MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

State University Medical institute

The concept of the educational activity development according to the educational-professional program 222 Medicine second (master's) level in the field of education 22 Healthcare for 2021-2025.

Approved by the Academic Council

of the Medical institute

Protocol №12, June 30, 2021

Sumy, 2021

The concept of educational activities under the educational-professional program (EPP) 222 Medicine in the field of education 22 Healthcare is formed on the basis of the order of the Cabinet of Ministers of Ukraine №95-r of February 27, 2019 "On approval of the Strategy for medical education in Ukraine", "Strategy of regional development of Sumy region for 2021-2027 ", approved by the decision of the regional council of the 8th convocation on 11.12.2020," Strategic development plan of Sumy State University for 2020 - 2026 ", approved by the Conference of the university staff (protocol №7 of 24 January 2020).

## I. The relevance of educational activities for EPP

The relevance of masters training in frame of educational-professional program 222 Medicine is due to the processes of reforming the healthcare sector in the country, the need for new professionals who can learn quickly, responding to new challenges and changes in approaches to patient care, globalization, labor migration, epidemic challenges.

The regional aspect is due to the low staffing of doctors in the region (79.4%), the high incidence of respiratory tuberculosis, malignant neoplasms. Problems at the state level require the development of EPP and also include high prevalence of chronic diseases, socially dangerous diseases, short life expectancy, low resistance to epidemic challenges, imperfect organization of the healthcare system, lack of modern medical technologies in the industry, insufficient ownership specialists, etc. At the international level, there is a problem of high cost of medical education and reduced commitment to its acquisition due to the length of the training process, shortage of medical personnel due to active migration of specialists, lack of practical skills of applicants, professional burnout of employees.

## II. EPP mission and principles of concept implementation

The mission of EPP 222 Medicine is to provide medical students with quality and affordable education to improve public health and improve the quality of life of the population now and in the future on the basis of:

• acquisition of modern knowledge taking into account the principles of evidencebased clinical medicine by integrating the achievements of biomedical, clinical, behavioral and social sciences into education;

• application of modern learning technologies, including virtual and augmented reality;

• use of experience in advanced research; principles of lifelong learning for the needs of a rapidly changing world;

• internationalization for the perception of the best world practices in the field of medicine; use of innovative practice-oriented educational technologies;

• avoidance of any discrimination and the possibility of inclusive education.

The mission of the educational program is realized by acquiring a number of competencies, which form highly educated intellectual specialists in the field of healthcare, taking into account the needs of the region, able to work both independently and in a team.

The principles of the concept are:

- development of EPP with mandatory consideration of the requirements of the education standard;

- improvement of EPP on the basis of the analysis of needs of the labor market and prospects of development of medical branch, monitoring of needs of the basic stakeholders;

- inseparability of theoretical fundamental training with practice-oriented training and research work in the training of medical professionals, the formation of a humane personality of the future doctor;

- mastering the educational program on a competency basis by achieving certain program learning outcomes with an individual trajectory;

- ensuring the competitiveness of graduates due to the high guaranteed quality of medical education, which is achieved by the professional level of involved in the implementation of research and teaching staff and the use of innovative learning technologies;

- creating opportunities for academic mobility of students for education;

- independence and objectivity of assessment of higher education applicants;

- equality of conditions for each subject of study in relation to the full realization of its abilities, talent, including opportunity for inclusive education.

## III. Short, medium and long term prospects for the implementation of the concept

The short-term perspective for 2021-2022 should be considered:

- ensuring the indicators of the Unified State Clinical Examination (USCE) at a level not lower than the national indicator;

- involvement in scientific work at least 30% of the students at EPP;

- involvement at least 5% of the students in academic mobility programs;

- employment of at least 60% of graduates at the regional level to meet the needs of medical institutions of the region, specially primary care;

- expansion of the contingent of domestic applicants by developing a program of regional order for training, cooperation with united territorial communities (UTC) as well;

- passing the international accreditation of EPP.

The medium term perspective for 2022-2024 should be considered:

- ensuring the indicators of passing the Unified State Clinical Examination (USCE) at the level of the national indicator, taking into account the increase of the requirements of the Testing Center at the Ministry of Health of Ukraine to the criteria passed / failed the specified examination;

- involvement in scientific work of at least 40% of students at EPP;

- involvement of at least 10% of students in academic mobility programs;

- employment of at least 60% of graduates at the regional level to meet the needs of the secondary level of medical institutions of the region;

- implementation of programs of "double" diplomas for EPP, the possibility of continuing studies abroad for similar EPP;

- expansion of the contingent of foreign applicants at the expense of entrants from European countries.

The long-term perspective for 2024-2025 should be considered:

- ensuring the indicators of passing the Unified State Clinical Examination (USCE) at a level higher than the national indicator;

- involvement in scientific work of at least 50% of applicants for education for EPP;

- involvement of at least 15% of students in academic mobility programs;

- overcoming the shortage of medical positions in the region, taking into account the age turnover of staff;

- growth of the contingent of EPP graduates who have received approval for certification from the Educational Commission for Foreign Medical Graduates (ECFMG).

## IV. Ways to implement the concept

1. Development of the educational component of EPP:

• introduction of university educational resources on the awareness of applicants about the principles of accreditation of educational programs (2021-2022);

• conducting regular surveys of key stakeholders to respond in a timely manner to the needs of the labor market, the introduction of new treatment standards, innovative teaching approaches (2021-2025);

• support for the percentage of research and teaching staff who have a scientific degree (academic title) and teach at the EPP at a level not lower than 80% and ensure the implementation of a long-term staffing plan (2021-2025) in accordance with the deadlines;

• achieve of 60% of teachers in the support group who have a certificate of proficiency in a foreign language level B2 (with one hundred percent providing of the educational process in English-speaking students), 60% by 2022, 70% by 2024, 80% by 2025.

• achievement of the percentage of foreign teachers for EPP in 3% by 2023, 5% by 2025.

• expansion of educational activities on the basis of the University Clinic by conducting the educational activity with departments of internal medicine with a center of respiratory medicine, family medicine with a course in dermatovenereology, infectious diseases with epidemiology, oncology and radiology, physical therapy, occupational therapy and family medicine, public health, public health (until 2022);

• creation of educational and training centers on the basis of clinical medical institutions of the region (until 2023);

• introduction of stimulation technologies (from 2021), augmented (from 2021) and virtual reality (from 2023) into the educational process;

• Continuing the practice of non-formal education by organizing online / offline seminars with the participation of the world's leading scientists (with the assistance of the Scientific Society of Students, Postgraduates and Young Scientists of the Medical Institute and the International Medical Student's Association).

2. Development of the scientific component of EPP:

• continuation of the practice to perform annual English-language scientific conferences at the university with the assistance of the Scientific Society of Students, Postgraduate Students and Young Scientists of the Medical Institute (annually);

• increase to 10% of the number of applicants who take part in scientific events (conferences, symposia, seminars) abroad, in particular in partner universities;

• development of the Center for Collective Use of Scientific Equipment of the Medical Institute by creating a 3D-printing laboratory (2022), a microanalysis laboratory (2024), modernization of the vivarium (2024);

• increase the number of EPP teaching staff publications in Q1, Q2 journals to 20% of the total number by 2023, to 30% by 2025;

• promoting the growth of h-index of the staff involved in the implementation of EPP with the achievement of the average value per 1 employee in 2 in 2022, 5 - in 2025.

• achievement of the percentage of teaching staff who pass at least one course abroad in 5 years, in 2022 - 40%, in 2025 - 60%.

3. Development of logistics of EPP:

• acquisition of anatomical 3D tables with the ability to simulate computed tomography technology (from 2021);

• acquisition of phantoms for simulating mastery of manipulations in children and adults in order to expand the capabilities of the training center (until 2022), the creation of separate centers for therapeutic, pediatric, obstetric, surgical simulation (until 2024);

• purchase of a simulator of surgical and obstetric operations to expand opportunities for students on the basis of the regional research and training center for endoscopic methods of diagnosis and minimally invasive surgery (until 2025);

• purchase of interactive whiteboards (2022);

• renovation of the training laboratory of the Department of Physiology and Pathophysiology with a course in medical biology (purchase of a digital polygraph) - 2023;

• updating of light microscopes of training laboratories of the course of microbiology of the Department of Public Health (2022);

• purchase of a modern computer tomograph for the renovation of the Center for Computed Tomography of the Department of Oncology and Radiology (2023);

• completion of the educational building of the Medical Institute (by 2025).