

**MINISTRY OF HEALTH OF UKRAINE**  
**NATIONAL PIROGOV MEMORIAL MEDICAL UNIVERSITY, VINNYTSYA**

**«APPROVE»**

Rector of

National Pirogov Memorial Medical University,  
Vinnytsya



*[Signature]*  
V.M.Moroz

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**REGULATIONS**

**ON CONDUCTING OBJECTIVE STRUCTURED CLINICAL EXAMINATION (OSCE)**  
**AT NATIONAL PIROGOV MEMORIAL MEDICAL UNIVERSITY, VINNYTSYA**

these regulations were considered and  
approved at a meeting of

the Academic Council of National  
Pirogov Memorial Medical University,  
Vinnytsya

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Regulations on the procedure for conducting an objective structured clinical examination at National Pirogov Memorial Medical University, Vinnytsya (hereinafter - the Regulations) determines the methodology and procedure for conducting an objective structured clinical examination aimed at determining the level of students' acquisition of practical skills and acquisition of professional competencies.

## **1. Regulatory framework of an objective structured clinical examination**

The provision is based on the requirements of the Law of Ukraine "On Education" dated September 5, 2017; Law of Ukraine "On Higher Education" dated July 1, 2014; Resolutions of the Cabinet of Ministers of Ukraine № 334 "On approval of the Procedure for a single state qualification exam for applicants for higher education master's degree in the field of knowledge" 22 Health" dated March 28, 2018, Standards of higher education in Ukraine - 22 Health", the Statute of VNMU dated May 30, 2018; Regulations on the organization of the educational process in VNMU, approved on June 30, 2017; Regulations on the medical faculty № 1 dated August 30, 2018; Regulations on the medical faculty № 2 dated August 30, 2018; Regulations on the faculty of training foreign citizens in the main specialties dated January 31, 2018; Regulations on monitoring and quality control of education of VNMU dated October 28, 2014.

## **2. General provisions**

The Objective Structured Clinical Examination (OSCE) is a method of assessing the clinical competence of higher education students in a medical institution of higher education on the basis of objective testing through the performance of clinical tasks. The method of assessing the clinical competence of students must meet three criteria: validity, reliability, feasibility.

The validity of the clinical examination should include the following abilities:

- to collect the patient's anamnesis;
- perform a physical examination of the patient;
- to determine the patient's problems from the received information and to make a differential diagnosis;
- identify appropriate research methods;
- interpret research results;
- to recommend and carry out appropriate treatment, observation of the patient and further recommendations to the patient.

The reliability of the clinical examination should be ensured by following an objective approach to evaluation: consistency and stability of evaluation criteria; constancy of the patient and the examiner.

The feasibility of a clinical trial should include the following criteria:

- number of students to be evaluated;
- the number of involved teachers - examiners, their status and specialty;

- availability and accessibility of standardized patients;
- availability of a place or a suitable room for a clinical examination;
- criteria for assessing the results of the exam.

### **3. The main components of OSCE**

- 1) **The general management** concerning the organization and carrying out of OSCE is carried out by the Vice-Rector on scientific and pedagogical (educational) work of VNMU.
- 2) **The Methodical Council** is a coordinating advisory body, which approves the List of OSCE stations and the List of OSCE examiners.
- 3) **Exam coordinators** are teachers who are responsible for the preliminary planning, organization and conduct of OSCE in the specialty. Departments provide information about the teacher responsible for the organization and conduct of OSCE.
- 4) **List of OSCE stations.** The OSCE exam should reliably assess students' clinical competence and may include: history taking, objective physical examination of the patient, skills technique and procedure, interpretation of laboratory and instrumental research methods, student counseling and communication skills.
- 5) **Check-list.** Criteria for calculating points for evaluation (form of evaluation letter). An evaluation sheet is developed for each station. The preparation of an evaluation letter requires a preliminary definition of objective criteria for each task, which are based on the goals and objectives of the curriculum. The evaluation letter should be short, clear, unambiguous. The evaluation sheet contains items that allow you to evaluate and mark the performance of the task on a scale of points, and the sum of points given by the examiner allows you to evaluate the performance of the task by the student at the station.
- 6) **Students who make up OSCE.** Students should be provided with complete instructions, specifying the exact place and time of the exam, clearly and concisely described the rules of movement from station to station, a list of clinical skills that will be performed at OSCE stations. The student does not ask questions to the examiner.

**It is strictly forbidden to bring mobile phones and use various electronic gadgets to the OSCE assembly area.**

Students should remember that they should appear for the exam in a white coat and carry a phonendoscope, gloves (3 pairs). Before the exam, the student will be issued a badge with a number (surname). This badge must be placed so that it is visible to examiners throughout the exam. After the exam the badge must be returned to the secretary of the examination board.

- 7) **Examiners.** Examiners at the station can be assistants, associate professors and professors of graduating departments. It is recommended to involve examiners from different medical specialties. 8 weeks before the exam, examiners must be provided

with a complete description of the relevant stations. The examiner observes how the student performs clinical skills at the station, coordinates the actions of the standardized patient, does not comment on the student's actions and does not ask additional questions, fills in the evaluation sheet before the next student enters. The examiner must evaluate the performance of the task by the student according to the criteria for evaluating each step of the task specified in the evaluation sheet and set points in it in the course of the task by the student.

**The examiner is not allowed to use a mobile phone in the OSCE area.**

8) **Place of the exam.** When planning OSCE, the place of the exam should be shown schematically, marked all the stations and shown samples of the direction of movement of students. It is important to keep in mind that students are required to move from station to station during the exam, and if the rooms are not located close, the transition periods should be short and coordinated. The location of the clinical stations should be such that the call or signal indicating the time of transition to the next station should be clearly audible at all stations.

9) **Examination stations** can be of the following types:

*Clinical station* - includes the interaction of students with a real or standardized patient,

*Practical stations* - includes the implementation of practical skills, conducting an objective examination, interpretation of the results of clinical, laboratory and instrumental data, treatment plan, treatment, prescribing, which are then collected for evaluation;

*Rest stations*, where students will be able to rest for a short time (up to 2 minutes), drink water and get acquainted with the further task placed on the stands. At these stations, examiners do not need to observe students.

10) **A standardized patient** presents not just a medical history, but shows the manifestations of the disease, conveys the emotional and personal characteristics of the simulated patient. A standardized patient can participate in OSKI only after appropriate training and education. Real patients with acute diseases are not suitable for such an examination, however, patients with chronic diseases in remission with stable physical changes (goiter, lung sounds, heart murmurs, abdominal organomegaly, skin changes, deformities) can be used very effectively.

Standardized patients have several distinct advantages over real patients: they can be controlled, their medical history is more revealing, and the simulation of disease manifestations can be standardized. The use of standardized patients, you can control the level of complexity of the examination station, and their use during exams can accurately compare the results of students.

11) **The responsible person** who controls the exam time and signal time (call or signal) - an employee of the simulation center, pre-instructs his assistants and agrees

with the exam coordinators the exact time of the exam, time at the station (up to 2 minutes - practical skills, up to 5 minutes - standardized patient).

**12) Analysis and evaluation of OSCE implementation.** Heads of graduating departments are responsible for the analysis of OSCE. The analysis of the tasks included in the USCI should be complete to determine the rate of difficulty for each station in relation to the exam as a whole and to differentiate the levels of performance of tasks by students.

Tasks at OSKI stations to be performed by students must be clearly defined, precise and clear instructions must be provided to students, examiners, standardized patients, evaluation sheet and scoring system, list of required materials (equipment, scenario for standardized patients, characteristics of standardized patients, assistance of technical support staff).

An adequate number of stations of appropriate duration should be provided to ensure broad coverage of the training material. The total number of clinical stations should consist of 10 stations, and the time allotted for the task at each station should not exceed 2 or 5 minutes, depending on the type of station (practical skills or standardized patient).

#### **4. Pilot testing of clinical stations**

OSCE clinical stations should be tested. This is necessary to determine the validity of a particular station in the planned volume and time. Pilot testing of each station can be conducted by employees of the department involving employees of the simulation center of VNMU. Departments are submitted to the training department "OSKI piloting schedule in the simulation center". After coordination in the simulation center the "Schedule of piloting of OSCE" which is signed by the head of the simulation center and approved by the vice-rector on scientific and pedagogical (educational) work is made.

Tasks scheduled at the OSCE must be confidential. Clinical stations should be well lit, have the necessary equipment and items to assess skills. It is necessary to observe silence in the premises where the exam will take place. Examination clinical stations must be clearly marked in a logical sequence, which allows you to easily, without hindrance to move from one station to another.

#### **5. Organization of OSCE**

OSCE coordinators together with the head of the simulation center carry out preliminary planning, organization and conduct of the exam.

The schedule of OSKI is made after coordination with departments and deans' offices for registration of students in the simulation center.

"OSCE schedules in the simulation center" and "List of students admitted to the OSCE" are signed by the head of the simulation center and approved by the vice-rector for scientific and pedagogical (educational) work.

OSCE coordinators hold a meeting with teachers-examiners and staff involved in passing the exam. During the meeting, the procedure for conducting the

exam is discussed, the responsibility of each examiner is determined and agreed upon, and responsible teachers are appointed to instruct students. If for any reason the examiner is unable to attend this meeting, he must be informed in writing of the decision of the meeting and any issues must be clarified and resolved before the exam.

The list of OSCE stations is developed by departments taking into account the competencies to be tested (collection of anamnesis / medical history, objective physical examination, manipulation, interpretation of laboratory and instrumental data, communication skills and patient consultation) and clinical situations in which these competencies must be met.

The amount of assessed competencies by stations can be distributed as follows:

1. Stations of the standardized patient - 20%;
2. Stations of practical skills - 60%;
3. Stations of interpretation of laboratory and instrumental data - 20%.

Clinical stations must be numbered according to the layout of the stations and equipped with the equipment necessary for the examination. OSCE coordinators are responsible for preparing all the documentation for the exam in the required amount: evaluation letters; instructions for examiners and students; list of students taking the exam; a list of all stations, a list of examiners and a list of equipment required for each station; station location plan.

Detailed instructions for students should be prepared and pre-submitted for review. Must be prepared for each group:

- general instructions,
- station layout,
- writing paper,
- pencil and eraser
- badge (number or surname and name of the student, printed in large font).

Each examiner receives information about the time and place of the exam, a list of all stations on the exam, indicating which station they are examiners; list of students; evaluation sheet for each station. The exam cannot begin until all examiners are present. Responsibility for the presence of examiners rests with the heads of departments from which the examiner was recommended. Teachers must arrive at 30 minutes earlier before the OSCE exam.

The day before the exam, the responsible staff prepares the stations. Brief information for the student (in Ukrainian and English) and the serial number of the station are attached to the door of each station. Information for students with the following parameters: Font Times New Roman, size 34, spacing 1.5. Sequence number - size 120.

## **6. Conducting OSCE**

Prior to the exam, the OSCE coordinator must pre-check the location and numbering of each station; provision of each station with the necessary equipment

and materials; the presence of all examiners at the appropriate stations; check the presence of all planned standardized patients; check the readiness of teachers to instruct students; readiness of assistants.

Examiners, students must approach the place of the exam (university simulation center) 30 minutes before the exam. Indicative instructions are given for each group separately.

After completing the exam, make sure that the answer sheets are collected from each student and the grade sheets with grades from each examiner, which should be submitted to the secretary of the examination boards.

The results of the exam are summarized. Any problems that arise during the organization and conduct of the exam should be considered and taken into account in preparation for the next exam. Suggestions that could increase the effectiveness of further examinations should be considered.

The results of clinical tasks performed by students in the exam should be discussed by teachers and examiners so that the identified shortcomings are taken into account and taken into account to improve student learning.

### **7. Development of clinical scenarios**

Clinical scenarios are developed to combine in one clinical case several clinical skills acquired in different disciplines, as well as the development of clinical thinking. Departments use critical situations in accordance with the typical curriculum of the discipline.

Clinical scenarios are developed based on a performance of up to 5 minutes. During this time, students must provide emergency care to the "patient", perform clinical skills, etc.

Before conducting a clinical scenario, the teacher must clearly define the purpose of the scenario, develop correct questions and an evaluation letter. During the clinical scenario, teachers who assess the performance of a practical skill should clearly instruct the students performing the procedure.

### **8. Assessment of OSCE**

Assessment of the task by the student is carried out on a checklist, which is based on the algorithm of actions in a particular clinical situation. The maximum score for the task at the first station is 1 (one) point. Each point of the algorithm, depending on the complexity, is assigned a certain part of the score.

The value of each item may be different depending on their number, complexity of implementation and so on. Some scenarios may have critical points that fail to complete the task.

After passing all the stations, the points scored are counted. The maximum number of points is 25. The exam is considered passed if the student scored at least 60% of the maximum number of points.

The obtained points are translated into a fixed scale:

Grade "5" - 200 - 180 points

Grade "4" - 179 - 160 points

Grade "C" - 159 - 122 points

After passing the exam by students of one group, the examiners submit checklists to the secretariat, which enters the information in the appropriate accounting forms (information). After OSCE, checklists and information are passed to the dean's office.

The results of the exam are announced to students on the day of its passing.

If the student does not agree with the result of the exam, he can appeal and appeal the result. Appeals are considered by the relevant commission by watching a video of the student taking the exam. The composition of the appeal commission is determined by the order of the rector of the university.

### **9. Final provisions**

Regulations on the procedure for conducting an objective structured clinical examination at National Pirogov Memorial Medical University, Vinnytsya is considered and approved by the Academic Council of the University.

Changes and additions to the Regulations on the procedure for conducting an objective structured clinical examination at National Pirogov Memorial Medical University, Vinnytsya are made in accordance with current legislation.

After the adoption of a new version of the provision - the previous one expires.