri?authorId=57204201758

Borisyuk Irina Yuriivna (h - index - 4)

https://www.scopus.com/authid/detail.uri?authorId=12773717700

Kresyun Valentyn Iosifovych (h - index - 3)

https://www.scopus.com/authid/detail.uri?authorId=6603470162

Rozhkovsky Yaroslav Volodymyrovych (h - index - 1)

https://www.scopus.com/authid/detail.uri?authorId=57221446223

Shishkin Ivan Volodymyrovych (h - index - 3)

https://www.scopus.com/authid/detail.uri?authorId=57197781457

Publications correspond to educational components.

Teachers who are members of the collegial bodies of the university - the Scientific Council of the Faculty of Pharmacy and of ONMedU (Anisimov V.Y., Helmboldt V.O., Rozhkovsky Y.V). Thus, they are involved in decision-making not only within the faculty, but also at the university as a whole.

The university supports the training of teachers, both in the professional field and in the field of higher education pedagogy. The plan of professional development of the AS for 2020-2021 academic year and the results of its implementation were provided to the commission during the visit. 2 teachers (Aleksandrova O.O., Golubchik H.O.) underwent advanced training at the Institute for Advanced Training of Pharmacy Specialists of the National University of Pharmacy "Development and maintenance of distance learning courses" (paid by ONMedU).

The international internship "New innovative teaching method "on the basis of the University of Economics in Krakow (Poland) from 4 to 29 May 2020 was attended by the teacher of graduating departments: Bogdan Pristupa, "Challenges of modernization of medical science education in Ukraine and EU countries "(180 hours) on the basis of the Medical University of Lublin – teachers of the Department of technology of medicines Borisyuk I . Yu ., Zamkova A. V., Berbeck V . L. , "New and innovative teaching methods in pharmacy" on the base of Medical university in Lublin - teacher Sushchuk N. (2019), "Natural science education as a component of the educational system in Ukraine and EU countries » associate professor Anisimov V.Yu. (2019), "Organization of the educational process, scientific projects and publication activities at the universities of the European Union" on the base of Prague Institution of Advanced Training - Shukaieva O . (2017).

Teachers' achievements are included in the portfolio required in Ukraine for the accreditation of educational programs. The portfolio and supporting documents were presented during visits to the departments of pharmacology and pharmacognosy, as well as the organization and economics of pharmacy.

In 2021, the university developed a regulation on the rating of teachers <a href="https://onmedu.edu.ua/wp-content/uploads/2021/07/ilovepdf">https://onmedu.edu.ua/wp-content/uploads/2021/07/ilovepdf</a> merged3.pdf. The site publishes the results of the rating assessment of teachers based on the results of student surveys.

#### Analysis

The composition of the AS involved in the educational process of the EP "Pharmacy, Industrial Pharmacy" has sufficient qualifications. The selection of the AS is carried out in accordance with current legislation, but all requirements are quite general. The University website has a Procedure for a competitive selection of the AS, but it is quite old (2015) and the requirements set out in it are formal and do not take into account modern requirements. Information on teachers is included in the unified state electronic database on education. Practical pharmacy workers are involved in the educational process as part-timers. Teachers have scientific publications in reputable scientific journals that are indexed by leading databases. The university plans and supports the training of teachers in the field of pedagogy, partially finances it. Given the large number of students who study in English, the University has conducted training and certification of teachers for teaching in English. However, for most teachers, certification is provided by their own foreign language department.

To better stimulate the scientific and pedagogical activity of teachers, allowances are provided for publications in international peer-reviewed and own scientific journals of ONMedU, for participation in the preparation and publication of textbooks, monographs and manuals, as well as for guidance and defense of dissertations for supervisors. Regulations on employee bonuses are posted on the university website <a href="https://onmedu.edu.ua/wp-content/uploads/2021/05/polozennya.pdf">https://onmedu.edu.ua/wp-content/uploads/2021/05/polozennya.pdf</a>.

The site presents the results of the rating assessment of teachers, but it is based mainly on the results of a survey of students. For the EP "Pharmacy, Industrial Pharmacy" the results are unrepresentative, as only 7 people participated in the survey. The rating assessment of teachers according to the Regulation developed in 2021 was not conducted.

Thus, the qualification and composition of the AS at the EP "Pharmacy, Industrial Pharmacy" in general meet the requirements of the standard.

Strengths /best practice: In general, this standard meets IAAR quality criteria.

#### EEC recommendations:

5.1.2. Organize independent certification of teachers for the English language knowledge to assess the level of foreign language proficiency and teaching opportunities (by September 2022)

EEC conclusions on the criteria: (strong / satisfactory / suggest improvements / unsatisfactory):

Strong - 0 Satisfactory - 12 Assume improvement - 1 Unsatisfactory - 0

6.6. Standard "EDUCATIONAL RESOURCES"

#### **Evidence**

ONMedU has sufficient material and technical base for the implementation of the educational process. Graduating departments of the Faculty of Pharmacy are located in a separate building at M. Malinowski, 37 - 2253.9 m² (pharmaceutical chemistry, part of the Department of Pharmacognosy and Pharmacology, Drug Technology, Organization and Economics of Pharmacy), the educational process also involves fundamental departments of chemical and medical -biological training of the medical faculty. Equipment of laboratories and classrooms is standard for the EP "Pharmacy, industrial pharmacy". The building where the Faculty of Pharmacy is located provides for the creation of a university pharmacy (currently a simulation pharmacy). In accordance with the decision of the Academic Council of ONMedU (Minutes № 11 of 11.06.2021) the procurement plan for 2022 includes the purchase of furniture and equipment for classes at chemical departments for a total of 1,297,600 UAH , including modern devices - UV-spectrophotometer UV-900 and IR-Fourier IR- Spirit spectrometer . Chemical laboratories use reagents that are prepared by staff appointed by the head. All departments and educational and administrative divisions of the University are provided with modern computer equipment and Internet access.

The University has a modern electronic library, in which electronic departmental databases have been created for each department of the University. The resource is available on the ONMedU information portal info.odmu.edu.ua around the clock from any device connected to the Internet. To apply for authorized entry into the system, all applicants for higher education at the University are provided with a login and password. At ONMedU according to the Order of the Ministry of Education and Science of Ukraine № 269 from 27.02.2019 "On approval of the Procedure for ensuring access of higher education institutions and research institutions to electronic scientific databases" all users of the University computer network access to unique services of leading scientometric databases Web of Science Core Collection, Scopus, Science Direct. For students of the EP Pharmacy the library has 10,280 copies of textbooks (152 titles), including 132 in Ukrainian, 12 in English, 8 in Russian 8. The University Library has implemented an electronic book publishing process. The work of the catalog is provided by the modern specialized IRBIS software. Regulations on educational and methodological support of the educational process https://onmedu.edu.ua/wp-content/uploads/2021/10/Polozhennja-pro-navchalno-metodichnezabezpechennja-osvitnogo-procesu compressed.pdf regulates the access of students educational materials.

The University has developed an electronic system for quality of education management at ONMedU, which includes systems "Electronic Journal" (work with progress reports, lists of

debtors, online exams), "Rector's control" (testing applicants), OSCE exams (Objective structured clinical exam; Objective Structured Clinical Examination - OSCE). At ONMedU, all classrooms and offices in the main building, anatomical building, the building of the Faculty of Pharmacy, in the premises of the dean's office and the administration are provided with wired and wireless authorized access to the local network with access to the World Wide Web. The <a href="University's website is functioning">University's website is functioning</a> and constantly updated, as well as the distance education system running on the software of the Moodle and MicrosoftTeams platforms.

Equipment for practical skills is standard, then they are fixed during the training.

Students undergo practical training at the training pharmacy of the Faculty of Pharmacy, classes are held in the form of business games, practical classes are held on the manufacture of drugs and public services. The university cooperates with pharmacy institutions and pharmaceutical enterprises of Odesa, which are the bases of industrial training for students of the Faculty of Pharmacy. Students undergo internships in the organization and economics of pharmacy, management and marketing in pharmacy, pharmaceutical analysis, clinical pharmacy in real time, learning professional activities in real situations.

Training on the EP is carried out with the use of modern computer technologies, including distance learning. The curriculum includes such disciplines as information technology in pharmacy (normative), as well as elective - European standard of computer literacy, pharmaceutical informatics and statistics, computer modeling in pharmacy, computer technology in the study of medicines.

ONMedU provides unimpeded and free access for students and research and teaching staff of the University to electronic sources of information. Students and teachers have free access to pharmaceutical resources.

Subjects of the curriculum, especially professional-oriented ones in accordance with the presented syllabuses, contain elements of scientific methodology and the results of modern scientific achievements. In addition, the catalog of elective subjects contains some such as systematic data analysis, patent science, intellectual property in pharmacy, drug development and others that can further shape the understanding of scientific methodology.

The curriculum provides for a compulsory defense of a master's thesis, so all students are more or less involved in research. Students have the opportunity to take part in scientific work, competitions. The commission was provided with the evidence of students' participation in the scientific work of the departments of the Faculty of Pharmacy in the form of participation in conferences (Panova G., Oleksyuk K., Kozyr S., Fedorenko I., etc.), joint publications (Snigach A., Shpichka A.). The successes of students at the All-Ukrainian Olympiads in Pharmacy (Riga N., 2018, Nersesyan M., Makarets I., 2019), Pharmacology (Zharun Yu., 2019), Cosmetology (Nesterenko K., 2019), Pharmaceutical Law and Legislation (Mosku E., 2020); certificates of participation in scientific conferences (Kravchenko D., Vykhvaten E., Emets I., etc.). The combination of training and research is realized through the activities of the SSS; https://www.facebook.com/scionmedu ). The Scientific-Practical Conference with International Participation "Modern Theoretical and Practical Aspects of Clinical Medicine" (for students and young scientists) is held annually at ONMedU, where annually applicants for higher education of the Faculty of Pharmacy present their scientific achievements. An agreement has been concluded with the Physicochemical Institute of the National Academy of Sciences of Ukraine named after O.V. Bogatsky, Interchim plant, Faculty of Chemistry and Pharmacy, Odessa National University named after I.I. Mechnikov.

Lectures and master classes of visiting professors and honorary professors of ONMedU promote acquaintance with the leading scientific achievements and practices.

Recognition of learning outcomes obtained in other higher education institutions is regulated by the following documents: "Rules of admission to the Odessa National Medical University" <a href="https://files.odmu.edu.ua/pk/pravyla\_2021.pdf">https://files.odmu.edu.ua/pk/pravyla\_2021.pdf</a>; "Regulations on the organization of the educational process by applicants for higher education at the Odessa National Medical University" <a href="https://onmedu.edu.ua/wp-content/uploads/2020/01/osvitnij-proces.pdf">https://onmedu.edu.ua/wp-content/uploads/2020/01/osvitnij-proces.pdf</a>

For example, student Pisarchuk Vladislav Leonidovych, born in 1995, personal file № 403/20 finished the 3rd year, 5th semester in 2018-2019 academic year majoring in 226 "Pharmacy, Industrial Pharmacy" at Vinnytsia National Medical University named after M.I. Pirogov (academic certificate № 41zf dated November 7, 2019). He was reinstated in the 2019-2020 academic year for the 6th semester of the 3rd year of the Faculty of Pharmacy, specialty 226 "Pharmacy, Industrial Pharmacy" with the elimination of the academic gap until 30.08.2020 (decision of the Rector's Office № 2 from 23.01.2020)

Student Kirilenko Olha Andiivna, born in 2000, personal file № 107 / 20 finished the 2nd year in 2019-2020 academic year, in specialty 226 "Pharmacy, Industrial Pharmacy" at the National University of Pharmacy (academic certificate №075 / 20 from 28.07. 2020). She was reinstated to study in the 2020-2021 academic year for the 5th semester of the 3rd year of the Faculty of Pharmacy in the specialty 226 "Pharmacy, Industrial Pharmacy" in the elimination of the academic gap until 30.08.2021 (Rector's decision №23 from 20.08.2020)

Student Topuria Svitlana, born in 1999, personal file № 393 / 19 studied Pharmacy in 2017-2018 at the State University of Medicine and Pharmacy of the Republic of Moldova named after Nikolai Testemitanu (academic certificate №52 dated 03.09.2018, Certificate of recognition of a foreign educational document N-14508-19 dated 24.09.2019). She was reinstated to study in the 2019-2020 academic year for the 3rd semester of the 2nd year of the Faculty of Pharmacy, specialty 226 "Pharmacy, Industrial Pharmacy" in the elimination of the academic gap until 30.01.2020 (decision of the Rectorate №23 from 21.08.2019).

The transfer of credits can be carried out in the order of crediting credits which were received by students during their studies in other educational programs, in other educational institutions, in the framework of academic mobility programs.

ONMedU has concluded agreements on mutual recognition of learning outcomes and research with foreign partners: the State University of Medicine and Pharmacy of the Republic of Moldova named after Nicolae Testimiciano; Ovid University, Constanta, Romania; University Gabriele d'Annunzio Chieti and *Pescara*, *Italy; University of Malaga, Spain;* Julius and Maximilian *University* of Würzburg, Germany, etc. With the participation of scientists from the EP Pharmacy, agreements on scientific cooperation have been concluded with the Institute of Applied Physics of the Republic of Moldova, Opole State University.

#### Analysis

Laboratories for the implementation of classes in chemistry subjects should have a large area, for the convenience of organization and training, it is advisable to concentrate chemistry training in one building, for which it is necessary to increase the number of laboratories. In fact, there are no specialized equipped scientific laboratories. Admission to work with precursors during the educational process and research is carried out by the head of the department, although in Ukraine there is a clear procedure for determining the admission to work with precursors.

The university has developed an electronic system, but today it is not fully implemented, it works in test mode. Individual work plans of teachers, study load, are filled in manually.

During the quarantine period, classes are held remotely, but sometimes there are failures in the schedule and links to classes do not work, in particular during the visit we could not connect to classes "physico-chemical analysis of drugs" and "standardization" (both in the department of general pharmacy with a course in clinical pharmacology.

The commission was provided with evidence of students' participation in scientific activities - abstracts, articles, certificates of participation in scientific conferences. However, during the meeting with the students, some noted the lack of motivation to study science in the junior years, intending to do research only in the final year to complete a master's thesis.

For the design, implementation and evaluation of the educational program in ONMedU there is a certain algorithm, given in the "Regulations on educational programs of ONMedU", but

it is not multifaceted, does not involve broad involvement of national and international experts. Involvement of internal stakeholders is also sometimes formal. Minutes were provided with suggestions from teachers on improving teaching, but most of them suggested an increase in hours on a particular topic (discipline).

Master classes of leading professors in the field of medicine are held at ONMedU, but such work has not been established at the Pharmacy, Industrial Pharmacy EP. It is possible to recalculate the learning outcomes in the process of academic mobility, but examples for EP "Pharmacy, Industrial Pharmacy" were not provided.

Strengths/best practice: In general, this standard meets IAAR quality criteria.

#### EEC recommendations:

- 6.1.3. Complete the test mode and put into operation the electronic system of support of all processes of the university, automate and synchronize the modules "schedule", "learning process", "electronic journal", "workload", "individual teacher plan" (June 2022).
- 6.5.1. Develop an integrated program of support of the EP taking into account the national legislation and modern world tendencies in pharmacy education, organize carrying out of scientific educational conferences with attraction of national and international experts.

#### Area for improvement:

- 6.1.5. Establishment of an interdepartmental research center for research in pharmaceutical chemistry, pharmacognosy and drug technology will increase student involvement in research. Arrange the admission of ASs and support staff to work with precursors
- 6.5.2. Involve on a regular basis as full-time and part-time teachers visiting professors of leading scientists of Ukraine and the world in the field of pharmaceutical education and science.
- 6.5.3. Encourage the training and participation of the EP teachers as experts in the evaluation of educational programs at both the national (NAQAHE) and international levels. Organize internal training for the ER support team.
- 6.6.3. Provide for financial planning for internships, participation in international conferences, various types of academic mobility for teachers and students of the EP "Pharmacy, Industrial Pharmacy"

EEC conclusions on the criteria: (strong / satisfactory / suggest improvements / unsatisfactory):

Strong - 0 Satisfactory - 21 Suggest improvement - 6 Unsatisfactory - 0

6.7. Standard "EDUCATIONAL PROGRAM EVALUATION"

#### **Evidence**

The evaluation of the educational program is made in accordance with a number of normative documents of ONMedU - Regulations on internal monitoring of the quality of education <a href="https://onmedu.edu.ua/wp-content/uploads/2021/01/Polozhennja-pro-vnutrishnij-monitoring-jakosti-osviti.pdf">https://onmedu.edu.ua/wp-content/uploads/2021/01/Polozhennja-pro-vnutrishnij-monitoring-jakosti-osviti.pdf</a>, Regulations on educational programs <a href="https://onmedu.edu.ua/wp-content/uploads/2020/07/Polozhennja-pro-osvitni-programi-ONMedU.pdf">https://onmedu.edu.ua/wp-content/uploads/2020/07/Polozhennja-pro-sistemu-vnutrishnogo-zabezpennja-jakosti-vishhoi-osviti.pdf</a>, Regulations on stakeholders of educational programs <a href="https://onmedu.edu.ua/wp-content/uploads/2020/07/Polozhennja-pro-stejkholderiv-osvitnih-program-ONMedU.pdf">https://onmedu.edu.ua/wp-content/uploads/2020/07/Polozhennja-pro-stejkholderiv-osvitnih-program-ONMedU.pdf</a>,

To evaluate the educational program, internal and external audits are provided, as well as external evaluation of students' academic achievements, including the state system for determining

the level of minimum competence of graduates - USQE Krok-1 and Krok-2. In 2021, ONMedU successfully passed the national accreditation examination, which confirms the overall effectiveness of the processes.

In accordance with the Regulations on Educational Programs, the monitoring of the EP is carried out in order to identify compliance with the requirements of the National Qualifications Framework and professional standards. The following components are monitored: program structure; the ratio of basic and variable parts; availability of elective disciplines; types and practices; educational and methodical support; availability of electronic information and educational environment; staffing; logistics.

Achieving the goals within the EP is monitored by the system of intra-university control at 4 levels:

- at the level of students, in the form of a questionnaire "Survey of ONMedU students on the quality of education, prospects for learning and employment ", " Best Teacher".
- at the level of the academic staff involved in the implementation of the EP, to identify the needs of students in teaching disciplines, methods and technology of classes, assessment of current, boundary and final control at the end of the course is a survey of students.
- at the level of graduating departments implementing the EP, monitoring and evaluation is carried out by conducting demonstration, open classes, mutual visits, seminars, conferences, round tables, meetings of departments on the results of intermediate and final controls of students.
- at the level of faculties and the University, monitoring and evaluation of the EP is carried out by analyzing the intermediate, final controls of students and discussions at the Central Coordinating Methodological Council, scientific councils of faculties and the Academic Council of the University. Based on the results of the discussion, a decision is made to improve the EP.

The main goal of internal monitoring today is to assess the level of student satisfaction with the learning outcomes. Several surveys were conducted to assess student satisfaction. According to the results of the questionnaire there were developed and available to fill in Google forms for the survey of teachers and employers <a href="https://onmedu.edu.ua/zagalna-informacija/potochni-anketuvannja/">https://onmedu.edu.ua/zagalna-informacija/potochni-anketuvannja/</a>. In particular, there are questionnaires: Survey of teachers on the specifics of teaching at ONMedU, Best teacher during distance learning at ONMedU, Survey of higher education applicants at ONMedU on the assessment of relations with representatives of administration / departments / departments, Survey of graduates of ONMedU, ONMedU psychological testing, Student survey on the quality of education, prospects for education and employment, questionnaires on academic integrity.

The report on internal monitoring of the quality of education is available on the university's website <a href="https://onmedu.edu.ua/wp-content/uploads/2021/04/Zvit-pro-monitoring">https://onmedu.edu.ua/wp-content/uploads/2021/04/Zvit-pro-monitoring</a> - 2020-21-nr1.pdf .

In November 2020, a survey of students on the conditions of study at ONMedU was conducted. According to the results of the survey, 82% of students have high or medium motivation for medical education, the majority (63%) of students have practical work experience while studying at the university, about 60% of students are satisfied with studying at the university. Among the factors that form the dissatisfaction of some students, in particular the following criteria: the use of active forms of education, equipment, comfort of the university, employment opportunities and others https://onmedu.edu.ua/wp-content/uploads/2021/02/Rezultate - opituvannja-studentiv-shhodo-umov-navchannja-ONMedU-listopad-2020-roku.pdf

The results of the student survey were considered at the meetings of the Academic Council of the University (Minutes  $N_{2}$  4 of December 10, 2020), the Faculty of Pharmacy (Minutes  $N_{2}$  4 of December 15, 2020) and the Council of Young Scientists (Minutes  $N_{2}$  7 of December 17, 2020). Extracts from the relevant meetings were presented to the Commission.

To objectify the evaluation of the educational program for several years as chairman of the examination commission in 2018, 2019, 2020 was invited Gromovik Bogdan Petrovich – head of

the Department of Organization and Economics of Pharmacy, Lviv National Medical University named after Danylo Halytsky. In 2021 - Nikogosyan Levon Rubenovich .

At the end of the academic year, the EP is put up for public discussion for all stakeholders. Reviews of the EP are given by representatives of practical pharmacy.

#### Analytical part

In September-October 2020, an inspection of the status of posting information on the methodological support of academic disciplines on the university website was carried out, based on the results of the inspection, recommendations were made to eliminate shortcomings however, no specific information about the shortcomings regarding departments, disciplines, teachers was given, and documents regarding the response to the identified shortcomings and the results of their elimination were not provided.

In accordance with the developed Regulations, surveys of students on their satisfaction with training and rating of teachers were conducted. However, the students of the EP Pharmacy were not involved enough in this process, only 7 students participated in compiling the ranking of teachers. The questions of the questionnaire do not cover the whole learning process and do not provide an opportunity for a comprehensive assessment of the educational program. However, the results of the survey of graduates showed the presence of critical places in the learning process. Discussions of learning outcomes at the Academic Council of the University, the Academic Council of the Faculty and the Student Council were quite formal, without specifics and management decisions, for example, in the operative part of the Academic Council of the Faculty: "increase the use of active learning and improve the material base - all without a description of specific processes, deadlines, responsible executors.

The site provides questionnaires for teachers, but so far no survey has been conducted. During the certification, L.R. Nikoghosyan was appointed the chairman, but he works as the head of the department at the EP "Pharmacy, Industrial Pharmacy" and is himself part of the process.

Thus, the University has created the prerequisites and developed documents for the evaluation of the educational program in accordance with international standards.

Strengths/best practice: In general, this standard meets IAAR quality criteria.

#### **EEC** recommendations:

- 7.1.1. Carry out the analysis of risks of quality of the EP according to mission, allocate critical points for an assessment of process, periodicity of control, decisions and adjustments on the received results; implement a monitoring program in the educational program.
- 7.1.2. Conduct a survey of teachers of the EP on the evaluation of the quality of the educational program, to develop a system for eliminating shortcomings based on the results of the survey in 2022
- 7.1.6. Develop an integrated program of independent quality assessment of the EP, perform SWOT-analysis twice a year, adjust actions depending on the results obtained
- 7.1.7. Develop a program to respond to identified problems in the implementation of the EP and provide for improvement processes based on the results of the analysis of shortcomings.
- 7.1.8. Modify the student survey questionnaire to assess the quality of the EP with coverage of all processes, conduct a survey with the involvement of the maximum number of students in the EP. The university should continue the practice of attracting external stakeholders for state certification.

#### Area for improvement:

7.1.11. The results of all surveys and corrective action decisions should be posted on the website, and action should be taken to obtain feedback from all the stakeholders.

EEC conclusions on the criteria: (strong / satisfactory / suggest improvements / unsatisfactory):

Strong - 0 Satisfactory - 16 Suggest improvement - 6 Unsatisfactory - 0

#### 6.8. Standard "GOVERNANCE AND ADMINISTRATION"

#### **Evidence**

The university is managed at the state and domestic levels. ONMedU as a state institution of medical education is under the administrative subordination of the Ministry of Health of Ukraine. The Ministry of Health coordinates the introduction and abolition of specialties in the industry. In terms of regulatory requirements for higher education (admission rules, licensing, educational process, etc.), the University is guided by the regulatory framework of the Ministry of Education and Science, common to all institutions of higher education.

The activity of the rector and vice-rectors is evaluated on the basis of the analysis of reports and activity plans; analysis of the implementation of the goals and objectives of the strategic plan; based on key performance indicators developed for each position. The annual report of the rector contains quantitative and qualitative indicators of the results of the University, sent to the Ministry of Health of Ukraine, reported, and posted in the public domain on the website of the University.

The main collegial body of the university is the Academic Council. Regulations on the Academic Council <a href="https://onmedu.edu.ua/wp-content/uploads/2019/11/Polozhennja-VR-stranicy.pdf">https://onmedu.edu.ua/wp-content/uploads/2019/11/Polozhennja-VR-stranicy.pdf</a> and its composition <a href="https://onmedu.edu.ua/wp-content/uploads/2021/09/Sklad-Vchenoi-radi-1.pdf">https://onmedu.edu.ua/wp-content/uploads/2021/09/Sklad-Vchenoi-radi-1.pdf</a> are available on the university website. The chairman of the scientific council is the rector. The Academic Council also includes vice-rectors, deans (including the dean of the Faculty of Pharmacy V.Yu. Anisimov). heads of structural subdivisions, heads of departments (from graduating departments of OP "Pharmacy" - professors Helmboldt VO, Rozhkovsky YV, Unguryan LM), students. Of the 64 members of the Academic Council, 9 are students, including the chairman of the student government of the Faculty of Pharmacy K. Stepanenko.

The work plan for 2021/22 academic year and the decisions of the Academic Council are transparent and available on the official website of the University <a href="https://onmedu.edu.ua/zagalna-informacija/vchena-rada-universitetu-ta-vcheni-radi-fakultetiv/">https://onmedu.edu.ua/zagalna-informacija/vchena-rada-universitetu-ta-vcheni-radi-fakultetiv/</a>

The Academic Council of the Faculty of Pharmacy takes an active part in the management of the EP <a href="https://onmedu.edu.ua/zagalna-informacija/fakulteti/farmacevtichnij-fakultet/">https://onmedu.edu.ua/zagalna-informacija/fakulteti/farmacevtichnij-fakultet/</a>

All the main processes related to the receipt, structure and content of the program, the training process, evaluation and planned results are carried out in accordance with the legislation of Ukraine and generally meet the requirements of the standard. The state certification is made both by the university commission (defense of the master's thesis) and by an independent state organization - the Testing Center at the Ministry of Health of Ukraine (Krok-1 and Krok-2). According to the results of the state certification, graduates receive a master's degree in pharmacy of the established standard, information about graduates is entered into a single state electronic database on education. Human resources are sufficient for the implementation of the program.

The University has formed an internal system for ensuring the quality of education at 4 levels: university-wide; at the level of faculties and departments; at the level of structural units; at the student level. The key person guaranteeing the quality of education at the University is the Rector, and the main authorized person responsible for ensuring the quality of education is the Vice-Rector for Quality Assurance in Education. The main carrier of information is the university website. Its filling is adequately declared by the university mission, the site is filled regularly, the information is relevant. Basic regulations are available.

Functionality for the development and maintenance of the EP is defined in the document Regulations on educational programs of ONMedU <a href="https://onmedu.edu.ua/wp-content/uploads/2020/07/Polozhennja-pro-osvitni-programi-ONMedU.pdf">https://onmedu.edu.ua/wp-content/uploads/2020/07/Polozhennja-pro-osvitni-programi-ONMedU.pdf</a>

The University Budget contains the University Budget <a href="https://onmedu.edu.ua/zagalna-informacija/publichna-informacija/koshtoris/">https://onmedu.edu.ua/zagalna-informacija/koshtoris/</a>, financial report and information on tender purchases <a href="https://onmedu.edu.ua/zagalna-informacija/publichna-information-of-tender-procedures/">https://onmedu.edu.ua/zagalna-informacija/publichna-information-of-tender-procedures/</a>

The educational activities of the university are conducted in accordance with the licensing requirements set by the Legislation of Ukraine, the content and logic of the educational process is carried out in connection with the stakeholders.

#### **Analysis**

Compliance of the management and administration of the EP with the requirements and international principles of standards of training of masters of pharmacy is confirmed by a certificate of accreditation by the National Authority <a href="https://registry.edbo.gov.ua/university/188/study-programs/">https://registry.edbo.gov.ua/university/188/study-programs/</a>.

The university has developed a system of rating evaluation of teachers, <a href="https://onmedu.edu.ua/wp-content/uploads/2021/07/ilovepdf">https://onmedu.edu.ua/wp-content/uploads/2021/07/ilovepdf</a> merged3.pdf , but at the moment such an evaluation has not been conducted. A rating of teachers based on the results of a survey of students has been compiled, but the sample for the EP "Pharmacy, Industrial Pharmacy" is unrepresentative (7 people).

In 2021, it is planned to allocate funds to improve the material base of graduating departments of the EP, but the continuous improvement of the program requires evaluation of results and decision-making based on clearly defined criteria.

The stakeholders of the EP "Pharmacy, Industrial Pharmacy" are not represented in the Academic Council of the University, there are 2 other stakeholders, of which 1 is a part-time employee of ONMedU.

#### Strength /best practice: no

In general, this standard meets the IAAR quality criteria.

#### Recommendations:

8.1.8. Develop and implement a system of rating assessment of departments participating in the implementation of the EP, taking into account all types of activities (September 2022).

#### Area for improvement:

- 8.4.3. Develop a University Management Quality Assurance Program, which includes consideration of needs for improvement by December 2022;
  - 8.4.4. Implement a system for monitoring the effectiveness of administration

#### Conclusions of EECon criteria:

Strong - 1 Satisfactory - 21 Suggest improvement - 3 Unsatisfactory - 0

#### 6.9. Standard "CONTINUOUS RENEWAL"

#### **Evidence**

Odessa National Medical University is at the stage of development, creation of modern scientific laboratories in accordance with modern world trends in medical science. Much attention is paid to improving the material base, methodological support, development of international

activities, attracting students and teachers from different countries. The university has created a cluster of teachers at all EPs, teaching their educational components in English.

The University constantly monitors, analyzes and evaluates, plans changes in the organization and implementation of the educational process and educational activities taking into account the requirements of the Licensing Conditions for Educational Activities, national legislation in education and health, criteria for assessing the quality of educational programs, requirements and expectations of stakeholders, development of quality education based on competence and student -centered approaches.

In order to improve the quality assurance system of education in 2018, the University passed the certification procedure and received a certificate of compliance of the education quality management system with the international standard ISO 9001: 2015. Compliance with the standard is a guarantee of the University's processes and provides a high level of confidence in the quality of educational services provided by the University.

The university has a department for monitoring the quality of higher education, the position of the vice-rector for quality assurance is provided. The University website contains the Regulations on the Department of Quality Assurance in Higher Education, https://onmedu.edu.ua/wp-content/uploads/2021/01/Polozhennja-pro-viddil-zabezpechennjajakosti-osviti.pdf , Regulations on Internal Monitoring quality education https://onmedu.edu.ua/wp-content/uploads/2021/01/Polozhennja-pro-vnutrishnij-monitoringjakosti-osviti.pdf, regulations on the system of internal quality assurance of higher education https: edu.ua/wp-content/uploads/2020/07/Polozhennja-pro-sistemu-vnutrishnogozabezpennja-jakosti-vishhoi-osviti.pdf. In 2020, surveys of students on academic integrity, satisfaction with the educational process, determining the best teachers in the period of distance learning were carried out.

In the last five years at the University: the equipment with the necessary software of computer equipment which has been put into operation at all departments and in structural divisions of the University has been completed; nine simulation classes have been equipped; all lecture halls have been equipped with modern large screens, wireless systems and headsets, for which a preliminary audio distribution of the premises has been fixed; three large classrooms of the main educational building have been equipped with stationary multifunctional multimedia projectors; Wi-Fi coverage has been expanded to provide access to the Internet, including the campus and libraries; About 200 new computerized workstations with connection to the internal local and global network (Internet) have been created to improve students' learning.

#### Analysis

The university has a department for monitoring the quality of higher education, but at the interview during the visit of the expert commission, the representatives of the management could not clearly define the functions of the department and interaction of other departments with it.

The website contains the work plan of the department for monitoring the quality of higher education for 2020/2021, there is no plan for the current academic year. The report on monitoring the quality of education presented on the website is based on the results of a survey of students but it does not contain a SWOT analysis, analysis of quality risks, is quite general without a specific analysis of each EP. In addition, in some cases to evaluate the activities of the EP "Pharmacy, Industrial Pharmacy" the results obtained can not be considered correct.

Strength /best practice: In general, this standard meets IAAR quality criteria.

#### EEC recommendations

9.1.1. Define and publish on the website the goals of the EP "Pharmacy, Industrial Pharmacy" for the 2021-2022 academic year, update them annually; at the end of the academic year evaluate the effectiveness of achieving goals and post the results on the university website. Define a system for documenting shortcomings based on the results of performance evaluation and an algorithm for making managerial decisions for improvement.

#### Area for improvement

- 9.1.4. Intensify work on participation of teachers and students in international programs of academic exchanges, promoting the exchange of information on pharmacy education and aimed at updating the EP "Pharmacy, Industrial Pharmacy".
- 9.1.6. Conduct "brainstorming" with members of the project team to update the EP on the results of the study of national and international experience in training pharmacists
- 9.1.8. Introduce modern methods and forms of educational process to increase student motivation, apply integrated learning
- 9.1.14 As part of the monitoring of quality assurance processes, develop tools to improve it.

#### Conclusions of EEC on criteria:

Strong - 0 Satisfactory - 10 Suggest improvement - 5 Unsatisfactory – 0

#### (VII) OVERVIEW OF STRENGTHS/BEST PRACTICE FOR EACH STANDARD

- ✓ According to standard 1 "Mission and end results": not identified.
- ✓ According to standard 2 "Educational program": not identified.
- ✓ According to standard 3 "Student assessment": not identified.
- ✓ According to standard 4 "Students": not identified.
- ✓ According to standard 5 "Academic staff / teachers: not identified.
- ✓ According to standard 6 "Educational environment and resources": not identified.
- ✓ *According to Standard 7 "Evaluation of the educational program":* not identified.
- According to standard 8 "Management and administration": not identified.
- ✓ According to standard 9 "Continuous improvement": not identified.

## (VIII) OVERVIEW OF RECOMMENDATIONS FOR IMPROVING QUALITY FOR EACH STANDARD

#### According to standard 1 "Mission and Outcomes":

Revise the wording of the mission of the EP "Pharmacy, Industrial Pharmacy", post it on the university website (until September 2022) and promote it to students of the EP, expand the representation of external stakeholders in reviewing of the EP.

#### According to standard 2 "Educational Program":

Organize the staged introduction of modern teaching methods into the educational process, in particular - problem-oriented, science-oriented and team-oriented training starting from the 2022/2023 academic year. Standardize the requirements for practical skills during the implementation of the EP.

Define the duties and responsibilities of the guarantor of the EP, the dean's office in providing and assessing the individual learning environment and learning process depending on the needs of students and teachers. (by September 1, 2022).

## According to standard 3 "Assessment of Students":

Use modern and differentiated methods of student assessment, which allow to objectify formal assessment, to widely introduce proctoring when conducting distance learning.

Introduce a cumulative credit rating system for assessing students by individual educational components, determine specified grades for individual elements within each educational component (summative assessment) - by the end of 2022.

#### According to standard 5 "Academic staff /faculty":

Organize independent certification of teachers of their English language knowledge to assess the level of foreign language proficiency and teaching opportunities (until September 2022)

## According to standard 6 "Educational Resources":

Complete the test mode and put into operation the electronic system of support of all processes of the university, automate and synchronize the modules "schedule", "learning process", "electronic journal", "load", "individual plan of the teacher".

Develop an integrated program of support of the EP taking into account the national legislation and modern world tendencies in pharmacy education, organize carrying out of scientific educational conferences with attraction of national and international experts.

#### According to standard 7 "Educational Program Evaluation":

Carry out the analysis of risks of quality of the EP according to the mission, allocate critical points for an assessment of process, periodicity of control, decisions and adjustments on the received results; implement a monitoring program into the educational program.

Conduct a survey of teachers of the EP to assess the quality of the educational program, to develop a system for eliminating shortcomings in the survey in 2022.

Develop an integrated program for independent evaluation of the quality of the EP, perform SWOT-analysis twice a year, adjust actions depending on the results obtained.

Develop a program to respond to identified problems in the implementation of the EP and provide for improvement processes based on the results of the analysis of shortcomings.

Modify the student survey questionnaire to assess the quality of the EP with coverage of all processes, conduct a survey with the involvement of the maximum number of students on the EP. The university should continue the practice of attracting external stakeholders for state certification.

#### According to standard 8 "Governance and Administration":

Develop and implement a system of rating assessment of departments participating in the implementation of the EP, taking into account all types of activities (September 2022).

## According to standard 9 "Continuous Renewal":

Define and publish on the website the goals of the EP "Pharmacy, Industrial Pharmacy" for the 2021-2022 academic year, update them annually; at the end of the academic year evaluate the effectiveness of achieving goals and post the results on the university website. Define a system for documenting shortcomings based on the results of performance evaluation and an algorithm for making managerial decisions for improvement.

# (IX) OVERVIEW OF RECOMMENDATIONS FOR THE DEVELOPMENT OF ODESSA NATIONAL MEDICAL UNIVERSITY

There are no recommendations for the development of the organization of education.

(X) RECOMMENDATION TO THE ACCREDITATION COUNCIL



Appendix 1. Evaluation table "Parameters of Specialized Profile" 226 "Pharmacy, Industrial Pharmacy"

No.	No	No. crit.	EVALUATION CRITERIA	Position of education organization			
				Strong	Satisfactory	Assumes improvement	Unsatisfactory
		1.1.1	"MISSION AND OUTCOMES" Statement of Mission				
1	1	1.1.1	The medical educational organization <b>must</b> determine the mission of the postgraduate educational program		+		
2	2	1.1.2	The medical education organization <b>must</b> bring the mission of the postgraduate education program to the attention of stakeholders and the health care sector.			+	
			The medical education organization <b>must</b> determine the educational program allowing <b>to</b> prepare a specialist at the level of postgraduate medical education:				
3	3	1.1.3	competent in any field of medicine, including all types of medical practice, management and organization of health care		+		
4	4	1.1.4	able to work at a high professional level.		+		
5	5	1.1.5	able to work unattended, alone and in a team, if necessary.	A	+		
6	6	1.1.6	with a commitment to lifelong learning, including professional responsibility for maintaining the level of knowledge and skills through performance appraisal, auditing, self-study and recognized activities in the <i>CPD</i> / <i>CME</i>		+		
7	7	1.1.7	The medical educational organization must guarantee that the mission covers consideration of the health needs of the community or society, the needs of the health system and other aspects of social responsibility, as appropriate.		+		
			The medical educational organization <b>should</b> encourage:				
8	8	1.1.8	innovations in the educational process, allowing the development of broader competencies than the minimum necessary.			+	
9	9	1.1.9	improving patient care, which is necessary, effective and compassionate in addressing health and health promotion issues.		+		

## **Unofficial Translation**

10	10	1.1.10	organizing and conducting research of postgraduate students.			+	
		1.2	Participation in mission formulation				
			The medical educational organization must				
11	11	1.2.1	guarantee that key stakeholders are involved in		+		
			the development of the mission.				
			The medical educational organization <b>should</b>				
10	10	1 0 0	guarantee that the stated mission is based on the				
12	12	1.2.2	views / suggestions of other relevant		+		
			stakeholders.				
		1.3	Institutional autonomy and academic				
		1.3	freedom				
			The medical educational organization <b>must</b> have				
			a training process that is based on a recognized		+		
3	3	1.3.1	basic medical education and helps to strengthen				
			the professionalism of the student				
			The medical educational organization must	4			
			guarantee that the training process promotes		+		
4	4	1.3.2	professional autonomy to enable the graduate to		L '		
			act in the best interests of the patient and society.				
		1.4	Learning outcomes				
			The medical educational organization must				
			determine the expected <i>learning outcomes</i> which		-		
			the students should achieve, regarding:				
15	15	1.4.1	their achievements at the postgraduate level in		+		
			terms of knowledge, skills and thinking				
16	16	1.4.2	the appropriate basis for future careers in the		+		
17	17	1.4.3	chosen field of medicine; their future roles in the health sector				
1/	1 /	1.4.3	commitment and skills in the implementation of				
18	18	1.4.4	continuing education		+		
			public health needs, health system needs and				
19	19	1.4.5	other aspects of social responsibility		/+		
20	20	1.4.6	professional behavior		+		
20		1.1.0	The medical educational organization <b>must</b>	7	'		
	1		determine:	7			
		4	general and specific to the specialty (discipline)				
21	21	1.4.7	components of educational outcomes that		+		
		***	students are required to achieve.				
			appropriate behavior towards undergraduates and				
22	22	1 4 0	other students, teachers, patients and their		.		
22	22	1.4.8	relatives in accordance with appropriate standards		+		
			of conduct.				
			The medical educational organization must				
23	23	1.4.9	determine educational outcomes based on the				
23	23	1.7.7	results obtained at the level of basic medical		+		
			education.				
			Total		20	3	
		2	EDUCATIONAL PROGRAM				
		2.1	Approach to learning				
			The medical educational organization must:				

## **Unofficial Translation**

	1				1		
24	1	2.1.1	determine the educational program based on the		+		
	1	2.1.1	results of the existing basic medical education		'		
25	2	2.1.2	organize the learning approach systematically		+		
23		2.1.2	and transparently		+		
26	2	0.1.2	describe general and discipline / specialty-				
26	3	2.1.3	specific components of training		+		
			use teaching and learning methods that are				
27	4	2.1.4	suitable for both practice and theory		+		
			identify the teaching and learning methods used				
28	5	2.1.5	to stimulate, prepare and support students to take			+	
		2.1.0	responsibility for their learning process				
			ensure that the educational program is				
29	6	2.1.6	implemented in accordance with the principles of		+		
2)		2.1.0	equality		'		
			The medical educational organization <b>should:</b>				
			guide the student through mentoring and regular				
30	7	2.1.7	assessment and feedback.			+	
			increase the degree of independent responsibility		sin and		
31	8	2.1.8	of the student as skills, knowledge and experience				
31	0	2.1.0	improve.		+		
		2.2	Scientific method				
		2,2					
			The medical educational organization must:				
-		1	teach students the principles of scientific		-		
			methodology in accordance with the level of				
32	9	2.2.1	postgraduate education and to provide evidence		+		
			that the student achieves knowledge and				
			understanding of the scientific basis and methods				
			of the chosen field of medicine;				
	_	-	provide evidence that the student is familiar with evidence-based medicine as a result of wide				
33	10	2.2.2			+		
			access to relevant clinical / practical experience in the chosen field of medicine	-			
				4			
			The medical educational organization <b>should:</b>		7		
34	11	2.2.3	include official studies of critical evaluation of		+		
	4		literature and scientific data into the EP.	7			
35	12	2.2.4	provide the student with access to scientific		+		
		-	activities.				
36	13	2.2.5	correct and change the content of scientific		+		
		2.2	developments in the educational program.				
		2.3	Training content  The medical educational expenientian charlet				-
			The medical educational organization <b>should</b>				
			include in the learning process the practice and				
			theory of:				-
		2.3.1	medical-biological, clinical, behavioral and social sciences.		+		
		222					-
		2.3.2	clinical solutions.		+		
27	1.4	2.3.3	communication skills.		+		-
37	14	2.3.4	medical ethics.		+		-
38	15	2.3.5	public health.		+		
39	16	2.3.6	medical jurisprudence;		+		1
40	17	2.3.7	management disciplines;		+		

	1	ı			ı		
41	18	2.3.8	organize an educational program with		+		
	10	2.0.0	appropriate attention to patient safety.				
			The medical educational organization should				
			adjust and make changes in the educational				
			program for:				
42	19	2.3.9	ensuring the development of knowledge, skills				
42	19	2.3.9	and thinking of various roles of the graduate;		+		
			compliance of the content of the EP with the				
43	20	2.3.10	changing conditions and needs of society and the		+		
			health care system.				
		2.4	Curriculum structure, composition and				
		2.4	duration				
			The medical educational organization must:				
		- 4	give a description of the content, scope and				
44	21	2.4.1	sequence of courses and other elements of the		+		
			educational program				
45	22	2.4.2	identify compulsory and optional components		+		
			combine practice and theory in the learning	B.			
46	23	2.4.3	process;		+		
47	24	2.4.4	ensure compliance with the national law.		+		
			In the educational program the medical				
			educational organization should:				
			take into account the results of basic medical				
48	25	2.4.5	education in relation to the choice of medical		+		
			field;				
			take into account requirements for the future		4		
49	26	2.4.6	graduate to perform various roles in the health		+		
			care system.				
		2.5	Relationship between education and health				
		2.5	care practice				
			The medical educational organization must:	- ,-	-		
			describe and observe the integration between				
50	27	2.5.1	theoretical training and professional		+		
			development;				
	1		guarantee combination of training and	7			
51	28	2.5.2	professional internships, including through on-		+		
		ALC: N	the-job training.				
		1	In the educational program the medical				
		***	educational organization should:				
			effectively organize the use of health system				
52	29	2.5.3	opportunities for training purposes, including in		+		
			the field of workplace practice.				
			guarantee that such training is complementary				
53	30	2.5.4	and does not comply with the requirements for the		+		
			provision of medical services.				
		2.6	Program management				
			The medical educational organization <b>must:</b>				
			define responsibilities and roles for the				
54	31	2.6.1	organization, coordination, management and			ر	
)4	31	∠.0.1	evaluation of the individual learning environment			+	
			and learning process.				

			involve in the planning and development of the				
55	32	2.6.2	educational program due representation from the		+		
			AS, students and other relevant stakeholders.				
			In the educational program the medical				
			educational organization should:				
56	33	2.6.3	guarantee a variety of places to study.		+		
			coordinate multiple training locations to gain				
57	34	2.6.4	appropriate access to different aspects of the		+		
			chosen field of medicine;				
50	25	2.65	have access to the resources needed to plan and				
58	35	2.6.5	implement teaching methods.		+		
50	26	266	have access to the resources needed to plan and				
59	36	2.6.6	implement student assessment.		+		
60	27	267	have access to the resources needed to plan and				
60	37	2.6.7	implement curriculum innovations.		+		
			Total		34	3	
	1	3	STUDENT ASSESSMENT				
		3.1	Assessment methods	B.			
			The medical educational organization must:				
(1	1	2 1 1	present the process of assessment of students in				
61	1	3.1.1	the EP		+		
			identify, approve and publish principles, methods				
			and practices used to assess students, including				
			the number of examinations and other tests,		1		
			balancing written and oral examinations, using				
62	2	3.1.2	assessment methods based on criteria and		+		
			reasoning, and special examinations (OSCE or				
	N.		Mini-Clinical exam), as well as to determine the				
			criteria for establishing passing scores, grades and				
			the number of permitted transfers;				
63	3	3.1.3	ensure that assessment covers knowledge, skills		_		
03		3.1.3	and attitudes towards learning;	100			
			use a wide range of assessment methods and				
			formats depending on their " utility assessment",				
64	4	3.1.4	which includes a combination of validity,		4 4 1 1 1 1	+	
	1		reliability, impact on learning, acceptability and				
			effectiveness of assessment methods and format;				
		M	formulate criteria for passing exams or other				
65	5	3.1.5	types of assessment, including the number of		+		
			permitted transfers;				
66	6	3.1.6	use assessment methods that provide formative		+		
		2.1.0	teaching methods and constructive feedback.		,		
			The medical educational organization <b>should:</b>				
			document and evaluate the reliability and validity				
67	7	3.1.7	of evaluation methods, which requires an			+	
	'	5.1.7	appropriate quality assurance process for existing			'	
			evaluation practices;				
68	8	3.1.8	introduce new assessment methods in accordance			+	
			with the need;			'	
69	9	3.1.9	use a system to appeal the evaluation results.		+		
70	10	3.1.10	encourage the process of inspection of evaluation			+	

			mathods by avtarnal avnarts				
			methods by external experts;				
71	11	3.1.11	use the system of appeals against evaluation results;		+		
70	10	2 1 12	if necessary, organize a "different opinion", a		_		
72	12	3.1.12	change of the AS or additional training		+		
		3.2	Relationship between assessment and learning				
			The medical educational organization <b>should</b> use				
			the principles, methods and practices of				
			assessment, including the learning achievements				
			of students and assessment of knowledge, skills,				
			professional values of the relationship, which:				
			are clearly comparable to teaching methods,				
73	13	3.2.1	teaching and learning outcomes;		+		
			guarantee that students achieve the end results of				
74	14	3.2.2	their studies;		+		
75	15	3.2.3	contribute to the learning of students;		+		
13	13	3.2.3	determine the adequacy of training.		'		
	A	7	provide an appropriate balance between	1	ar mi		
			formative and summative assessment to manage		i.		
76	16	3.2.4	learning and assess a student's academic			+	
/ 0	10	J.4. <del>4</del>	progress, which requires establishing rules for	1			
			assessing progress and their relationship to the				
			assessment process.				
		4	The medical educational organization should:		-		
77	17	3.2.5	use principles, methods and practices that promote integrated learning;		+		
70	10	226	encourage association with practice, including				
78	18	3.2.6	clinical;				
70	10	227	guarantee timely, concrete, constructive and fair				
79	19	3.2.7	feedback to students based on assessment results.	L	<b>T</b>		
			Total		14	5	
		4.	STUDENTS	B			
		4.1	Admission and selection policy				
			The medical educational organization <b>must</b> :				
	1			7			
00		111	define and implement an admission policy based				
80	1	4.1.1	on the organization's mission including a clear		+		
		7	position in the student selection process;				
81	2	4.1.2	guarantee a balance between learning		+		
		<del>-</del>	opportunities and student admission				
			formulate and implement policies / rules for the				
83	3	4.1.3	selection of students according to established		+		
			criteria				
			have policies and implement practices of				
84	4	4.1.4	admission of students with disabilities in		+		
	'	1.1.1	accordance with current laws and regulations of		'		
			the country;				
			have a policy and implement the practice of				
85	5	4.1.5	transferring students from other programs and		+		
			medical educational organizations;				
86	6	4.1.6	involve medical professionals in the policy-		+		

			malving and student calcution muscoss				
			making and student selection process.				
			The medical educational organization <b>should:</b>				
87	7	4.1.7	guarantee the transparency of the selection procedure;		+		
88	8	4.1.8	provide transparent admission to all qualified graduates of basic medical education		+		
89	9	4.1.9	consider, as part of its selection process, the specific opportunities of potential learners to improve learning outcomes in their chosen field of medicine.		+		
90	10	4.1.10	include the mechanism of the appeal on decisions of admission		+		
91	11	4.1.11	periodically review admission policies based on relevant social and professional data to meet the health care needs of the community and society.		+		
		4.2	Number of students				
92	12	4.2.1	The medical educational organization <b>must</b> determine the number of students admitted in accordance with the material and technical and capabilities at all stages of education and training.		+		
			The medical educational organization <b>should:</b>				
			periodically review the number and contingent of				
93	13	4.2.2	students admitted in consultation with relevant stakeholders responsible for the planning and development of human resources in the health sector,				
94	14	4.2.3	adapt a number of potential specialists taking into account the available information on the health care needs of the society.		7		
95	15	4.2.4	regulate the number of potential students based on available information on the number of qualified candidates;	_	- 6	ı	
96	16	4.2.5	adjust the number of potential students based on available information on national and international labor markets.		+		
97	17	4.2.6	adjust the number of potential students, taking into account the inherent unpredictability of the precise labor needs of specialists in various fields of medicine.		+		
		4.3	Student counseling and support				
			The medical educational organization must:				
98	18	4.3.1	have a system of academic counseling for their students;		+		
99	19	4.3.2	offer a student support program for social, financial and personal needs, which includes support for social and personal issues and events, health and financial issues, access to health care, immunization programs and health insurance, and financial assistance services in in the form of material assistance, scholarships and loans;		+		
100	20	4.3.3	allocate resources to support students;		+		
			ii '		i		

	1	T		1	I		
101	21	4.3.4	guarantee the confidentiality of counseling and support.		+		
102	22	4.3.5	offer career guidance and career planning.		+		
			The medical educational organization <b>should</b>				
			provide counseling that:				
			is based on monitoring and control of student				
103	23	4.3.6	progress, including analysis of unintentional		+		
			incidents				
101	2.4	4.0.5	provide support in the event of a professional				
104	24	4.3.7	crisis		+		
		4.4	Student representation				
			The medical educational organization should				
			determine and implement a policy of student				
		-	representation and participation:				
105	25	4.4.1	in the development of the EP;		+		
106	26	4.4.2	In the EP management;		+		
107	27	4.4.3	evaluation of the educational program;		+		
108	28	4.4.4	planning conditions for students.	B.	+		
			The medical educational organization should				
109	29	4.4.5	encourage learners to participate in decisions			+	
			about learning processes, conditions, and rules.	1			
			Total		28	1	
		5.	ACADEMIC STAFF/FACULTY				
		5.1	Personnel selection policy				
		7	The medical educational organization must				
			determine and implement a policy of selection				
			and admission of teachers, which:				
110	1	5.1.1	takes into account the necessary work				
110	1	3.1.1	experience				
			contains criteria for the scientific, pedagogical				
111	2	5.1.2	and clinical merits of applicants, including the	400			
111		3.1.2	appropriate ratio between pedagogical, scientific	A		+	
			and clinical qualifications;		7		
112	3	5.1.3	determines their responsibilities;		+		
	1		determines training responsibilities, including	1			
113	4	5.1.4	the balance between teaching, research and other		+		
		***	functions				
114	5	5.1.5	takes into account the mission of the EP.		+		
			The medical educational organization should				
			take into account such criteria in its recruitment				
			and recruitment policy as:				
			to determine the responsibility of the academic				
115	_						
	6	5.1.6	staff in terms of its participation in postgraduate		+		
	6	5.1.6	education;		+		
116	6 7		education; to determine the level of remuneration for		+		
116		5.1.6	education; to determine the level of remuneration for participation in postgraduate education;				
	7	5.1.7	education; to determine the level of remuneration for participation in postgraduate education; to guarantee that teachers have practical		+		
116 117			education; to determine the level of remuneration for participation in postgraduate education; to guarantee that teachers have practical experience in the relevant field;				
	7	5.1.7	education; to determine the level of remuneration for participation in postgraduate education; to guarantee that teachers have practical		+		

			study.				
		5.2	Staff commitments and development				
		3,4	1				
			The medical educational organization <b>must</b> guarantee that students and teachers have				
119	10	5.2.1	6				
119	10	3.2.1	sufficient time for learning, counseling and self- study.		+		
			ž				
			The medical educational organization <b>should:</b> take into account the ratio of "teacher-student"				
			depending on the various components of the				
120	11	5.2.2	educational program and taking into account the		+		
			peculiarities of the educational program;				
121	12	5.2.3	develop and implement staff support policies,		,		
121	12	3.2.3	including on self-study and further professional development;		+		
		_					
122	13	5.2.4	evaluate and recognize the scientific and		+		
			academic achievements of teachers.		12	1	
	A	6.	Total EDUCATIONAL RESOURCES		12	1	
		6.1	Physical resources				
			The medical educational organization <b>must</b>				
			provide students with:				
1000		-	sufficient material and technical base to ensure				
123	1	6.1.1	adequate implementation of the educational		+		
			program, space and opportunities for practical and				
104		600	theoretical research;				
124	2	6.2.2	access to current professional literature;		+		
125	3	6.1.3	adequate information and communication		-	+	
			technologies;				
126	4	6.1.4	modern equipment for teaching practical methods.		+		
	-		The medical educational organization <b>should:</b>		-		
			improve the learning environment by regularly				
			updating, expanding and strengthening the				
127	5	6.1.5	material and technical base and equipment to			+	
121		0.1.5	maintain the appropriate quality of education at	7	17	!	
	1		the postgraduate level.	/			
		6.2	Educational environment				
		- 0.2	The medical educational organization should				
			provide the necessary resources to provide				
			students with adequate practical experience,				
			including the following:				
	_		selection and approval of the educational				
128	6	6.2.1	environment;		+		
100	_	600	availability of sufficient clinical / practical				
129	7	6.2.2	facilities / bases to provide training;		+		
130	8	6.2.3	sufficient number of patients where necessary;		+		
			appropriate variety of clinical cases to achieve				
131	9	6.2.4	learning goals and objectives;		+		
			organization of training in such a way as to				
132	10	6.2.5	provide the student with extensive experience in		+		
			the chosen field of medicine.				
			ı		1		

			When choosing a learning environment the medical educational organization should:				
			guarantee the number of patients and the				
			corresponding variety of clinical cases, allowing				
			to gain clinical experience in all aspects of the				
133	11	6.2.6	chosen specialty, including training in the		+		
			organization and management in the field of				
			health and disease prevention				
			Ensure training in a university clinic, as well as				
134	12	6.2.7	training in other relevant cynics / institutions and		+		
			community facilities / locations, if necessary.				
		6.3	Information technology				
			The medical educational organization should				
		-	determine and implement policies that are aimed				
135	13	6.3.1	at the effective use and evaluation of relevant		+		
			information and communication technologies in				
			the educational program.				
		7	The medical educational organization should	B			
			provide teachers and students with opportunities				
			and encourage them to use information and				
			communication technologies:				
136	14	6.3.2	for self-study;		+		
137	15	6.3.3	access to health information resources and				
			relevant patient data;				
138	16	6.3.4	patient management;		+		
139	17	6.3.5	work in the health care system to provide medical		4		
137	* /		care.				
		6.4	Medical and scientific research				
			The medical educational organization must:				
140	18	6.4.1	introduce the methodology of scientific medical		+		
			research into the educational program.				
			The medical educational organization <b>should:</b>	4			
	10	- 1 O	encourage students to participate in medical				
141	19	6.4.2	research on the state and quality of public health		+		
	1		and the health system;				
142	20	6.4.3	provide access to research facilities and activities		+		
		6.5	in places of training.				
		6.5	Educational expertise The medical educational organization must:				
			develop and implement a policy on the use of				
			expertise at the stage of planning,				
143	21	6.5.1	implementation and evaluation of training in a			+	
			particular educational program				
			The medical educational organization <b>should:</b>				
			have access to expertise in education where				
			necessary, and conduct expertise that examines				
			the processes, practices and problems of health				
144	22	6.5.2	education and may involve physicians with			+	
*		0.0.2	experience in medical education, psychologists			•	
			and sociologists in education, or experts from				
			other national and international institutions.				
	1				1		

			promote the aspirations and interests of				
145	23	6.5.3	employees in conducting research in medical			+	
			education.				
		6.6	Educational exchanges				
			The medical educational organization should				
			determine and implement policies for :				
			availability of individual learning opportunities				
146	24	6.6.1	in other educational institutions of the appropriate		+		
			level within or outside the country;				
147	25	6.6.2	transfer and offset of educational credits and		+		
17/	23	0.0.2	learning outcomes.		ı		
			The medical educational organization <b>should</b> :				
			promote the regional and international exchange				
148	26	6.6.3	of staff (academic, administrative and teaching			+	
110	20	0.0.5	staff) and students, providing appropriate			. '	
			resources;				
	A		establish links with relevant national and				
149	27	6.6.4	international bodies for the exchange and mutual		+		
			recognition of learning elements.				
			Total		21	6	
		7.	EDUCATIONAL PROGRAM EVALUATION				
		7.1	Mechanisms for monitoring, control and				
			evaluation of the program				
			The medical educational organization must		-		
			have a program monitoring processes and				
			outcomes, including the collection and analysis of				
			data on key aspects of the curriculum to ensure				
1.50	1	7 1 1	that the educational process is conducted				
150	1	7.1.1	appropriately and to identify any areas requiring			+	
			intervention, and also data collection is a part of		-		
			the administrative procedures for admission, assessment of students and completion of				
1			l				
			training. collect and analyze feedback on the quality of the		/		
151	2	7.1.2	educational program from teachers;			+	
	-		collect and analyze feedback on the quality of the	_			
152	3	7.1.3	educational program from students;		+		
			The medical educational organization <b>should</b>				
		1	establish and implement mechanisms for				
			evaluating the educational program that:				
			are aimed at the educational program and its main				
			components, including the model of the				
153	4	7.1.4	educational program, the structure, content and		+		
			duration of the educational program, and the use				
			of compulsory and elective parts;				
154	5	7.1.5	are aimed at the progress of the student;		+		
			identify and address issues that include				
155	6	7.1.6	identify and address issues that include insufficient achievement of expected learning			+	
155	6	7.1.6				+	
155 156	6 7	7.1.6 7.1.7	insufficient achievement of expected learning			+	

			showsonings and muchlams will be used as				
			shortcomings and problems will be used as				
			feedback for carrying out actions and plans of				
			corrective actions, for improvement of the				
			educational program and curricula of disciplines;				
157	8	7.1.8	involve key stakeholders in the evaluation of			+	
			curriculum processes and outcomes.				
			The medical educational organization <b>should</b>				
			periodically conduct a comprehensive evaluation				
			of the educational program aimed at:				
			the organizational and financial context of the educational process, which includes the				
158	9	7.1.9	organization and resources, learning environment				
136	9	7.1.9	and culture of the medical organization of		+		
			education;				
		-	learning outcomes to be measured by national				
159	10	7.1.10	examinations, international examinations, career				
137	10	7.1.10			+		
	1		choices and further learning outcomes; making the evaluation process and results				
160	11	7.1.11	transparent to all stakeholders.			+	
-		7.2	•				
		1.4	Student academic performance The medical educational organization should	-			
			analyze the academic achievements of students, regarding:				
			Postgraduate education mission and learning				
			outcomes of the educational program, which				
			includes information on the average duration of		10		
			training, achievement scores, frequency of exams				
161	12	7.2.1	and failures, cases of successful completion and		+		
			expulsion, reports of students on the conditions of				
			training courses, time spent studying areas,				
			including optional components;				
162	13	7.2.2	educational program.		4		
102		7.2.2	The medical educational organization <b>should</b>				
			analyze the academic achievements of students in				
			relation to:				
163	14	7.2.3	postgraduate education missions;	7	+		
	1		level of training / qualification at the time of		•		
164	15	7.2.4	admission to the medical educational organization		+		
		7	The medical educational organization <b>should</b> use				
			the analysis of students' academic achievements				
			to provide feedback to the structural units				
			responsible for:				
165	16	7.2.5	selection of students;		+		
166	17	7.2.6	educational program planning;		+		
167	18	7.2.7	advising students.		+		
			Approval and control of the educational				
		7.3	environment				
			The medical educational organization must				
			provide evidence that the entire educational				
			program has been approved by the competent				
			authority on the basis of:				

168	19	7.3.1	clearly defined criteria;		+		
169	20	7.3.2	program evaluations;		+		
			opportunities for authorities to provide or				
170	21	7.3.3.	withdraw recognition of educational				
170	21	1.3.3.	environments or theoretical courses (licensing,		+		
			accreditation, etc.).				
			The medical educational organization <b>should</b> :				
			develop and implement a system of control over				
171	22	7.3.4	the educational environment and other		+		
1/1	22	7.5.4	educational facilities, including site visits and		'		
			other relevant tools and resources.				
			Total		16	6	
		8.	GOVERNANCE AND ADMINISTRATION				
		8.1	Management				
		1	The medical educational organization must				
	1		guarantee that the educational program is				
			implemented in accordance with the rules				
150		0.1.1	regarding:				
172	1	8.1.1	admission of students;		+		
173	2	8.1.2	structure and content	4	+		
174	3	8.1.3	process		+		
175	<u>4</u> 5	8.1.4	assessment		+		
176	_ 3	8.1.5	planned results		+		
		7	The medical educational organization <b>must</b> document the completion of training by issuing				
			degrees, diplomas, certificates or other official		4		
177	6	8.1.6	certificates of qualification provided as a basis for		+		
	٦		the official recognition of a specialist in the				
			chosen field of medicine.				
		1	The medical educational organization must				
			ensure a continuous assessment of:				
170	7	0.1.7	educational programs for various types of				
178	/	8.1.7	postgraduate medical education.		+		
			institutes / faculties / departments and other				
179	8	8.1.8	educational structures that implement the learning	7		+	
	<b>\</b>		process.				
180	9	8.1.9	teachers.		+		
181	10	8.1.10	The medical educational organization should be		+		
			responsible for quality development programs.				
			The medical educational organization should				
			guarantee:				
182	11	8.1.11	application of procedures for verification of final				
104	11	0.1.11	results and competencies of graduates for use by both national and international bodies		+		
			transparency of management structures and their				
183	12	8.1.12	decisions.		+		
		8.2	Academic leadership				
		U,2	The medical educational organization <b>must</b>				
104	10	0.2.1	clearly determine the responsibilities of the				
184	13	8.2.1	academic management for the development and		+		
			management of the educational program.				
			management of the educational program.				

			The medical educational organization should				
			periodically evaluate academic management on				
			achieving:				
185	14	8.2.2	missions of the postgraduate educational program		+		
			the final results of training in this educational				
186	15	8.2.3	program.		+		
		8.3	Funding and resource allocation				
			The medical educational organization must:				
187	16	8.3.1	determine the responsibilities and powers to				
107	10	6.3.1	manage the budget of the educational program;		+		
			The medical educational organization should				
			manage the budget to match:				
188	17	8.3.2	mission and results of the educational program;		+		
189	18	8.3.3	ensuring the functional responsibilities of		+		
	10	A 100	academic staff and students.		·		
		8.4	Administrative staff and management				
			The medical educational organization <b>must</b> have		97 %		
			an appropriate administrative staff, including their number and composition according to				
1			qualifications, in order to:				
			ensure the implementation of the educational				
190	19	8.4.1	program and relevant activities;		+		
404			ensure proper management and allocation of				
191	20	8.4.2	resources.		+		
		7	The medical educational organization should:				
			develop and implement an internal management				
192	21	8.4.3	quality assurance program that includes			+	
			consideration of needs for improvement;				
193	22	8.4.4	conduct regular reviews and analyses of the			+	
170		-	management to improve quality.			·	
		8.5	Requirements and regulations				
			The medical educational organization must				
104	22	0 5 1	comply with national legislation regarding the		<b>7</b>		
194	23	8.5.1	number and types of recognized medical		+		
	1		specialties for which approved curricula are developed.	1			
			The medical educational organization should				
195	24	8.5.2	identify approved postgraduate medical education		+		
	-		programs in collaboration with all stakeholders.		,		
			Total		21	3	
		9.	CONTINUOUS RENEWAL				
			As a dynamic and socially responsible				
			institution the medical educational organization				
			should:				
			initiate procedures for regular reviewing and				
196	1	9.1.1	updating of the structure, functions and quality of			+	
			the system of the postgraduate medical education				
197	2	9.1.2	program; document and eliminate deficiencies.				
197	3	9.1.2	allocate resources for continuous improvement		+		
198	3	9.1.3	•		+		
			The medical educational organization <b>should:</b>				

199	4	9.1.4	base the update process on prospective research and analysis and on the results of our own research, evaluation and literature on medical education;			+	
200	5	9.1.5	ensure that the process of renewal and restructuring leads to a review of postgraduate education policies and practices in line with past experience, current activities and future prospects.		+		
201	6	9.1.6	direct the process of renewal to the adaptation of the mission statement and the final results to the scientific, socio-economic and cultural development of society.			+	
202	7	9.1.7	direct the renewal process to modify graduate learning outcomes to meet documented environmental and labor market needs, including clinical skills, public health training, and participation in patient care in accordance with post-graduate responsibilities.		+		
203	8	9.1.8	direct the update process to the adaptation of teaching approaches and teaching methods to ensure their relevance and relevance;	\		+	
			direct the process of updating to adjust the structure, content and duration of the educational program and their relationship in accordance with advances in biomedical, behavioral, social and clinical sciences, changes in demographic and				
204	9	9.1.9	health / morbidity patterns and socio-economic and cultural conditions, and the process adjustments will ensure the inclusion of new relevant knowledge, concepts and methods, and		1		
205	10	9.1.10	the elimination of outdated ones.  direct the update process to the development of assessment principles and methods, and methods and number of examinations in line with changes in learning outcomes and teaching and learning methods.		+		
206	11	9.1.11	direct the process of renewal to the adaptation of the policy of enrollment and selection methods, taking into account changing expectations and circumstances, needs for human resources, changes in the system of postgraduate education and the needs of the educational program.		+		
207	12	9.1.12	direct the process of renewal to the adaptation of the policy of recruitment and formation of academic staff in accordance with changing needs.		+		
208	13	9.1.13	direct the renewal process to the renewal of educational resources in accordance with changing needs, such as the number of students, the number and profile of academic staff, the		+		

			educational program and modern teaching methods.				
209	14	9.1.14	direct the process of renewal to improve the process of monitoring, control and evaluation of the educational program.			+	
210	15	9.1.15	focus the renewal process on improving the organizational structure and management principles to ensure effective action in the face of changing circumstances and the needs of postgraduate education, and, in the long run, to meet the interests of different stakeholder groups.		+		
			Total		10	5	
			GRAND TOTAL	·	177	33	

Appendix 2. PROGRAM OF THE VISIT TO THE ORGANIZATION OF EDUCATION

Appendix 3. RESULTS OF THE ACADEMIC STAFF QUESTIONNAIRE

Appendix 4. RESULTS OF THE STUDENT QUESTIONNAIRE