

## **Objective Structured Clinical Examination (OSCE)**

OSCE is a modern method for the final assessment of professional competencies in medical educational institutions. The examination is conducted in the format of sequentially passing through stations, each of which is aimed at assessing specific practical skills, clinical reasoning, communication abilities, and the level of professional training.

### **Objectives of OSCE**

- Assessment of the level of professional competencies acquired according to the educational program.
- Evaluation of the student's ability to apply theoretical knowledge in conditions close to real clinical practice.
- Development and enhancement of interpersonal communication skills and interaction with patients.





## **Methodology of OSCE**

### **1. Organization of stations:**

- Each station has clearly regulated tasks, including a description of the clinical scenario and the goal of the task.
- The duration of work at each station ranges from 5 to 15 minutes.

### **2. Types of stations:**

- Diagnostic: Analysis of clinical cases, interpretation of laboratory and instrumental data.
- Therapeutic: Performing manual skills (e.g., catheter insertion, administering injections).
- Communication: Interaction with patients, standardized or simulated.

### **3. Assessment tools:**

- Checklists containing key parameters for task performance.
- Use of simulators, mannequins, virtual technologies, and standardized patients.

### **Evaluation Criteria**

- Objectivity of results is ensured through a unified scoring system that describes the completion of each task step.
- Assessment includes an analysis of accuracy, sequence, logic of task execution, and communication competence.

## **The Role of OSCE in the Educational Program**

OSCE is integrated into the educational process as the final stage of training specialists. This method allows for an objective assessment of future doctors' readiness for practical activities, identifies their professional strengths, and detects gaps that require improvement.

### **Advantages of OSCE**

- High level of objectivity due to standardized assessment.
- A systematic approach to evaluating theoretical knowledge and practical skills.
- The possibility of implementing innovative technologies (virtual reality, digital simulators).

### **Clinical Scenario OSCE: New Patient Assessment**

Setting: Emergency Department/Admissions Unit.

Patient Details:

Presenting Complaint:

The patient complains of shortness of breath (dyspnea), which has worsened over the last day, and a feeling of heaviness in his chest. He also notes that his "heart is beating very fast."

### **History (Brief background):**

The patient has a history of arterial hypertension, which he treats irregularly. He also has chronic smoker's bronchitis. He is concerned about his condition and asks you to "do something right now."





## Evaluation Sheet: Blood Pressure Measurement

№	Action Parameter	Score (✓ 1 – completed, ✗ 0 – not completed, ● 0.5 – partially completed)
<b>I. Preparatory Stage</b>		
1	Established contact with the patient, greeted them	✓ / ✗ / ●
2	Introduced themselves and stated their role	✓ / ✗ / ●
3	Identified the patient (full name, DOB)	✓ / ✗ / ●
4	Explained the procedure and obtained consent for the examination	✓ / ✗ / ●
5	Sanitized hands before the procedure	✓ / ✗ / ●
6	Positioned patient correctly (relaxed, arm supported at heart level)	✓ / ✗ / ●
<b>II. Main Stage</b>		
7	Selected appropriate cuff size	✓ / ✗ / ●
8	Located the brachial artery pulse	✓ / ✗ / ●
9	Placed cuff correctly with marker over the artery	✓ / ✗ / ●
10	Estimated systolic BP by palpating radial pulse while inflating cuff	✓ / ✗ / ●
11	Deflated cuff completely after estimation	✓ / ✗ / ●
12	Placed stethoscope diaphragm over brachial artery	✓ / ✗ / ●

13	Re-inflated cuff 20-30 mmHg above estimated value	✓ / ✗ / 0
14	Deflated cuff slowly (2-3 mmHg/sec)	✓ / ✗ / 0
15	Identified the first Korotkoff sound (systolic BP)	✓ / ✗ / 0
16	Identified the fifth Korotkoff sound disappearance (diastolic BP)	✓ / ✗ / 0
<b>III. Concluding Stage</b>		
17	Informed the patient of the results	✓ / ✗ / 0
18	Removed the cuff and concluded the examination	✓ / ✗ / 0
19	Sanitized hands after the procedure	✓ / ✗ / 0
20	Correctly verbalized the final reading (e.g., 120/80 mmHg)	✓ / ✗ / 0

### Evaluation Sheet: Lung Auscultation (Аускультация легких)

№	Action Parameter	Score (✓ 1 – completed, ✗ 0 – not completed, 0.5 – partially completed)
<b>I. Preparatory Stage</b>		
1	Established contact with the patient, greeted them	✓ / ✗ / 0
2	Introduced themselves and stated their role	✓ / ✗ / 0
3	Identified the patient (full name, DOB)	✓ / ✗ / 0

4	Explained the procedure ("listening to breathing") and obtained consent	✓ / ✗ / ●
5	Sanitized hands before the procedure	✓ / ✗ / ●
6	Positioned the patient correctly (sitting up, adequate exposure of chest/back)	✓ / ✗ / ●
<b>II. Main Stage</b>		
7	Used disinfected stethoscope ear tips and diaphragm	✓ / ✗ / ●
8	Instructed patient to breathe deeply through their mouth	✓ / ✗ / ●
9	Performed auscultation using a systematic, symmetrical "ladder" pattern	✓ / ✗ / ●
10	Auscultated posterior chest wall systematically, comparing sides	✓ / ✗ / ●
11	Auscultated anterior chest wall and axillary regions	✓ / ✗ / ●
12	Correctly assessed breath sounds (vesicular, bronchial) and noted any added sounds (e.g., wheezing, crepitations)	✓ / ✗ / ●
<b>III. Concluding Stage</b>		
13	Concluded the examination, thanked the patient, and assisted in dressing	✓ / ✗ / ●
14	Disposed of materials/disinfected stethoscope appropriately	✓ / ✗ / ●
15	Sanitized hands after the procedure	✓ / ✗ / ●
16	Correctly formulated a summary of findings for the examiner	✓ / ✗ / ●

**Final Score:** \_\_\_\_\_

**Examiner's Full Name:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

Date: \_\_\_\_\_

Score Conversion Scale

(Rescaling the points earned by the examinee at the station into a 10-point grading scale for Evaluation Sheet (Checklist) No. 1)

**Points Earned 10-Point Grading Scale**

**1-4                      1**

**5-7                      2**

**8-10                     3**

**11-12                   4**

**13-14                   5**

**Points Earned 10-Point Grading Scale**

**15-17                   6**

**18-21                   7**

**22-24                   8**

**25-27                   9**

**28                        10**



## Defect Report

for Evaluation Sheet (Checklist) No. \_\_\_\_

(specified according to the sequential number of the case (scenario))

of the Objective Structured Clinical Examination (OSCE)

for the academic discipline "Family medicine")

**Student's Full Name:**

\_\_\_\_\_

**Faculty:** \_\_\_\_\_ **Group:** \_\_\_\_\_ **Course:** \_\_\_\_\_

**Department:**

\_\_\_\_\_

Practical Skill (Procedure): Physical Examination in Family Medicine

### List of Non-Standard and Unsafe Actions Not Included in the Evaluation Sheet

(Checklist)

No	Non-Regulated and Unsafe Actions Not Listed in the Evaluation Sheet (Checklist)	Date Examiner's	Signature
1.			
2.			

List of Additional Clinically Significant Actions Not Included in the Evaluation

Sheet (Checklist)

No	Additional Actions with Clinical Significance Not Included in the Evaluation Sheet (Checklist)	Date Examiner's	Signature
1.			
2.			

Recommendations for Organizing the "Physical Examination of the Respiratory System in an Adult Patient" OSCE Station for the Next Exam

Examiner's Full Name: \_\_\_\_\_

Date: \_\_\_\_\_