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# **INTERNATIONAL EXPERIENCE IN SCIENTIFIC RESEARCH**

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**FEATURES OF STANDARDIZED PATIENT SCENARIOS ACROSS  
DIFFERENT CLINICAL DISCIPLINES FOR OSCE 2026**

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**Abstract:** During the OSCE 2026 at the Odesa National Medical University, students completed 10 examination stations. In total, 528 examination tasks were included in the exam, among which 243 were clinical scenarios involving standardized patients. An analysis of the structure of standardized patient scenarios in various clinical disciplines (surgery, internal medicine, obstetrics and gynecology, and pediatrics) was conducted. The largest proportion of examination tasks assessed clinical (professional) competence (41.17%) as well as physical examination and diagnostic skills (23.90%). The proportions of tasks aimed at assessing communicative competence and treatment strategy were approximately equal, accounting for 18.11% and 16.85%, respectively.

**Keywords:** Objective Structured Clinical Examination, standardized patient, clinical competencies.

The OSCE is an Objective Structured Clinical Examination for medical students, the format of which was proposed and first implemented in 1975 at the University of Dundee (Scotland) by Ronald Harden and his colleagues [1, p. 1]. This higher educational institution, which has the status of a public research university, is a major international center for education and research, particularly in the fields of

medicine and natural sciences. According to the 2026 national rankings, the University of Dundee is among the top 30 universities in the country.

The first publication describing the OSCE methodology appeared in 1975 in the *British Medical Journal* under the title “Assessment of Clinical Competence using Objective Structured Examination.” In this article, the authors – R. McG. Harden, Mary Stevenson, W. Wilson Downie, and G. M. Wilson – described in detail the advantages of the new type of clinical examination for medical students and presented its concept, which was based on the use of standardized patients and checklists to ensure objective assessment of graduates’ core clinical competencies [2, p. 448].

According to the original concept, the OSCE organizational standard involved assessing the graduate’s ability to obtain medical history, perform physical examination, interpret laboratory and instrumental findings, establish a preliminary diagnosis, prescribe appropriate treatment, and provide emergency care. An important aspect of the examination was also the assessment of the ability to communicate ethically and clearly with patients or their relatives and to correctly complete essential medical documentation, including patient medical records, medical certificates, sick leave certificates, urgent notifications of infectious diseases, food poisoning, acute occupational poisoning, prescriptions, and others. These five pages of printed text permanently transformed perceptions of medical education by converting subjective oral examination into a visual and standardized process characterized by a high degree of transparency, impartiality, and fairness in assessment.

Thus, the OSCE format fundamentally differs from the traditional oral examination or practical examination (unstructured clinical examination) [3, p. 2].

The absolute advantages of the OSCE include objectivity, multidimensionality (allowing assessment of all key competencies within a single examination), standardization, and practical orientation. These advantages are achieved through the use of clearly defined assessment criteria (checklists), involvement of standardized patients (actors), and identical examination tasks with the same level of difficulty for

all examinees [4, p. 2].

In Ukrainian medical universities, the OSCE was approved by the Ministry of Health of Ukraine in 2019 as a mandatory component of the Unified State Qualification Examination.

At the Odesa National Medical University, the OSCE has been conducted since 2018, while the university administration and department faculty continuously work on improving the validity of the examination.

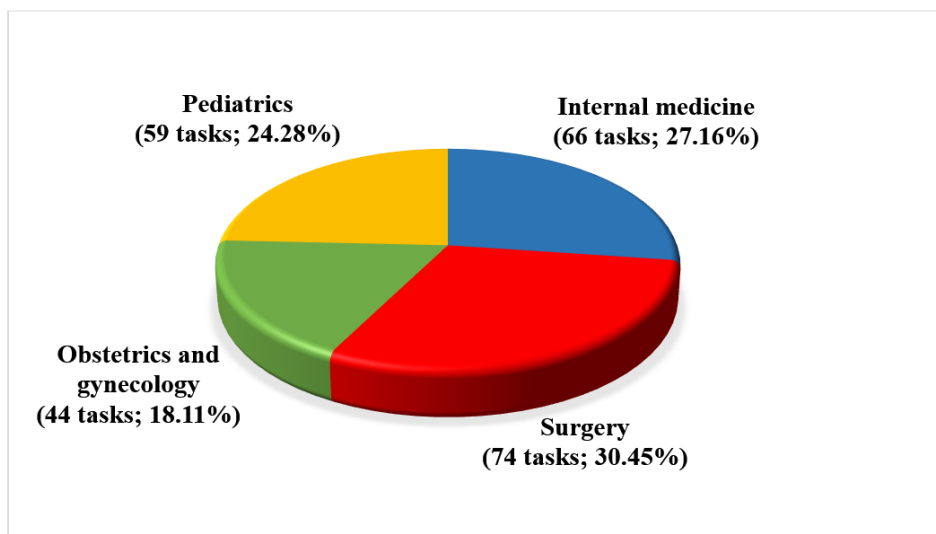
It should be noted that exam validity is the most important criterion of its quality [5, p. 522]. Successful completion of highly valid examination tasks allows objective conclusions and predictions regarding the graduate's future professional performance. Moreover, students' successful performance in a highly valid examination reflects the quality of educational services provided by the institution, particularly the professionalism of faculty members, including their scientific, methodological, psychological-pedagogical, and digital competencies. If an examination demonstrates low validity, its implementation loses practical significance.

High validity of examination tasks is ensured through content representativeness (balanced and adequate coverage of the entire educational material), criterion-related (predictive) validity (the ability to predict future professional success based on examination results), and, most importantly, high construct validity [6, p. 2]. This criterion allows the evaluation of how well future physicians' practical knowledge corresponds to international standards of clinical training. It should also be emphasized that another fundamental factor of exam validity is the unambiguity of examination tasks, meaning that their content and questions must be formulated concisely, clearly, and without the possibility of dual interpretation.

These principles have guided the development and annual improvement of standardized patient scenarios in clinical disciplines for the OSCE at the Odesa National Medical University.

During OSCE 2026, students completed 10 examination stations. Overall, 528

examination tasks were included in the examination, among which 243 were clinical scenarios involving standardized patients (Fig. 1).



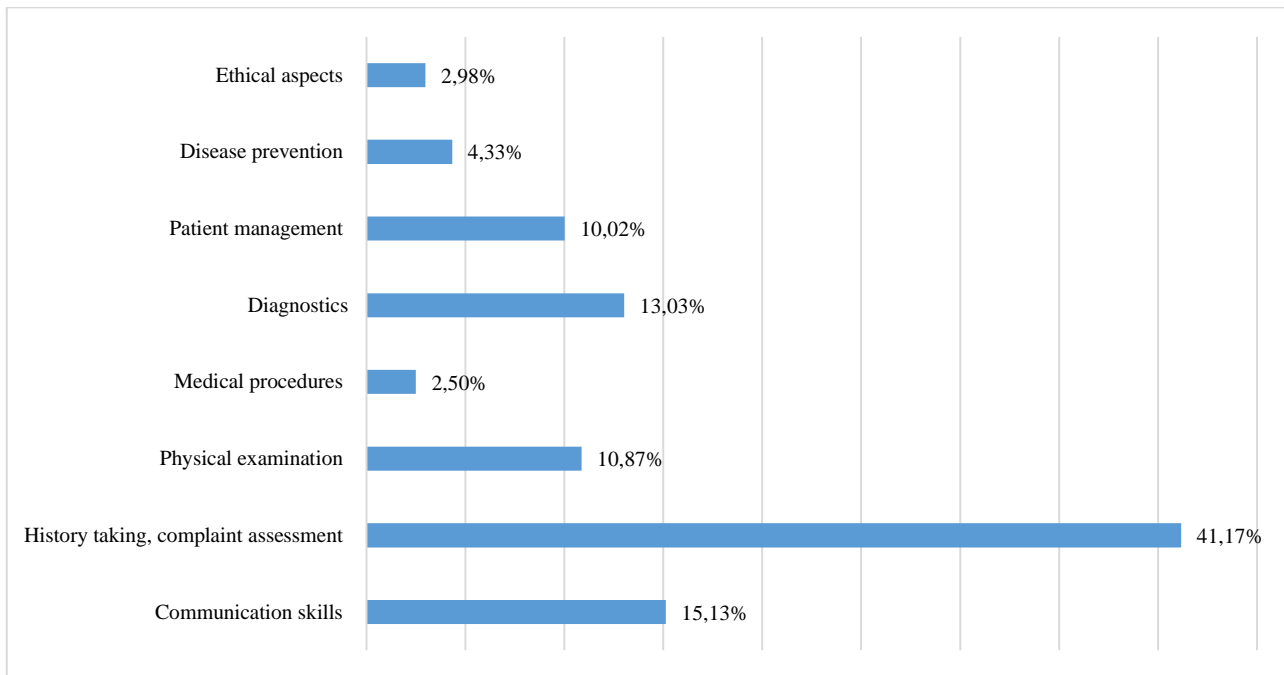
**Fig. 1. Distribution of standardized patient scenarios across different clinical disciplines**

The largest number of standardized patient scenarios belonged to surgical disciplines (74 tasks, 30.45%), followed by internal medicine (66 tasks, 27.16%), pediatrics (59 tasks, 24.28%), and obstetrics and gynecology (44 tasks, 18.11%).

To determine the specific features of the structure of standardized patient scenarios in clinical disciplines during OSCE 2026 at the Odesa National Medical University the focus was placed on assessing students' mastery of five core competencies (Fig. 2, 3).

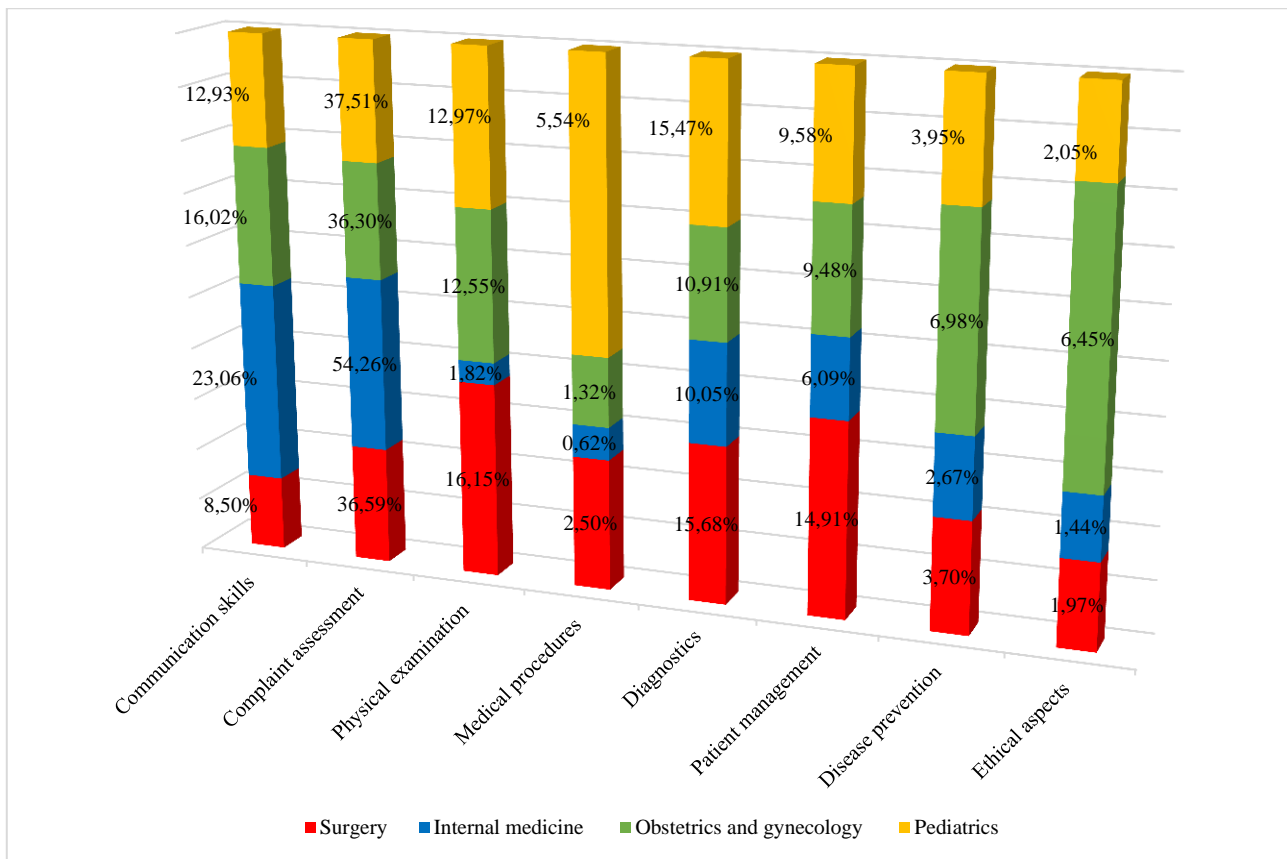
The first of these was communicative competence, namely the graduate's proficiency in communication skills, ability to formulate thoughts clearly, actively listen, persuade, and understand the emotions of patients and/or their relatives, as well as to inform patients about incurable conditions/diseases, malignant neoplasms, and similar diagnoses. This represents a highly important basic professional and personal competence of a physician, integrating medical knowledge with compliance-oriented interaction skills. Communicative competence involves the use of verbal and nonverbal communication methods, demonstration of empathy, and active listening skills. These factors create an atmosphere of trust and contribute to increasing the

patient's willingness to follow medical prescriptions and recommendations. The overall proportion of communication skills and ethical aspects in the structure of standardized patient scenarios during OSCE 2026 was 18.11%. This indicator was highest in internal medicine scenarios (24.50%) and obstetrics and gynecology scenarios (22.47%).



**Fig. 2. Structure of standardized patient scenarios across clinical disciplines for OSCE 2026**

Another important competency assessed during OSCE 2026 was professional (clinical) competence, namely the graduate's ability to correctly, systematically, and purposefully interview the patient regarding complaints, disease progression, and medical history. This skill undoubtedly constitutes the foundation for developing a plan of laboratory and instrumental investigations and establishing a preliminary (clinical) diagnosis. The overall proportion of history taking and complaint assessment in the structure of standardized patient scenarios accounted for 41.17%. This percentage was highest in scenarios involving internal medicine patients (54.26%), while in pediatrics, surgery, and obstetrics and gynecology the proportions were almost identical, ranging from 36.30% to 37.51%.



**Figure 3. Structure of standardized patient scenarios in surgery, internal medicine, obstetrics and gynecology, and pediatrics for OSCE 2026**

Physical examination of the standardized patient (actor) is a practical task aimed at assessing the graduate's ability to examine the patient correctly while adhering to ethical communication principles, hygiene standards, examination algorithms, and ergonomic requirements.

Despite the rapid development of medical imaging technologies, physical examination remains a critically important physician competency that enables identification of the earliest signs of disease, assessment of disease severity, and guidance of the diagnostic process in the appropriate direction. In the overall structure of standardized patient scenarios, tasks related to objective physical examination accounted for 10.87%. This proportion was highest in surgical scenarios (16.15%), followed by pediatrics (12.97%) and obstetrics and gynecology (12.55%).

Clinical reasoning, particularly the interpretation of laboratory and instrumental investigation results (ECG, radiographs, ultrasound examinations, etc.)

with substantiation of the preliminary diagnosis, also constituted an important component of the final assessment. Across all clinical disciplines, this indicator averaged 13.03%: in surgery and pediatrics scenarios it accounted for 15.68% and 15.47%, respectively, whereas in obstetrics and gynecology and internal medicine it was somewhat lower (10.91% and 10.05%, respectively).

The final core competency assessed during OSCE 2026 was treatment strategy, disease prevention, and medical interventions, including determination of treatment plans and technical performance of both basic and advanced procedures (venipuncture, catheter placement, cardiopulmonary resuscitation, endoscopy, minimally invasive procedures, and complex surgical dressings). The overall proportion of these tasks in the structure of standardized patient scenarios was 16.85%, with the highest proportion observed in surgical standardized patient scenarios (21.11%).

Thus, the conducted analysis of the structure of standardized patient scenarios across different clinical disciplines for OSCE 2026 demonstrated that the greatest emphasis was placed on the assessment of clinical (professional) competence (41.17%) as well as physical examination and diagnostic skills (23.90%). The proportions of tasks evaluating communicative competence and treatment strategy were approximately equal, accounting for 18.11% and 16.85%, respectively.

Preparation for the OSCE is a daily, meticulous, and highly responsible process. It represents collaborative interaction among faculty members, students, and university administration and constitutes an essential component of teamwork aimed at achieving sustainable success of the medical university and enhancing its competitiveness at the regional, national, and international levels.

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