

## Results

The approach of certifying a medical simulation center based on an assessment of its equipment and staffing is not new in itself. The non-profit organization ROSOMED has been conducting this work since 2014. Specific criteria for material and technical resources and staffing have been developed. However, it is very difficult to adhere to them within the framework of a publicly funded educational institution. And the main argument raised by the administration is: why make changes if there is already a valid license for educational activities? Why improve the structure, specialize the facilities, or purchase additional equipment if the existing center's operations can be adapted as-is to meet the established goals for student training? Therefore, before opening their own centers, universities most often study the experience of their "neighbors" and replicate it, taking into account their own financial and organizational capabilities. The Kazan university was a pioneer in the development of simulation-based learning in Russia, so it had to study and "take cues" from European and American medical schools. The center's operations were based on the concept of step-by-step mastery of practical skills in accordance with the trainee's accumulated professional knowledge and experience. The first challenge encountered along the way was assembling the teaching team. It would have made sense to use faculty from relevant clinical departments, but under the university's staffing regulations, only instructors and teaching specialists could work at the center — not teaching assistants or associate professors. And the main difference lay in the level of compensation for the work performed. There was a severe shortage of instructors, which had to be addressed primarily through sheer enthusiasm. The next problem was that the clinical departments, while generally supportive of the idea of simulator-based training, refused to allocate specific hours in their curricula. The solution was to allocate a portion of the hours from the students' summer clinical rotations. Thus, the first results were achieved: on the positive side, specially equipped rooms were established, housing modern specialized simulators; teaching methodologies were implemented; an interdepartmental resource center was created to facilitate exams and academic competitions; and the opportunity to provide paid educational services emerged. Among the negative outcomes were difficulties in recruiting qualified instructors and a lack of ongoing monitoring of teaching quality. This served as the basis for the next step in the development of simulation-based learning. In 2017, the center was transformed into the Department of Simulation-Based Medical Education. Advantages: a stable faculty team (department chair, associate professor, teaching assistants), an approved curriculum with a list of practical skills and allocated instructional hours, and direct accountability for the quality of teaching. Disadvantages: the inability to develop skills beyond the scope of student training; material and technical resources are limited to the selected subject areas. In other words, the department's work has become more routine. In 2020, a compromise was reached — the department was assigned the role of an interdepartmental training resource center (seven clinical departments conduct classes using simulators), and the development and implemen-

tation of promising simulation-based teaching methods were identified as the department's research focus.

## Conclusions

Combining the functions of a center and an academic department appears to be the most optimal approach, as it ensures a high-quality educational process and stimulates the development of new approaches to teaching, a specific example of which is the implementation of digital methods and the creation of hybrid simulation-based teaching methods.

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## TEN YEARS OF ACCREDITATION AT THE SIMULATION CENTER: CHALLENGES IN RESOURCE, PERSONNEL, AND ORGANIZATIONAL SUPPORT (USING THE EXAMPLE OF PERM STATE MEDICAL UNIVERSITY FEDERAL SIMULATION CENTER)

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**Abstract.** This paper examines the organizational, managerial, resource, and methodological aspects of simulation center operations in the context of the specialist accreditation process. Since the introduction of accreditation, requirements for the material, technical, personnel, and infrastructure support of accreditation sites have significantly increased. Using the Federal Accreditation Center (FAC) of Penza State Medical University as an example, the paper analyzes key challenges related to a shortage of space, the need for systematic tracking of equipment and consumables, and the heavy workload on support staff.

**Scientific specialty:** 3.2.3. Public Health and Health Care Organization, Sociology, and History of Medicine.

## Relevance

Over the past 10 years, simulation-based training in medicine has become a fundamental component of medical education. The accreditation process for specialists takes place at simulation facilities, whose material, technical, and methodological resources must meet current requirements and modern standards. To realize the full potential of simulation training centers, it is necessary to bridge the gap between technological capabilities and everyday teaching practices. The key to success will be strategic funding, the continuous development of faculty competencies, and the integration of AI tools.

## Objective

To conduct a retrospective analysis of the simulation center's operations based on 10 years of experience with primary and specialized primary accreditation procedures for specialists, and to identify the main challenges in the field of simulation-based training in order to determine the development prospects for the FAC.

## Materials and Methods

An independent procedure for licensing healthcare professionals — accreditation — was launched nationwide

in 2016. Accreditation centers were established in the regions to ensure the organizational and technical conditions necessary for the work of regional accreditation subcommittees. Management of the simulation center has changed significantly over the past 10 years; today, it is tasked with organizing the ongoing training and work of the teaching staff, implementing AI assistants, and planning strategic funding throughout the year to minimize risks.

## Results

The floor space of Perm State Medical University Federal Accreditation Center used for the accreditation of specialists in 2026 totals 1,746.1 m<sup>2</sup>. This is insufficient for the facility to operate at full capacity. During the busiest period of the summer accreditation session, stations for different specialties rotate in the same room at the center more than 15 times — this poses a significant organizational challenge. The constant replenishment of consumables and repairs to simulation equipment are funded by the university, which requires a systematic approach to procurement and financing. In 2020, when all specialties began the initial specialized accreditation process, the workload on the simulation center increased significantly. Human resources are essential to support the entire accreditation process. The accreditation site requires the coordinated work of specialists, while the university provides support staff. At the PGMU Federal Accreditation Center, full support is provided to candidates from the moment they enter the building until they complete the final stage. There are more than five categories of support staff; for the planned summer accreditation of 944 specialists with higher education, 534 support staff members were required. These costs represent a significant administrative challenge for the entire university, requiring systemic transformation.

## Discussion

Over the past 10 years, the accreditation of specialists, like simulation-based training in medicine, has undergone a qualitative transformation. Simulation centers have become an integral part of the accreditation of medical universities and continuing medical education systems in many countries, including Russia. When organizing an accreditation site, it is essential to take into account the existing challenges in the field of simulation-based training, as this is a key prerequisite for ensuring high-quality preparation:

1. Resource and financial constraints: The high initial cost of simulation equipment, the expenses associated with its maintenance and upgrades, as well as infrastructure requirements. To address these issues, the center's two facilities employ sorting, organization, cleanliness, standardization, and self-discipline in their inventory management. Implementation of the "kanban" lean production workflow management method, for example, visualizing the process on a whiteboard during accreditation sessions.
2. Staff shortages and workload on faculty: Faculty members teaching clinical disciplines often lack dedicated (guaranteed) time to master complex simulation systems and develop high-quality scenarios.

Russia's first systematic training program for medical school faculty on the use of simulation technologies, offered as part of the continuing education course "Pedagogy and Psychology of Higher Education in the Context of the Modern Digital Learning Environment, Professional Communication, and Simulation-Based Learning"

3. Methodological and academic challenges: Many educational institutions lack context-oriented integration of simulations into curricula, which are already overloaded with theoretical material.
4. Technological and Ethical Challenges of AI Implementation: When integrating AI and generative models into simulation-based learning, a low level of digital literacy is evident among both students and faculty, as well as a lack of uniform standards for the ethical use of data, algorithms, and privacy protection.

## Conclusions

The following areas represent promising directions for the development of a simulation center within the specialist accreditation system:

1. Integration of AI and adaptive learning: AI is used to create intelligent "virtual patients"
2. Development of immersive technologies and "digital twins": Robotic technologies, VR, AR, and mixed reality (MR) are becoming more accessible for training clinical reasoning. For example, the use of an anthropomorphic dental robot with a communication module in the training of dental students.
3. On-the-job simulations and interprofessional education: The focus is shifting toward conducting training directly in clinical departments; for example, on-site training sessions at hospitals in the Perm Krai to practice team collaboration when providing care to women with preeclampsia.
4. Improving Access to Technology: Development of low-cost solutions, cloud-based simulation platforms, and telemonitoring, as well as AI-powered simulation training assistants.

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## ACCREDITATION AS A FACTOR IN THE PROFESSIONAL IDENTITY AND COMMITMENT OF MEDICAL PSYCHOLOGISTS

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**Abstract.** This paper examines the impact of the accreditation process and preparation for it on professional identity, commitment, and the subjective perception of one's own competencies among specialists in the field of medical psychology.

**Scientific specialty:** 3.2.3. Public Health and Health Care Organization, Sociology and History of Medicine.

## Objective

The objective of this study is to assess the impact of the accreditation process and preparation for it on indicators