

ANALYSIS of the results of external assessment of the quality of postgraduate and CPD education in the National Research Centers and Research Institutes of the Republic of Kazakhstan

Evaluation period: January 2019 - February 2022

Initiator and executor: Eurasian Center for Accreditation and Quality Assurance in Higher Education and Health care (ECAQA).

Method of obtaining results: external evaluation within the framework of institutional and specialized accreditation of National Research Centers and Research Institutes.

The results were reviewed and discussed at the meeting of the Expert Board on 14.02.2022 (Minutes No.1).

Introduction

National research centers and research institutes provide training in residency programmes (postgraduate education/PDE) and additional and non-formal education (*Order of the Acting Minister of Health and Social Development of the Republic of Kazakhstan dated July 31, 2015 No. 647 "On approval of state mandatory standards and standard professional training programmes in medical and pharmaceutical specialties" and "On approval of rules for additional and non-formal education of health care professionals, qualification requirements for organizations implementing educational programmes of additional and non-formal education in the field of health care, as well as rules for recognition of learning outcomes received by health care professionals through additional and non-formal education"*). *Order of the Minister of Health of the Republic of Kazakhstan dated December 21, 2020 No. KR DSM-303/2020. Registered in the Ministry of Justice of the Republic of Kazakhstan on December 22, 2020 No. 21847.*) Complementary and non-formal education is not a licensed type of education.

Residency programmes are implemented in national research centers and research institutes in accordance with the classifier of specialties (*"On approval of the Classifier of areas of training with higher and postgraduate education"*). *Order of the Minister of Education and Science of the Republic of Kazakhstan dated October 13, 2018 No. 569. Registered in the Ministry of Justice of the Republic of Kazakhstan on October 17, 2018 No. 17565.*)

External assessment tools

Standards of institutional and specialized (programmatic) accreditation of postgraduate medical education are developed on the basis of the International Standards of the World Federation of Medical Education for Improving the Quality of Postgraduate Medical Education (Revision 2015), taking into account the specification of the National Qualifications Framework and priorities of the Health care system of the Republic of Kazakhstan.

Standards of institutional accreditation of organizations of additional and non-formal education (continuous professional development) are developed on the basis of the International standards of the World Federation of Medical Education on improving the quality of continuous professional development of doctors (2015).

Standards for accreditation of residency educational programmes (primary accreditation) of medical educational organizations are developed on the basis of the International Standards of the World Federation of Medical Education for Improving the Quality of Postgraduate Medical

Education (Revision 2015), taking into account the criteria of the World Federation of Medical Education (WFMO) for the creation of new medical schools: Guidelines for government, regulatory authorities and universities (2017).

The standards of institutional (PDE), programme (residency) and accreditation of additional education ECAQA have certificates of state registration of rights to the copyright object of the Ministry of Justice of the Republic of Kazakhstan No.1909 dated June 15, 2018, No. 2834 dated November 27, 2017 and No.2773 dated November 20, 2017, respectively.

External evaluation results

Between January 2019 and February 2022 ECAQA has conducted institutional and specialized (programmatic) accreditation of 14 national research centers and research institutes (Table 1), while 5 organizations have been training residents since 2014.

№ no.	Name of the educational organization	Institutional accreditation	Accreditation of residency programmes, number	Date of decision on accreditation
1.	RSE "Hospital of the Medical Center of the Office of the President of the Republic of Kazakhstan"	As an organization of additional education	-	2019.
2.	RSE on REM "National Center for Public Health" of the Ministry of Health of the Republic of Kazakhstan (MoH RoK)	As an organization of additional education	-	2019.
3.	National Scientific Center of Phthisiopulmonology of the Ministry of Health of the Republic of Kazakhstan	As an organization of additional education	-	2019.
4.	RSE on REM "Kazakh Scientific Center of Quarantine and Zoonotic Infections named after Masgut Aikimbayev" MoH RoK	As an organization of additional education	-	2019.
5.	RSE on REM "Republican Scientific and Practical Center for Mental Health MoH RoK	As an organization of additional education	-	2019.
6.	RSE on REM "Research and Production Center for Transfusiology" MoH RoK	As an organization of additional education	-	2019.

7.	Republican Center for Health Development MoH RoK	As an organization of additional education	-	2019.
8.	LLP "National Scientific Oncology Center"	As an organization of postgraduate and additional education	planned 9 residency educational programmes	2019. 2022.
9.	JSC "National Center of Neurosurgery"	As an organization of postgraduate additional education	2 residency programmes	2020. 2022.
10.	Public Association "Experts and consultants on external comprehensive assessment in the field of health care"	As an organization of additional education	-	2021.
11.	LLP "Kazakh Order "Badge of Honor" Research Institute of Eye Diseases	As an organization of postgraduate and additional education	1 residency programme	2021.
12.	JSC "National Scientific Center of Surgery named after acad. A.N.Syzganov	As an organization of postgraduate and additional education	5 residency programmes	2021.
13.	RSE on REM "National Center for Expertise of Medicines and Medical Devices"	As an organization of additional education	-	2021.
14.	JSC "Scientific Center of Urology named after Academician B.U. Dzharbussynov"	As an organization of postgraduate and additional education	1 residency programme	2022.
			Total 9 programmes	
	JSC "Scientific Pediatrics and Pediatric Surgery"	As an organization of postgraduate and additional education	3 programmes residencies	scheduled for 2022

In the process of external evaluation, ECAQA experts studied the conditions for training residents, students in the above organizations, the compliance of educational and human resources, educational and methodological documentation. An interview was conducted with the management of organizations and departments, interviews with residents and students, teachers, employers, graduates.

As part of the external evaluation, the ECAQA observer conducted a questionnaire survey of 132 students and 47 residents. The results are presented in Figures 1 and 2.

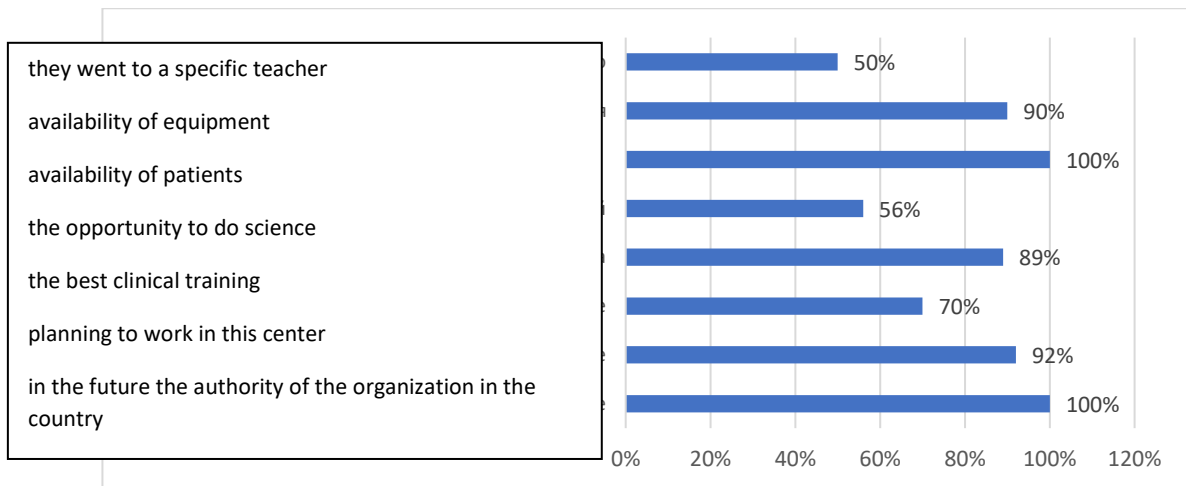


Figure 1. Motivation of training of residents (n=47) in the National Research Centers and RI, in %

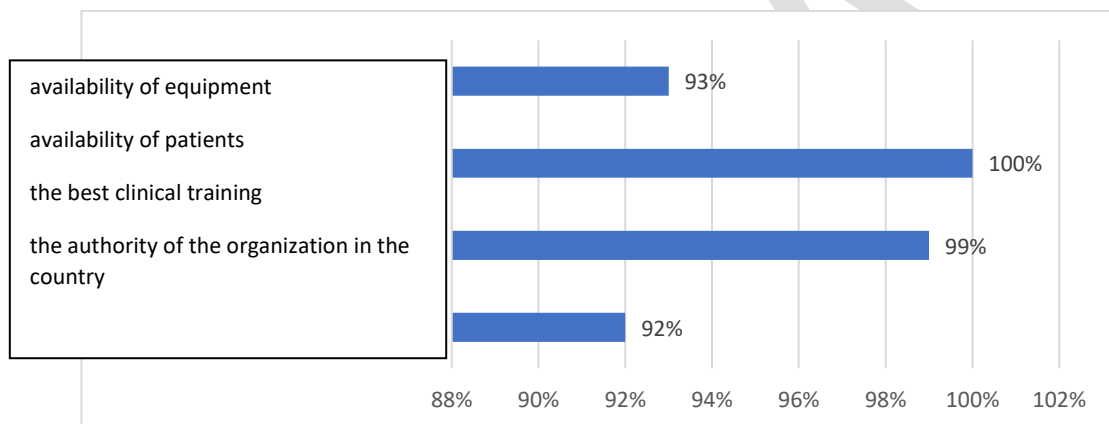
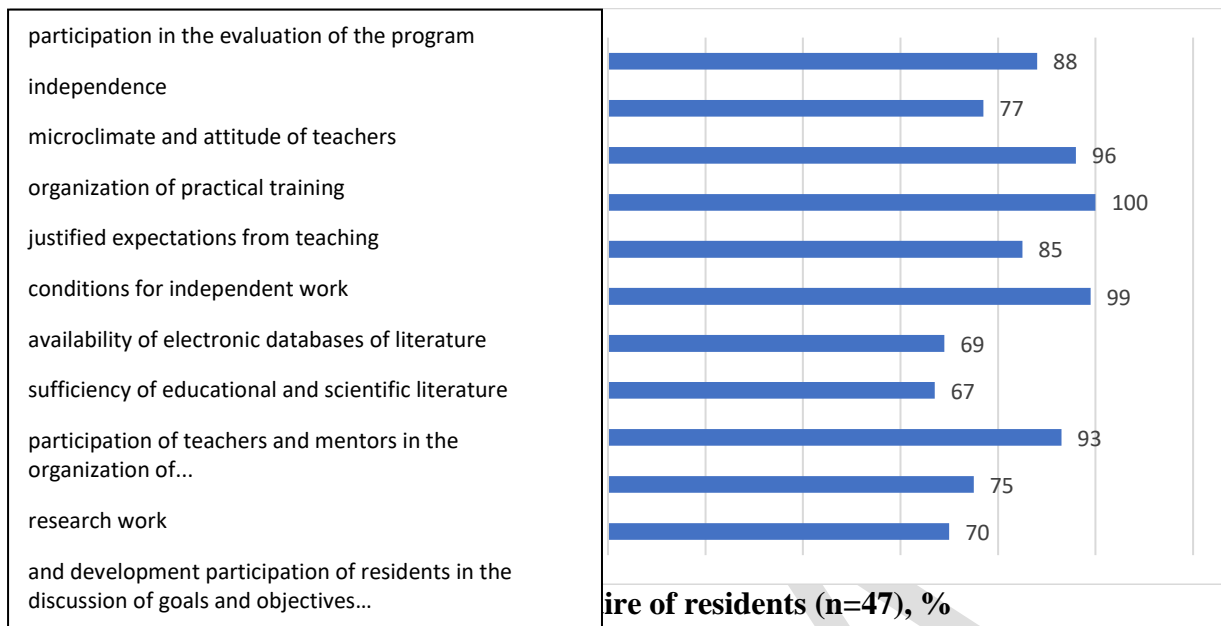


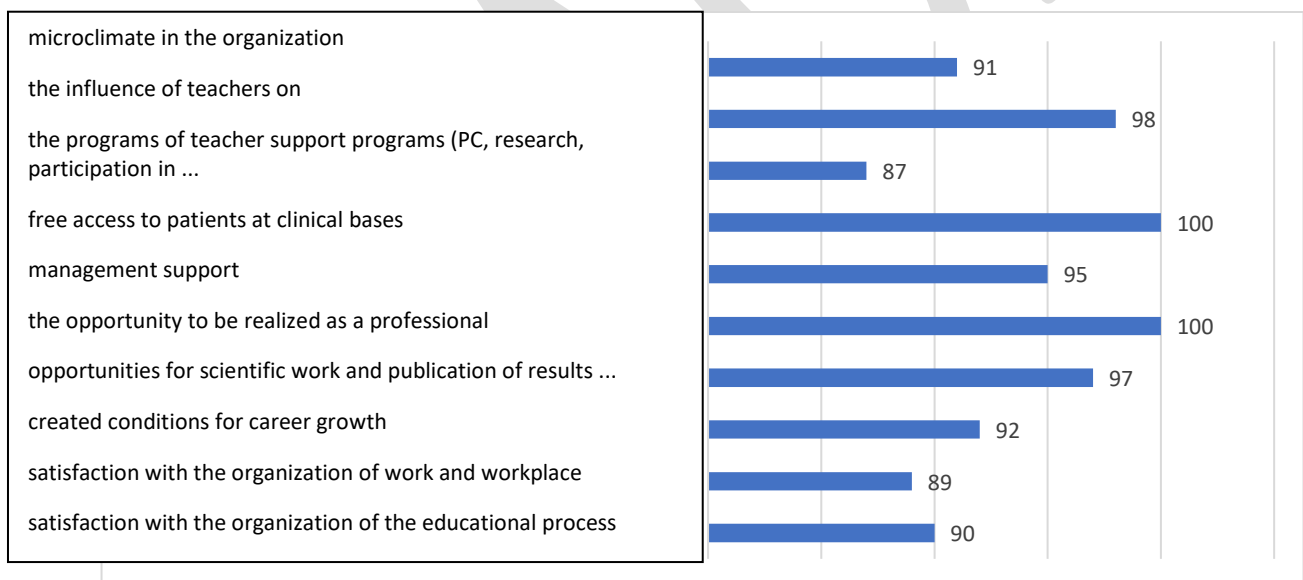
Figure 2. Motivation of students to study (n=132) at the National Research Centers and RI, in %

The dominant number of residents and students surveyed consciously chose the place of training or advanced training. All of the above organizations (table 1), according to respondents, are characterized by the appropriate conditions for training and the availability of the necessary resources.

The survey of 47 residents of 9 educational programmes in 14 organizations included a number of questions, the answers to which are presented in Figure 3.



It should be noted that resident respondents are fully satisfied with the organization of training. At the same time, residents lack independence, electronic databases are not available enough and there is a lack of scientific literature in the library of the place of study. Not all perform RW and not all are involved in the discussion of the goals and objectives of the educational programme, the formation of elective themes (Figure 3).



In the survey of 57 teachers of 14 organizations, high satisfaction with the organization of the educational process, work in the organization, conditions for career growth, and the possibility of publications was established. Most are satisfied with the support of management and the teacher support programme (Figure 4).

As a result of the institutional assessment of 14 organizations for compliance with the standards of accreditation of postgraduate and additional education ECAQA, external experts developed recommendations for improvement.

In total, the implementation of 9 standards for accreditation of residency programmes was analyzed:

1. Mission and outcomes
2. Educational programme
3. Assessment of residents
4. Residents
5. Teachers
6. Educational resources
7. Assessment of the educational programme
8. Management and administration
9. Continuous renewal

The table below summarizes areas for improvement:

Standards	Recommendations of external experts
Mission and outcomes	<ul style="list-style-type: none"> – Involve students, employers, representatives of partner organizations, public and professional associations in the work of advisory bodies (councils, working groups) on the formulation of the mission, proposals for a strategic development plan, the development of educational programmes, the development of a policy for the recruitment and selection of residents.
Educational programmes	<ul style="list-style-type: none"> – To intensify work on the introduction of innovation in the educational process. – Involve more stakeholders in the implementation of the programmes. – Strengthen the educational programme by introducing the scientific component into the component of choice. – Ensure the effective implementation of independent research activities of residents.
Assessment of residents	<ul style="list-style-type: none"> – Regularly review and evaluate the quality of the methods and evaluation format used for validity and reliability and document the process. – Provide a system for assessing the final results of training residents with the appropriate methodological base and documentation. – When developing a student assessment policy, include the Anti-Plagiarism system (IWS, projects) and consider the possibility of using the OSCE as a final assessment stage, as well as provide for a self-assessment procedure for students. – The availability of a trained testologist for the development and review of test questions is substantiated.
Residents	<ul style="list-style-type: none"> – Ensure the active involvement of residents in the work of collegial and advisory bodies, involving in the discussion of the educational programme and ensuring the quality of its implementation. – Formalize consulting support for residents, including individual support.
Teachers	<ul style="list-style-type: none"> – Strengthen the role of mentoring in training residents and motivating employees to perform the role of a mentor, document this process with appropriate regulations. – Planning and implementation of systematic training of employees of the center involved in the educational process in the residency and advanced training of doctors, methods and technologies of innovative interactive teaching.

Educational resources	<ul style="list-style-type: none"> – Equip the simulation room in accordance with the Order of the Minister of Health and Social Development of the Republic of Kazakhstan dated May 29, 2015 No. 423. On approval of standards for equipping simulation rooms (centers) of educational organizations in the field of health care. – Equip the computer classroom in accordance with the goals and objectives of training and evaluation of residents and students. – Consider the possibility of implementing external mobility of residents and teachers with training on the basis of foreign international centers, universities and clinics. – Provide the residency programme with relevant modern educational and scientific literature and guarantee access to it for residents. – More effectively use information and communication technologies in the educational process management system (electronic document management, resident accounting, bar code, QR code, electronic feedback, etc.) and ensure the protection of information when working with documentation on residency programmes. – Further intensification of work with international organizations, attraction of research grants.
Assessment of the educational programme	<ul style="list-style-type: none"> – Improve the feedback mechanism with graduates, residents and employers, conduct regular analysis of the results of stakeholder surveys reflecting the specifics of specialties and use the results to improve the quality of educational programmes.
Management and administration	<ul style="list-style-type: none"> – Provide appropriate administrative and financial support for the implementation of the Internal Quality Assurance Policy of the educational process, including the purchase of educational literature, the equipping of the simulation room, the opening of the testing room. – Systematize the work of the department of postgraduate education in accordance with the goals and objectives of educational programmes of residency specialties

Standards of institutional accreditation of organizations of additional and non-formal education (continuous professional development) include 9 sections:

1. Mission and outcomes
2. Educational programmes
3. Appraisal of trainees' competencies and documentation
4. Health care professionals (individual professional development)
5. Provision of supplementary and non-formal education
6. Educational resources
7. Evaluation of supplementary and non-formal education programmes
8. Organization
9. Continuous renewal

The table below summarizes areas for improvement:

Standards	Recommendations of external experts
Mission and outcomes	<ul style="list-style-type: none"> – When revising the mission and developing the mission of educational programmes, involve all interested parties in the discussion with subsequent wide information of the mission.
Educational programmes	<ul style="list-style-type: none"> – Improve record keeping on additional education (documentation management procedures) and teaching taking into account the state

	<p>language policy of the Republic of Kazakhstan</p> <ul style="list-style-type: none"> – To develop the activities of the educational and methodological body, whose functions include the development, approval, implementation and monitoring of the quality of educational and methodological documentation on additional education. – The existing educational and methodological documentation should be brought into line with the NLA in the field of additional professional education (the corresponding content of students, document flow, internal documents); – Develop a unified form of methodological documentation for educational programmes (educational and methodological complexes, work curricula, syllabuses). – Expand the distance component in the programmes of additional education of health professionals.
Appraisal of trainees' competencies and documentation	<ul style="list-style-type: none"> – Improve the system of assessing the competencies of students through the development of a regulation (regulation) on assessing the competencies of students and specify the reflection of the final results of training in educational materials.
Health care professionals (individual professional development)	<ul style="list-style-type: none"> – Expand the contingent of students of educational programmes taking into account an interdisciplinary approach (nurses, social workers, NLA, population, etc.).
Provision of supplementary and non-formal education	<ul style="list-style-type: none"> – Expand training opportunities for employees involved in the educational process on innovative and active teaching methods in additional education.
Educational resources	<ul style="list-style-type: none"> – Provide students with access to modern simulation technologies. – More actively use information and communication technologies as an integrated part of training and assessment of the formation of students' competencies (computer testing). – Update and expand Internet resources (website, access to international scientific and educational sites). – To improve the system of access to international databases of professional and scientific literature.
Evaluation of supplementary and non-formal education programmes	<ul style="list-style-type: none"> – Improve approaches to educational assessment with the participation of all stakeholders, ensuring internal and external quality control with the involvement of external experts (representatives of the academic environment, practical health care, professional organizations, as well as foreign experts). – Optimize feedback through the implementation of electronic questionnaires. – More actively involve employers in the development of proposals for changing and improving educational programmes. – Involvement in the review of educational and methodological documentation (educational programmes, syllabuses, tests) of scientific and pedagogical employees of third-party organizations and representatives of practical health care to ensure the quality of materials on postgraduate and additional education.
Organization	<ul style="list-style-type: none"> – In order to optimize educational activities, effective and systematic methodological support of the process, provide for the position of

	methodologist of the department of continuous professional development.
Continuous renewal	– Bring in compliance with the requirements of the NLA and legislative acts record keeping and teaching in the state language.

After completion of the external peer review, ECAQA conducted a survey of SC and RI employees involved in self-assessment and preparation of reports on compliance with the *standards of institutional accreditation of organizations of additional and non-formal education*. The purpose of the questionnaire was to identify problems during the self-assessment and what standards caused difficulties in the preparation of the report.

The results of the assessment of the degree of complexity of accreditation standards on a 10-point scale (1- less difficult, 10- as difficult as possible):

standards	1	2	3	4	5	6	7	8	9
points	2	5	4	4	7	5	9	3	7

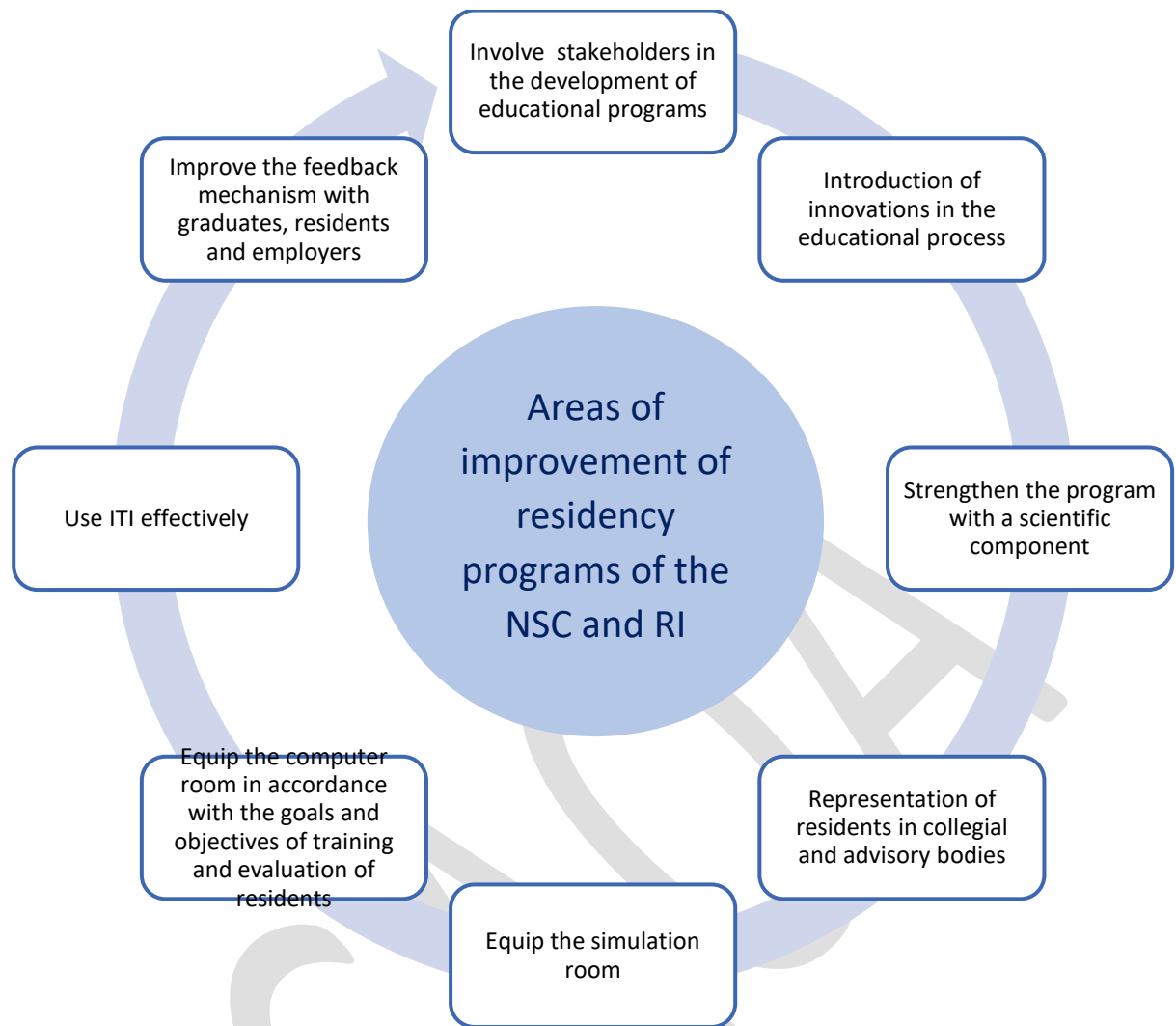
As the results of a survey of HMC employees showed, the most difficult were standards 5 (Providing additional and non-formal education), 7 (Evaluation of additional and non-formal education programmes, 9 (Continuous renewal).

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The areas of organizational improvement (see table 1) in the context of residency programmes are as follows (figure 1):



Scheme 1. Areas of improvement of NSC and RI residency programmes

The areas of organizational improvement (see table 1) in the context of supplementary and informal programmes are as follows (figure 2):

