

**REPORT  
OF THE EXTERNAL EXPERT COMMISSION ON THE RESULTS OF THE  
EVALUATION OF THE RSE ON THE REM “NATIONAL SCIENTIFIC  
CENTER OF PHTHYSIOPULMONOLOGY OF THE REPUBLIC OF  
KAZAKHSTAN” OF THE MINISTRY OF HEALTH OF THE REPUBLIC OF  
KAZAKHSTAN FOR COMPLIANCE WITH STANDARDS OF  
INSTITUTIONAL ACCREDITATION OF MEDICAL ORGANIZATIONS OF  
POSTGRADUATE AND ADDITIONAL EDUCATION (CONTINUOUS  
PROFESSIONAL DEVELOPMENT)**

**period of external expert evaluation: June 11-13, 2024**

**Almaty, 2024**

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## LIST OF SYMBOLS AND ABBREVIATIONS

Abbreviation	Designation
RSE on the REM "NSCP RK"	Republican state enterprise on the right of economic management "National Scientific Centre for Pheniopulmonology of the Republic of Kazakhstan"
NSCP RK	National Scientific Centre for Physiopulmonology of the Republic of Kazakhstan
Goso	State compulsory educational standard
MDRTB	Multi-drug resistant tuberculosis
MOH RK	The Ministry of Health of the Republic of Kazakhstan
PMC	Primary medical care
GP	General practitioners
EMA	Educational and methodological association
EQACA	Eurasian Centre for Accreditation and Quality Assurance in Education and Healthcare
WHO	World Health Organization
PE	Postgraduate education
CPE	Continuous professional education
EP	Educational program
Academic staff	Academic staff
LSI	Laws and Statutory Instruments
TC	Typical curriculum
NJSC "KNMU"	Non -profit joint -stock company "Kazakh National Medical University"
NEI "KRMU"	Non-state education institution "Kazakh-Russian Medical University"
JSC	Joint -Stock Company
PA	Public Association
NGO	Non -governmental organizations
TBL	Team Based Learning (command training method)
CBL	CASE BASED LEARNING (learning based on clinical case)
HIV	Human immunodeficiency virus
IA	Institutional accreditation
KPI (efficiency)	Key performance indicators.
KRMU	Kazakh-Russian Medical University
KNMU	Kazakh National Medical University named after S.D. Asfendiyarov
AIS	Automated information system
CQAFES MSHE RK	Committee for Quality Assurance in the Field of Education and Science of the Ministry of Science and Higher Education of the Republic of Kazakhstan
STP	Scientific and technical project
DET	Distance educational technologies
ICT	Information and communication technologies
SOP	Standard operating procedures
Media	Media
XUAR PRC	Xinjiang Uygur Autonomous Region of the People's Republic of China
EMC	Educational and methodological council
AC	Academic council
SCO	Shanghai Cooperation Organization
RI	Research Institute
CMC	Central Medical Commission
LEC	Local-ethical commission
EG	Expert group

## 1. Composition of the External Expert Commission

In accordance with ECAQA Order No. 22 dated May 30, 2024, an External Expert Commission (hereinafter referred to as EEC) was formed to conduct an external institutional evaluation of the National Scientific Centre for Phthisiopulmonology of the Republic of Kazakhstan of the Ministry of Health of the Republic of Kazakhstan during the period June 11-13, 2024, in the following compositions:

<b>№</b>	<b>Status as part of the EEC</b>	<b>Full name</b>	<b>Academic degree/title, position, place of work/place of study, course, specialty</b>
1	Chairman	Imasheva Bagdat Sakenovna	Doctor of Biological Sciences, Professor, Head of the Department of Science and Education of the National Center for Children's Rehabilitation of the MOH RK
2	Foreign expert	Ryzhkin Sergey Alexandrovich	Corresponding Member of the Academy of Sciences of the Republic of Tatarstan, Doctor of Medical Sciences, Head of the Department of Radiology, Radiotherapy, Radiation Hygiene and Radiation Safety named after Academicians A.S. Pavlov and F.G. Krotkov of the Russian Medical Academy of Continuing Professional Education (Moscow, Russian Federation), scientific secretary of the Division of Biological and Medical Sciences Academy of Sciences of the Republic of Tatarstan
3	Academic expert	Kurmanova Almagul Medeubaevna	Doctor of Medical Sciences, Professor of the Department of the clinical specialties of the Higher School of Medicine of the Kazakh National University named after Al-Farabi
4	Academic expert	Ramazanova Sholpan Khamzaevna	Candidate of medical sciences, Associate Professor of the Department of Children's Diseases named after N.A. Barlybaeva NJSC "Kazakh National Medical University named after S.D. Aspendiyarov"
5	Academic expert	Bugakov Anatoly Alekseevich	Candidate of Medical Sciences, Associate Professor, Head of the Department of Phthisiology of the NJCS "Medical University of Astana"
6	Academic expert	Iztleuov Yerbolat Maratovich	Candidate of Medical Sciences, Head of the Department of Radiology of the NJSC "West Kazakhstan Medical University named after Marat Ospanov"
7	Representative of employers	Ursasheva Gulmira Sayynbaevna	Head of the Department of Science and Professional Development of the RSE on the REM "National Center for the Development of Public Health" of the Ministry of Health of the Republic of

			Kazakhstan.
8	Representative of the residents	Tertyubaeva Zhazira Orumbekovna	Director of the Department of Postgraduate Education and Regional Development of the “Research International Institute of Postgraduate Education” LLP.

The work of the EEC was carried out in accordance with the Regulation on the EEC.

The EEC report contains a description of the results and the conclusion of the external evaluation of the National Scientific Centre for Phthysiopulmonology of the Republic of Kazakhstan of the Ministry of Health of Republic of Kazakhstan for compliance with the standards of institutional accreditation of medical organizations of postgraduate and additional education (continuous professional development) (hereinafter referred to as the Accreditation Standards), the recommendations of the EEC to further improve quality and recommendations to the ECAQA Accreditation Council.

## 2. General part of the final report

### 2.1 Presentation of the RSE on the REM “National Scientific Centre of Physiopulmonology of the Republic of Kazakhstan” of the Ministry of Health of the Republic of Kazakhstan

Organization name, legal form of ownership, bin	RSE on the REM “National Scientific Centre of Phthysiopulmonology of the Republic of Kazakhstan” of the Ministry of Health of the Republic of Kazakhstan
Government	Ministry of Health of the Republic of Kazakhstan
Full name of the first manager	Adenov Malik Moldabekovich
Creation date	1932
Location and contact details	050100, Almaty, Bekhozhina Street, house 5
State license for educational activities in residency (date, number)	KZ02LAA00009671 dated 05/17/2022
Information about branches, subsidiaries (if available)	No
The year of the beginning of educational activities in <b>residency</b> (postgraduate education) and the total number of graduates	Year of start-2024-2025 academic year (plan) The total number of graduates from the beginning of the implementation of residency programs is not
Duration of training in residency	Educational program "Adult, children" - 2 years Educational program "Adult, Children's Pulmonology"- 2 years Educational program "Radiology"- 2 years
The number of residents in the current academic year	Newly developed educational programs. A set of residents is expected in 2024.
The year of the start of the implementation of programs of <b>additional and informal education</b> , the total number of programs and the number of studies of students	Year of start - 2007 The total number of additional education programs (advanced training) is 15, of which 120 hours/4 of the loan - 3, with the volume of hours of 60 hours/2 loans - 12. The total number of additional education programs (certification courses) - 4 of them with a volume of 960 hours/32 loans - 2 programs, volume of 1050 hours/35 - 1 program, with a volume of 900 hours/30 - 1 program. The total number of informal education programs is 35, of which 45 hours are 7 programs, a volume of 30 hours - 15 programs, with a volume of 20 hours - 1 program, with

	a volume of 15 hours - 7 programs, with a volume of 12 hours - 1 program, with a volume of 10 hours - 2 Programs, with a volume of 8 hours - 1 program, with a volume of 4 hours - 1 program. Total listeners have prepared - 11 015 health specialists (over the past 5 years).
Number of distance educational programs	Total - 15, 14 - the volume of educational hours of 24 and 1 - the volume of training hours 40 Designed this year -3, the volume of training hours - 40
The number of listeners this year	589
Full-time teachers/part-time teachers involved in the implementation of residency and additional education programs, incl. % sedate	The total number of teachers is 31, including the full - time - 30, part -time - 1.  Sedateness 15.9%
The presence of the unit responsible for the educational process	Name: National Training Centre Creation year: 2007 Head: Kaydaulov Mukhtar Kenzhebekovich
The number of scientific projects over 5 years	48
The number of international treaties for 5 years	9
Website Instagram Facebook with active pages	Website: <a href="https://www.nncf.kz/">https://www.nncf.kz/</a> Instagram: <a href="https://www.instagram.com/nncf_mz_rk/">https://www.instagram.com/nncf_mz_rk/</a> Facebook: <a href="https://www.facebook.com/nncf.kz/">https://www.facebook.com/nncf.kz/</a>
Information on accreditation as a medical organization (date, No., period)	No. KZ28VEG00013453 from 04.07.2023 for a period of 3 years

### **The strengths of the organization of education and achievements over 5 years:**

RSE on the REM “National Scientific Centre for Phthysiopulmonology of the Republic of Kazakhstan” of the Ministry of Health of the Republic of Kazakhstan is a leading scientific centre with modern high-tech equipment, coordinating the phthysiopulmonological service of the Republic of Kazakhstan with more than 90-year-old rich history. Since the foundation in 1932, the institute studied the epidemiology of tuberculosis in various climate-geographical zones of the country. During the 30-year (60-80 years), the Small Institute has turned into the largest research, organizational, methodological and medical consulting centre for the fight against tuberculosis in the USSR, new buildings were built during this period, departments and laboratories, and scientific research were opened They were devoted to the issues of epidemiology, clinics and treatment of tuberculosis in adults and children, which were carried out through complex expeditions to various regions of the republic. In 2017, the Scientific Centre for Tuberculosis Problems was renamed the National Scientific Centre for Phthysiopulmonology of the Republic of Kazakhstan. The centre organized a monitoring group and assessment, which carries out annual monitoring of the activities of anti -TB organizations, the PMC network and departments in all areas. Currently, 350 beds (150 beds of therapeutic (pulmonary and lung tuberculosis) are deployed in the Scientific Centre, 40 - phthysiopediatric, 130 - departments of surgical treatment of tuberculosis, 30 - departments of differential diagnosis), there is a reception and consultation department, departments of anaesthesiology and resuscitation, separation, separation radiation, functional and instrumental diagnostics. The centre has modern diagnostic equipment, introduces minimally invasive methods of treating tuberculosis into practical healthcare, uses modern diagnostic methods (sequencing, quantiferon test).

The NSCP of the RK collaborates with the global fund for the fight against tuberculosis, AIDS and Malaria (The Globalfund), Stoptb Partnership, ISTC, KNCV-TB-Plus, Generium, the Centre for the Study of Global Health and Central Asia at the Columbia University (Columbia University), Xinjiang Medical University of the PRC (Xinjiang Medical University); The National Centre for Tuberculosis and Diseases (Georgia), the Republican Specialized Scientific and Practical Medical Centre of the Phthisians and Pulmonology of the Ministry of Health of the Republic of Uzbekistan, the Republican Centre for the Protection of the Population from the Tuberculosis of the Ministry of Health and the social protection of the population of the Republic of Tajikistan. Scientific projects are being implemented in the centre:

1. Evaluation of newly approved drugs in combined treatment for tuberculosis treatment with multiple drug stability and resistance to fluoroquinolones (Q) (EndTB project) (2020-2024);
2. Measuring the Rate IF ISONIAZID Monoresistance of Mycobacterium Tuberculosis in Kazakhstan (COLUMBIA University project) (2021-2024);
3. The use of BPalm/VPAL modes in the treatment of drug-resistant tuberculosis in pilot regions (the project of the Global Fund together with KNCV) (2023-2025);
4. Evaluation of the effectiveness and safety of modified non-injection short-term treatment schemes in the framework of surgical research among patients with RU/MDRTB in Kazakhstan (the Global Fund project together with Partners for health) (2023-2025);
5. The influence of the pandemic Covid-19 on the epidemiology of tuberculosis and response measures in Kazakhstan (the project of the Global Fund together with the Kazakhstan Association of Phthiopulmonologists) (2024-2026);
6. The study of the features of epidemiology, identification, diagnosis and treatment of tuberculosis in children in Kazakhstan (the project of the Global Fund, together with the Kazakhstan Association of Physiopulmonologists) (2024-2026);
7. Analysis of the effectiveness of new treatment schemes for the DR TB in the Republic of Kazakhstan (the project of the Global Fund together with the Kazakhstan Association of Physiopulmonologists) (2024-2026);
8. Expanding global knowledge of tuberculosis by establishing the Kazakhstan TB Portal (International Scientific and Technical Center) (2024);
9. Studying the effectiveness in the standard breeding of the use of an allergen of tuberculosis recombinant (Diaskintest) in the diagnosis of tuberculosis infection in adolescents (JSC Generium) (2019-2024).

**Over the past 5 years, the NSCP has achieved the following results in scientific and educational activities:**

- the contingent of listeners who have passed continuous professional education courses on the basis of the NSCP of the Republic of Kazakhstan increased 3.5 times (from 1100 students in 2019 to 3705 students in 2023);
- the magazine "Physiopulmonology" was included in the list of journals of the recommended CQAFES MSHE RK (order No. 343 07/14/2023);
- 48 scientific and technical projects were implemented, more than 140 articles were published by the NSCP of the Republic of Kazakhstan, 30 of which in the publications of Web of Science and/or Scopus, a system of Anti-plagiarism was purchased;
- In order to automate the process of training and launching the residency in the NSCP of the RC, a Platonus system has been introduced, contracts with clinical bases were concluded;
- Specialists of the NSCP of the Republic of Kazakhstan developed and approved 11 scientific and methodological products.

Educational programs for certification courses (Phthiology; Phthiology (children); Phthiology for adults and children; Phthiology for children) for phthiologists, pulmonologists, general practitioners and pediatricians have been developed and approved.

## **2.2 Information about the previous accreditation**

Previous accreditation was carried out by the **Eurasian Centre for accreditation and quality assurance in education and healthcare** with the issuance of certificate No. IA00015 dated July 26, 2019 until July 25, 2024, the information is officially submitted to the National Centre for the Development of Higher Education of the MSHE RK <https://www.nncf.kz>

### **2.3 A brief description of the report on the institutional self-assessment of the “National Scientific Centre for Physiopulmonology of the Republic of Kazakhstan” of the Ministry of Health of the Republic of Kazakhstan.**

Report on the institutional self -assessment “National Scientific Centre of Physiopulmonology of the Republic of Kazakhstan” of the Ministry of Health of the Republic of Kazakhstan (hereinafter referred to as the report) is presented on 153 pages of the main text, annexes on 53 pages, electronic versions of 15 documents located by link: <https://www.nncf.kz/> .

Report of the National Scientific Centre of Phthysiopulmonology of the Ministry of Health of the Republic of Kazakhstan (hereinafter - the NSCP of the Republic of Kazakhstan) is characterized by the completeness of answers for all 9 basic standards of institutional accreditation and criteria, structuring, taking into account the recommendations of the Guidelines for the self -assessment of medical educational institutions of ECAQA. A cover letter is attached to the report signed by Adenov Director Malik Moldabekovich, who confirms the accuracy of quantitative information and information included in the self -esteem report.

The report has a list of 17 members of the internal self-assessment commission, indicating the responsibility of each employee, information about the representative of the organization responsible for conducting institutional self-assessment - acting Deputy Director Ryskulov Kaglymzhan Pernbekovich.

Institutional self-esteem was carried out on the basis of the order of the director of order No. 90-o of March 6, 2024 "On the creation of a commission on institutional and specialized accreditation and approval of responsible persons."

The report was reviewed by experts on the accreditation of the EQACA and in analytical conclusions noted the strengths and areas for improvement, as well as recommendations on additions and changes, which, in the process of feedback with the representative of the NSCP of the Republic of Kazakhstan, were also taken into account in the final version of the self-assessment report by appropriate changes and additions.

All standards provide the real practice of organizing education to prepare residents in the specialties: “Phthysiology for adults, children”, “Pulmonology for adults, children”, “Radiology” and students in 15 programs of additional and non-formal education. The description in the self -assessment report is quite complete and relevant in the number of residents, listeners, teachers, and administration, information about the selection and admission, the results of training, the results of knowledge and skills assessment. Information on its own material and technical base with a total area of 25m<sup>2</sup> and the number of beds 350, as well as third -party clinical bases in the amount of -5, (JSC "Scientific Centre of Paediatrics and Children's Surgery" dated 06/27/2022; "City Clinic No. 1" of Almaty dated 08/04/2023; MSE on the REM "Central City Clinical Hospital" of Almaty 06/13/2022; RSE on the REM “Kazakh Research Institute of Oncology and Radiology” dated 04/30/2024, “City Clinic No. 6” Almaty 05/10/2024) contractual obligations with partners: financial information, development and improvement plans, etc.

The report is presented to the ECAQA in complete form, with data adjusted according to the above recommendations, written in competent language, the wording for each standard is clear and understandable and described in accordance with the criteria of the standards, 8 tables and 3 figures contain links in the text and are continuously numbered.

### **3. Description of external expert evaluation**

External expert work within the framework of the institutional evaluation of the “National Scientific Centre for Phthysiopulmonology of the Republic of Kazakhstan” of the Ministry of Health of



the Republic of Kazakhstan was organized in accordance with the Guidelines for Conducting External Evaluation of Educational Organizations and Educational Programs in ECAQA and according to the visit program. Dates of the visit to the organization: June 11-13, 2024.

The sequence of visiting within 3 days is presented in detail in the visit program (hereinafter referred to as the program), which is in the documentation of the accreditation centre. The program is evidence of the implementation of all planned measures within the framework of an external expert evaluation (Annex1).

To obtain objective information, the following methods and their results were used:

- interviews with management and administrative employees - 26 people;
- Interview with listeners - 2 people (Azharra Baurzhanovna Sagimbekova – MSE on the REM “Centre for physiopulmonology” of the DPH of Almaty; Akhaev Sagynbek Kusainovich - MSE on the REM “City clinic No.8” DPH of Almaty),

Studying website <https://www.npcf.kz>

- Interviewing only 15, including
- 31 - employees, 23- teachers, 8 mentors;
- graduates -5;
- Employers-19 (online)

Survey of teachers and listeners - 23 and 7, respectively;

Observation of the training of students: attending 2 practical classes: Topic: “Laboratory methods for identifying TB. Invasive diagnostic methods used in phthiisiology” Lecturer is Chingisova Lyalya Tursynbekvna- 2 students were attended; “Early identification, diagnosis and prevention of tuberculosis in the PMC” Lecturer is Sidorenko Olga Albertovna was attended by 11 people (online webinar).

- review of resources in the context of fulfilling accreditation standards: 3 practice/clinical training bases were visited, including JSC “Scientific Centre of Paediatrics and Children’s Surgery”, RSE on the REM “Kazakh Scientific Research Institute of Oncology and Radiology”, RSE on the REM “National Scientific Centre for Phthiisopulmonology of the RK” of the Ministry of Health of the Republic of Kazakhstan where it is planned to train residents in 3 educational programs with the participation of 30 full-time teachers/and 1 part-time teacher.
- Study of educational and methodological documents in the amount of 55 units both before the visit to the organization, and during the visit to the units (a list of studied documents in **Annex 2**).

The team of the accredited organization ensures the presence of all persons indicated in the visit program and according to the lists of interview sites (Table 1).

**Table 1 - Information on the number and category of participants in meetings, interviews, talks with members of the EEC**

<b>№</b>	<b>Position</b>	<b>Quantity</b>
1	Director	1
2	Chief Researcher (online)	1
3	Acting deputy Director of Economic Affairs	1
4	Training center	2
5	international and republican partners	7
6	Employers (online)	19
7	listeners	2
8	Graduates of CDP programs	5
9	Heads of structural units	31
10	Members of the Academic Council, Secretary	13
11	Academic staff	23
12	Local ethical committee	5
13	Editorial board of the journal “Phthiisopulmonology”.	1

14	Occupational Safety and Health Service	1
15	Department of Science, Strategic Development and International Cooperation	4

On the last day of the visit to the organization, a meeting of EEC members was held based on the results of the external evaluation. Members of the EEC began drafting the final report of the EEC. Generalizations of the results of the external evaluation are made. The experts individually completed the “Institutional Quality Profile and Criteria for External Evaluation of the “National Scientific Centre for Phthysiopulmonology of the Republic of Kazakhstan” of the Ministry of Health of the Republic of Kazakhstan for Compliance with the ECAQA Accreditation Standards.” No comments were made by the EEC members. Recommendations for improvement for the organization of education were discussed and Chairman Imasheva Baghdad Sakenovnoy held a final open vote on the recommendations for the ECAQA Accreditation Council for the accreditation period.

Comfortable conditions were created for the work of the EEC, access to all necessary information and material resources was organized. The Commission notes the high level of the corporate culture of the team, the operational provision of information to members, the timely response to the provision of requested documents, the revision of the route by visit with the aim of effective use of time was carried out.

*While conducting a survey of students- 71.4 % interviews with teachers are considered the most important tool for an external expert commission on the quality of the educational program; 100% of the listeners are sure that the acquired necessary knowledge in the chosen specialty in the NSCP*

*According to 82.6% of the teachers, the survey, which was conducted by the ECAQA, is useful for developing recommendations for improving the key activities of the accredited organization of education.*

At the end of the visit, the chairman of the EEC announced recommendations based on the results of the external evaluation as part of institutional accreditation to the management and employees of the educational organization.

### **3. Analysis for compliance with accreditation standards based on the results of the external evaluation of the RSE on the REM "National Scientific Centre for Phthysiopulmonology of the Republic of Kazakhstan" of the Ministry of Health of the Republic of Kazakhstan**

#### **Standard 1: Mission and outcomes**

##### **1.1 Mission**

While implementing the activities of the visit program, namely, following an interview with the Director of the Centre, Deputies, structural units, scientific secretary, members of the Academic Council, with the chief scientific employee, representatives of graduates, employers and members of the educational and methodological council, with students and teachers, compliance was established with the criteria of the **standard 1**. All participants in the educational process know the mission of the organization of education, took part in the formation of proposals for formulating the mission, while the mission was brought to the attention of students through the website of the NSCP of the Republic of Kazakhstan (link: <https://www.nncf.kz/korporativnoe-upravlenie>), social networks, placed on all information stands, the cabinets of the centre. The mission and goals are documented in the “strategic plan of work for 2022-2026”, which sets out long-term goals, objectives and strategic directions. From an interview with students and graduates of additional education programs, it was established that before starting classes, teachers inform about the mission, plans for the organization of education, where to get the necessary information about the educational program, teachers, and studies.

In the process of visiting the divisions, the accreditation experts noted the strengths of the education organization, including:

The NSCP operates a training centre that is directly related to the educational process, the telemedicine hall, which can be noted as the best practice in education, and, namely, the conduct of

CEC for all regions of Kazakhstan with the analysis of unique clinical cases with the involvement of international experts. This conclusion is made, based on the interviews, viewing the records of CEC meetings on the Moodle platform.

The results of the study of documentation demonstrate that the mission of the NSCP organization and the educational process are built in accordance with the SCES and the Laws and Statutory Instruments (LSI) in postgraduate education and healthcare. The mission of the centre was widely discussed and approved at a meeting of the Academic Council of May 10, 2024. Protocol No. 2.

### **1.2 Professionalism and professional autonomy**

All programs of additional and non-formal education and educational events of the Centre are aimed at improving the professional and personal development of medical specialists and providing qualified phthisiopulmonological care at the level of PMC. The content of the programs is formed taking into account the strategic directions of development to strengthen the health of the population of the Republic of Kazakhstan by reducing the incidence and mortality from tuberculosis, expanding and deepening existing knowledge in the specialty. When developing educational programs, the wishes and requests of the students themselves, health care organizations are taken into account, and the goals and objectives of training are determined; final outcomes.

The professionalism of students is formed by attracting highly qualified teachers, ensuring a balanced and consistent combination of theoretical and practical knowledge, developing quality educational programs, taking into account the opinions of all interested parties, as well as by applying effective methods of teaching and evaluating knowledge.

To verify the **standard 1**, a meeting was held with the director of the NSCP Adenov M.M. During the conversation, experts asked the following questions: about the prospects for the development of the NSCP, on strengthening the material and technical base, about the motivation of employees, on international cooperation and the implementation of scientific research. In the course of the interview, the director noted about cooperation with the Global Fund of the Centre, the introduction of all advanced technologies for the treatment of tuberculosis and accessibility at the PMC level, on stimulating scientific activity, about the participation of the Centre in the development and editorial office of the new version of clinical protocols, on the curation of regions on phthisiopulmonology service, on the preparation of the centre for moving to a new building.

*While conducting a survey of 7 students (on the resource <https://webanketa.com/>), out of 22 questions, a number were devoted to the quality of the educational process and educational program. It was found that 71.4% of students would recommend studying at this educational organization to their acquaintances, friends, and relatives. And 71.4% of students believe that educational program leaders and teachers are aware of students' problems related to learning. To the question "Do you think this educational organization allows you to acquire the necessary knowledge and skills in your chosen specialty "Phthisiology for adults, children", 100% of students answered positively.*

In a conversation with the students during the interview and when attending classes, the following information was received about the practical orientation of all forms of training, the analysis of relevant cases such as tuberculosis in ophthalmology, tuberculosis and HIV.

The surveyed 23 teachers (21 questions of the questionnaire) also answered that 95.6 % is satisfied with the organization of labour and the workplace in this organization of education, and 4.4 % partially agree with this statement. Experts determined that the organization has a healthy microclimate, since the head is quite accessible to listeners and employees, responds promptly to applications and appeals. In the questionnaire, 100 % of teachers are satisfied with the microclimate of the organization. *According to 86.9%, teachers in educational organizations have the opportunity to realize themselves as professionals in their specialty. For your information, a total of 23 people responded (there are 30 in total), with teaching experience of up to 5 years - 17.3%, up to 10 years - 21.7%, over 10 years - 61%.*

### **1.3 Final learning outcomes**

The NSCP of the Republic of Kazakhstan defines the final learning outcomes in accordance with the professional standard of "Phthisiology" for the specialties of the residency and by order of the

Minister of Health of the Republic of Kazakhstan dated July 4, 2022 No RK MOH-63 “On the approval of state compulsory standards for the levels of education in the field of healthcare”. When developing the final learning outcomes on postgraduate programs, the individual needs of residents (special and general competencies) will be taken into account using the catalogue of elective disciplines and the preparation of an individual curriculum for each resident (portfolio).

The final outcomes of continuous professional education programs are determined on the basis of the needs and requests of practical healthcare. Educational programs of additional informal education are considered at the profile committees of EMA, and thus the competencies acquired by listeners are closely related to the current and emerging needs of the company, in which health specialist’s work. The NSCP training centre has developed 15 educational programs of additional informal education on the current problems of the specialty: early detection, diagnosis, prevention and treatment of tuberculosis on an outpatient basis; Childhood tuberculosis (diagnosis, clinic, treatment, prevention); Radiation diagnosis of tuberculosis; Early detection, diagnosis, prevention and treatment of tuberculosis on an outpatient basis; Conducting tests for drug sensitivity to drugs of the first row; Bacteriological diagnosis of tuberculosis-pop; Laboratory diagnostics of tuberculosis in the PMC, etc., including for the specialty " Phthisiology for adults and children ". Students are informed about this.

*The interviewed teachers replied that 30.43 % fully satisfies the level of previous training of listeners, and 43.48 % are partially satisfied.*

Experts established a clear continuity between the final outcomes of the previous training of students and subsequent programs of continuous professional development.

*95.65% of reservation teachers believe that students of this organization of education have a high level of knowledge and practical skills after completing the training program, and 4.35% doubted the answer.*

#### **1.4 Participation in the formulation of a mission and final outcomes**

The mission formulated and defined the final learning outcomes for each educational program, taking into account the proposals of all interested parties, participants in the educational process: the Association of Phthisiopulmonologists of the Republic of Kazakhstan, representatives of medical universities KazNMU and KRMU, organization of subsequent education: JSC “Scientific Centre for Paediatrics and Children's Surgery”; "City clinic No. 1" of Almaty; MSE on the REM "Central City Clinical Hospital" of Almaty; RSE on the REM "Kazakh Research Institute of Oncology and Radiology", "City Polyclinic No. 6" of Almaty and employers.

While talking to the audience, to the question: do they know the mission of the centre? They replied that they were introduced to the organizational stage of training, employers - believe that the development of the mission belongs to the organization itself, but they are familiarized. The discussion of the mission was actively involved in the members of the Academic Council, which includes representatives of practical healthcare, representatives of professional associations, representatives of the health department and education organization. Thus, experts were convinced during the interview and visual inspection that all participants know the mission.

**Strong side:** the centre with the support of the global fund grant for 2023-2025 “Effective measures of response to drug -resistant tuberculosis in Kazakhstan” according to the “Tuberculosis” component, the CEC is actively carried out for all regions of the Republic of Kazakhstan by direct broadcasting and analysing unique clinical cases, with the involvement of international experts.

*Conclusions of the EEC according to the criteria.* Comply out of 9 standards: completely -9.

## **Standard 2: EDUCATIONAL PROGRAMMES**

### **2.1 Model of educational programs**

For the implementation of EP of additional and non-formal education, the documents of the NSCP of the Republic of Kazakhstan contain Programs that define the goal, take into account the integration of practical and theoretical components, and independent work.

Attending practical classes of advanced training cycles on the topic “Laboratory methods for identifying TB. Invasive diagnostic methods used in Phthisiology”, teacher: Gingisova L.T. and “Early detection, diagnosis and prevention of tuberculosis in the PMC network”, teacher: Sidorenko O.A. Experts received convincing data that training is carried out according to the plan, before the start of the lesson, students respond to basic tests, receive feedback from the teacher, have the opportunity to improve the skill on the stated topics. The organization ensures compliance with ethical aspects in the implementation of the EP, since experts studied the Code of Honour of the Academic staff (10.02.2024), as well as academic policy (2023 - 2026). During the interview, the students replied that they were informed about the content of these documents.

An analysis of educational activity showed that the scientific basis and all the achievements of science in the relevant disciplines are taken into account, additions to the EP bibliography were made, and teachers use them in the classroom. In the NSCP of the Republic of Kazakhstan, a telemedicine class operates, through which interaction with regional and district anti-tuberculosis organizations is carried out, CECs are carried out.

The training of listeners is carried out in accordance with the current policy of professional organizations, since the NSCP of the RK is mobile in the organization of AT cycles according to the needs of specific organizations.

In the NSCP of the Republic of Kazakhstan, the implementation of the EP of the postgraduate education is carried out according to the credit-modular system. The developed EP undergoes an internal and external examination for compliance with the LSI and is approved by the Academic Council of the NSCP of the Republic of Kazakhstan.

The NSCP of the Republic of Kazakhstan encourages cooperation and mutual recognition through the proper principles of training at the national, regional and international levels with educational institutions and organizations of the Republic of Tajikistan, the Russian Federation, the XUAR of the PRC, the Centre for the Study of Global Health and Central Asia at the Columbia University, Georgia, Uzbekistan. The agreements on joint activities with JSC “Scientific Centre of Paediatrics and Children’s Surgery” and the RSE on the REM “Kazakh Research Institute of Oncology and Radiology” were concluded.

The procedure for informing students about their rights and obligations is reflected in academic policy (2023 - 2026). In the NSCP of the Republic of Kazakhstan, the relevance of training programs is determined by the demand of the market for medical services and the feedback of the students through the survey.

Along with the principles of quality and academic integrity, which are described in the Academic Policy, the organization has an annual subscription to anti-plagiarism systems, where students are provided with access (Anti-plagiarism ru).

The implementation of the EP of additional and non-formal education of the NSCP of the Republic of Kazakhstan is carried out in collaboration with the Kazakhstan Association of Phthisiopulmonologists, non-governmental international organizations as a global fund for combating tuberculosis, USAID, and a partnership in the name of health. Teachers of the NSCP of the Republic of Kazakhstan are members of the Kazakhstan Association of Phthisiopulmonologists, as well as members of the scientific and teaching council (Protocol of the meeting of the Academic Council No. 4 of 12/07/23). Thus, they take part not only in the implementation of the EP, but also participate in the process of their development and update. The CDP programs take into account the policy of professional organizations, modern scientific data and classifications are taken into account.

## **2.2 Scientific method**

NSCP RK implements innovative scientific and technical projects:

- National Program for the introduction of personalized and preventive medicine in the

Republic of Kazakhstan Adenov M.M., Yeralieva L.T., Chingisova L.T., Bismilda V.L., 2021-2023  
– studying the effectiveness of the use of an allergen of tuberculosis recombinant in standard dilution (Diaskintest) in the diagnosis of tuberculosis infection in adolescents Seikbaeva K.S., 2021-2023.

– Assessment of newly approved drugs in combined treatment for tuberculosis treatment with multiple drug stability and resistance to fluoroquinolons (q) Ryskulov G.P., Bektasov S., Chingisova L., Bismilda V., 2020-2023.

– National Program for the introduction of personalized and preventive medicine in the Republic of Kazakhstan. Adenov M.M., Yeralieva L.T., Chingisova L.T., Bismild V.L., Iglykova Sh.K., 2021-2023.

– studying the effectiveness of the use of an allergen of tuberculosis recombinant in standard dilution (Diaskintest) in the diagnosis of tuberculosis infection in adolescents. Serikbaeva K.S., 2021-2023

– Assessment of the effectiveness and safety of modified treatment (MT) in the framework of surgery among patients with RU/MDR-TB in Kazakhstan. Adenov M.M. Ryskulov G.P., 2023-2025.

The principles of scientific methodology, scientific research methods in medicine, evidence-based medicine, research experience and the results of the STP of Academic staff are actively introducing in EP.

In the training programs for students of both long-term and short-term (CDP, seminars, trainings), teachers have introduced scientific approaches in training (interactive methods, the use of modern diagnostic equipment, innovative therapeutic techniques), the results of modern scientific research are used.

The Academic staff participates in the development of clinical protocols for diagnosis and treatment of the Ministry of Health of the Republic of Kazakhstan, used in the educational process:

1. Extrapulmonary tuberculosis of the Ministry of Health of the Republic of Kazakhstan dated April 04, 2019. Protocol No. 61
2. Multidrug-resistant extrapulmonary tuberculosis of the Ministry of Health of the Republic of Kazakhstan dated April 04, 2019 Protocol No. 61
3. Extensively drug-resistant extrapulmonary tuberculosis of the Ministry of Health of the Republic of Kazakhstan dated April 04, 2019 Protocol No. 61
4. Medical rehabilitation of patients with tuberculosis of bones and joints at the stage of anti-TB treatment of the Ministry of Health of the Republic of Kazakhstan dated September 23, 2021 Protocol No. 148
5. Palliative care for patients with tuberculosis of the Ministry of Health of the Republic of Kazakhstan dated May 28, 2023 Protocol No. 206
6. Drug-resistant respiratory tuberculosis in adults Ministry of Health of the Republic of Kazakhstan dated June 10, 2022 Protocol No. 162
7. Respiratory tuberculosis in children with drug resistance of the Ministry of Health of the Republic of Kazakhstan dated June 10, 2022 Protocol No. 162
8. Extensively drug-resistant respiratory tuberculosis in adults of the Ministry of Health of the Republic of Kazakhstan dated April 04, 2019 Protocol No. 61
9. Tuberculosis of the respiratory system in adults of the Ministry of Health of the Republic of Kazakhstan dated June 10, 2022 Protocol No. 162
10. Tuberculosis of the respiratory system in children of the Ministry of Health of the Republic of Kazakhstan dated June 10, 2022 Protocol No. 162
11. Drug-resistant tuberculosis of the central nervous system in adults of the Ministry of Health of the Republic of Kazakhstan dated June 10, 2022 Protocol No. 162
12. Tuberculosis of the central nervous system with extensive drug resistance in adults of the Ministry of Health of the Republic of Kazakhstan dated April 04, 2019 Protocol No. 61
13. Tuberculosis of the central nervous system in children with drug resistance of the Ministry of Health of the Republic of Kazakhstan dated June 10, 2022 Protocol No. 162

14. Tuberculosis of the central system in children with extensive drug resistance of the Ministry of Health of the Republic of Kazakhstan dated April 04, 2019 Protocol No. 61

Employees of the NSCP of the Republic of Kazakhstan has developed a national guide for systematic screening for tuberculosis and preventive treatment of tuberculosis infection (methodological recommendations), M.M. Adenov, L.T. Yeralieva, P.M. Dzhazybekova, K.S. Serikbaeva, A.S. Rakisheva, G.P. Ryskulov, Ye.V. Arbuzova, A. Matelli, M. Volik. There is conclusion of scientific and methodological examination No. 362 of April 10, 2023 for methodological recommendations (NSCHD).

The RSE on the REM “NSCP RK” publishes the scientific and practical journal “Phthisiopulmonology”, which publishes the results of scientific research, and is used in the educational process (Order No. 343 of 07/14/2023).

For listeners, Academic staff and employees of the NSCP of the Republic of Kazakhstan, free access to the Scopus scientific database is opened.

- Academic staff presented a unique archive of radiographs available on the basis of the centre, which is used in the educational process, which must be digitized in the form of an electronic textbook.

To improve scientific and clinical activities and the exchange of experience, teachers of the NSCP of the Republic of Kazakhstan participate in conferences, congresses, seminars, symposia, congresses, meetings and forums held in the Republic of Kazakhstan, in the countries of near and far abroad, after which various measures are being held to introduce best practices in the educational process, which was established in the process of interviews with the director of the NSCP of the Republic of Kazakhstan Adenov M.M., chief researcher Yeralieva L.T., members of the academic council, teachers.

### **2.3 Learning and teaching methods**

The Academic staff of NSCP of the Republic of Kazakhstan is responsible for the high -quality compilation of EP, and the guide for the distribution of resources necessary for its implementation. The liability of the administration and the Academic staff in the preparation of the EP is ensured by the procedure for the consideration and approval of these programs: EMC, AC, which is confirmed by the minutes of meetings at the relevant levels.

The management of the educational process, reflected in the Self -assessment report (Standard 2) and the general approaches to management found confirmation when visiting the National Educational Centre of the NSCP of the Republic of Kazakhstan, the department of differential diagnosis and treatment of patients without bacterial excretion No. 4, the department of the treatment of patients with tuberculosis with bacterial excretion No. 3, and radiation department , instrumental, functional diagnostics, national reference of a bacteriological laboratory, clinical and diagnostic express laboratory, JSC “Scientific Centre of Paediatrics and Children’s Surgery”, RSE on the REM “Kazakh Research Institute of Oncology and Radiology”. During the cross interview, it was established that the interaction between the units of the NSCP of the Republic of Kazakhstan and clinical bases is carried out, the conditions for students and teachers have been created.

Equipping the clinical bases of the NSCP of the Republic of Kazakhstan allows you to effectively implement active teaching methods (TBL, CBL, analysis of clinical cases, role -playing games, a “brainstorming” method, and group discussion method). The use of innovative teaching methods in the teaching process is established when attending practical classes, as well as during meetings with teachers.

In a conversation with the leadership of the NSCP of the Republic of Kazakhstan, experts received information on conducting practical classes for health specialists at clinical bases with access to patients where patients are located, listeners have access to equipment, and teachers confirmed that the training of listeners is carried out directly to the departments and in all structural units in accordance with the needs of the educational process, with the exception of cases where the admission of students to the treatment process is not allowed by the current legislation and/or the requirements of patients.

In order to high-quality implementation of the educational process, the training centre organizes training for the teachers of the centre. For example, in 2024, all teachers underwent training on teaching methodology, in the amount of 120 hours.

#### **2.4 Program structure, content and duration**

Experts were provided with documents on educational programs (EP) of the residency in the specialties of “*Phthiology for adults and children*”, “*Pulmonology for adults and children*”, “*Radiology*”. The structure of the EP consists of the disciplines of the obligatory and selective component, which is compiled in accordance with the standard curriculum approved by the authorized body in the field of healthcare. The complexity of the disciplines of the obligatory component in two-year training is 134 credits. The complexity of the disciplines of the selective component is 4 credits. EP residency is focused on practice. In the structure of syllabuses of disciplines, 10% of the time is assigned to theoretical training, 75% to practice in the clinic, and 15% for independent work.

Planning and management of the educational process is carried out by the head and deputy head of the training centre. The conclusion of contracts, the organization of training of students is carried out by the manager of the centre. The development of educational and methodological documentation and curation of the development of educational and methodological documentation is assigned to the methodologist of the centre. For the purpose of the appropriate organization of the educational process, the training centre interacts with all the structural divisions of the centre and EMA in the direction of healthcare. During the operation of the EEC, a meeting was held with the head of the National Educational Centre of the NSCP of the Republic of Kazakhstan Kaydaulov M.K. and the deputy head - Sidorenko O. A., who familiarized themselves with experts with the process of developing educational programs.

EPs are analysed and regularly reviewed at meetings of the EMC and Councils (minutes of meetings) with the participation of listeners, employers, representatives of professional associations (Ismailov Sh.Sh. - MD, professor, manager of the Global Fund) and other interested parties. Educational programs are adjusted on the basis of the results of a survey of students of additional and informal education courses. The survey results are analysed by the training centre and are brought to the attention of teachers. The responsibility of structural units on the educational process is determined by the provisions of structural units and the job descriptions of employees of the NSCP of the Republic of Kazakhstan.

There is “Internal Quality Assurance Standard of the NSCP of the Republic of Kazakhstan” (order of the director of the NSCP of the Republic of Kazakhstan No. 120, dated 10.05.24), containing requirements for the structure and content of EP. This Standard is posted on the official website of the RSE on the REM “NSCP RK” (<https://www.nncf.kz/>), in the section of the training centre - regulatory documents.

Responsibility for the choice and introduction of innovations in the educational process is carried out by the NSCP of the Republic of Kazakhstan, which was also established in the process of interviews with the head of the centre Kaidaulov M.K. and deputy head - Sidorenko O. A.

The content of the work programs reflects the needs of the healthcare system, for example - Advanced training “Childhood Tuberculosis”, 60 hours, as well as the specifics of teachers’ research work: “Studying the features of epidemiology, detection, diagnosis and treatment of tuberculosis in children in Kazakhstan”, a project of the Global Fund jointly with the Kazakhstan Association of Phthiopulmonologists; “Studying the effectiveness of standard dilution of the use of recombinant tuberculosis allergen (Diaskintest) in the diagnosis of tuberculosis infection in adolescents.” In 2024, based on the recommendations of the committees and the EMA section in the direction of Healthcare, adjustments were made to the certification course programs in terms of tasks for the certification course student; the disciplines of the certification courses were combined into modules to integrate



theory and practice. The experts were presented with applications for the purchase of simulation equipment planned for use in postgraduate, additional and/or non-formal education (delivery is planned until the end of 2024). It is to organize evaluation of practical skills of residents. For the successful implementation of residency programs, the NSCP of the Republic of Kazakhstan has 8 departments: Department of surgical treatment of extrapulmonary tuberculosis and MDR; Department of treatment of children and adolescents for TB and MDR-TB; National reference bacteriological laboratory; Department for the treatment of drug-resistant pulmonary tuberculosis; Department of differential diagnosis and treatment of patients without bacterial excretion; Department for the treatment of patients with tuberculosis with bacterial excretion; Department of radiation, instrumental, functional diagnostics; Department of Anaesthesiology and Reanimatology.

The organization has its own clinical base for 350 beds, as well as concluded 5 contracts in medical organizations (JSC “Kazakh Research Institute of Oncology and Radiology”. JSC “Scientific Centre of Paediatrics and Children’s Surgery”, MSE on the REM “City Polyclinic 6” DPH of Almaty, MSE on the REM "City Polyclinic 1" DPH of Almaty, MSE on the REM "Central City Clinical Hospital" DPH in Almaty). Experts got acquainted with the memorandum with: the centre for the study of global health in Central Asia; The Republican Centre for the Protection of the Population from Tuberculosis of the Ministry of Health and SH of the Republic of Tajikistan; National Centre for Tuberculosis and Light Diseases of the Republic of Georgia; Centre of breast surgery of the XUAR of the PRC; "The Novosibirsk Research Institute of Tuberculosis" of the Ministry of Health of the Russian Federation; Agreement on scientific, technical and educational cooperation with JSC "Generium".

At the time of the NSCP, there were no institutional accreditation of the set of residents, and therefore the analysis of the profiles was not presented.

Clinical training in the conditions of third-party clinics has been provided, and employees coordinate training on the basis of these clinics so that residents acquire adequate training in various aspects of the selected field of medicine. For example, JSC “Kazakh Research Institute of Oncology and Radiology”; JSC "Scientific Centre of Paediatrics and Children’s Surgery", which were visited by experts.

## **2.5 Organization of training**

The management of the educational process, reflected in the Self-assessment report (**Standard 2**) and the general approaches to management found confirmation when visiting the NSCP of the Republic of Kazakhstan, during a conversation with the head of Kaydaulov M.K., Deputy Head - Sidorenko O. A., departments of radiation, instrumental, functional diagnostics (leader: Ph.D., Karaev O.S.), department of treatment for patients with tuberculosis with bacterial excretion No. 3 (head: Zhaparkulova MA), the treatment of children and adolescents TB and MDR TB No. 5 (head : Ph.D., Serikbaeva K.S.), departments of differential diagnosis and treatment of patients without bacterial excretion No. 4 (head: Ph.D., Yegenova L.P.), national reference of the bacteriological laboratory (head: Gengisova: Gengisova L.T.), clinical and diagnostic express laboratory (leader: Telegin Ye. P.).

Experts held meetings with members of the Academic Council, an employee of the security and labour protection service, with the heads of structural units, with the employees of the science department, strategic development and international cooperation. Interviews with students and graduates of advanced training programs -2 people (Sagimbekova Ajara Baurzhanovna – MSE on the REM “Phthysiopulmonology Centre” DPH of Almaty; Ahaev Sagynbek Kusainovich - MSE on the REM “City clinic 8” DPH of Almaty), with international and Republican partners (Global Fund, Kazakhstan Association of Phthysiopulmonologists, KNCV) were held. There is no analysis of attending practical classes with residents, because EP is currently not implemented.

## **2.6 Process of developing educational programs**

The process of developing EP of postgraduate education includes such stages as: conducting an analysis of the needs of the labour market for the planned EP, evaluating the capabilities of the centre for the implementation of a certain EP; determination of the mission, goals and outcomes of the EP in interaction with interested parties; development of educational programs by teachers in accordance

with the LSI; consideration of the EP at a meeting of the EMC and a referral for consideration in the AC of the NSCP RK; consideration and approval of EP at a meeting of the AC of the NSCP RK; Determination of the cost of training based on the analysis of the labour market by the planning and economic analysis department of the NSCP of the Republic of Kazakhstan. Standard for the development of EP is posted on the official website <https://www.nncf.kz/>, in the section of the training centre - regulatory documents..

- Given the material and technical base of the NSCP, experts recommended the potential and demand for practical health care to develop EP for socially significant diseases of adults and children.

## **2.7 Procedure for approving educational programs**

EP of the postgraduate education in the NSCP of the Republic of Kazakhstan are developed by specialized specialists of the Centre, considered by the training centre at a meeting of the EMC, approved at the AC level. EP has internal and external reviews.

*Conclusions of the EEC according to the criteria.* Correct from 13 standards: completely -12, partially - 1, do not correspond - 0.

### *Improvement recommendations identified during the external visit:*

- 1) It is recommended to digitize the unique archive of radiographs available at the centre for further use by all medical universities of the Republic in the form of an electronic textbook (2.3.1).
- 2) To use the experience of highly qualified specialists in advanced technologies for treating tuberculosis, develop an educational program on socially significant diseases of adults and children (2.3.1).

## **Standard 3: ASSESSMENT OF COMPETENCIES AND DOCUMENTATION**

### **3.1 Assessment methods**

The study of control and measuring tools (15 tests, 10 tasks, 7 cases of the station) showed that an appropriate assessment policy has been introduced in the organization, which allows to diversely evaluate the educational achievements of students of additional education. During the interview, the students talked about the forms of assessment, for example, the analysis of the case Stadium for clinical cases and that they are satisfied with everything. And also receive regular feedback from teachers. The system of appealing the evaluation results is reflected in the document “Academic Policy in the field of postgraduate, additional and non-formal education” Order of the NSCP No. 28 of January 04, 2023 and there were no pre-centres of appeal during the organization of the organization of education.

So, to verify the data of the standard 3, the experts asked questions to the head of the National Educational Centre, they checked documents and methods, according to the assessment of students. The organization has control and measuring tools (KIS) in the amount of 15, which are compiled by the Academic staff of the NSCP and approved at a meeting of the EMC (protocol No. 2 of 01.06.2023). Control and measuring tools were reviewed by the KazNMU named after S.D. Asfendiyarov.

During a visit to the organization and during an interview with employee Sidorenko Olga Albertovna, deputy head of the trainig centre, the commission was convinced that there is a documentation system that is transparent and accessible to all teachers and staff, and includes documents such as annual operating plans, annual reports, regulations departments, agreements with teachers and residents, academic policy in the field of postgraduate, additional and non-formal education, code of honour and academic integrity of the resident and educational and methodological documentation (work program, work curricula, syllabuses, journals), assessment tools (checklists, statements), certificates, evidences and verifications. A review of the website showed that its pages contain the documents necessary for residents, passports of residency educational programs; this information was obtained during an interview with O.A. Sidorenko, deputy head of the training centre. The results of student assessment are documented in the evaluation journal and examination sheet.

### **3.2 The relationship between assessment and training**

Assessment of knowledge and skills of students of additional education is carried out in accordance with the Order of the Minister of Health of the Republic of Kazakhstan dated December 11, 2020 No PP-249/2020 "On approval of the rules for evaluating knowledge and skills of students, evaluating the professional preparedness of graduates of educational programs in the field of healthcare and specialists in healthcare areas. Control and evaluation of the educational achievements of students are carried out according to the point-rating system. The policy of evaluating knowledge and skills of students of additional and non-formal education are indicated in academic policy.

In order to ensure the quality of teaching methods, a survey of students of additional education is carried out. The organization evaluates the reliability and validity of the assessment methods by checking expert assessments among the teachers of the NSCP of the Republic of Kazakhstan, conducted before the start of classes with students.

While conducting an interview with teachers in relation to assessment methods, experts have received confirmation that the reliability and validity of these methods are checked by expert assessments among the teachers of the NSCP of the Republic of Kazakhstan before their use by listeners. Listeners also expressed their opinion on the assessment methods noting their transparency and objectivity.

Interviewed representatives of employers from 19 phthisiopulmonology centres also indicated that the training of additional education students corresponds to the modern development of medical practice and science, since students demonstrate a high level of knowledge and skills that meet current requirements and industry standards. The National Scientific Centre for Phthisiopulmonology of the Republic of Kazakhstan systematically provides feedback to employers, which is confirmed by the results of a survey of employers' satisfaction with the quality of training of graduates of the National Scientific Centre for Physiopulmonology of the Republic of Kazakhstan.

### **3.3 Documentation**

The organization has implemented a system of documenting the educational process.

The documentation system includes the regulatory legal (plans, reports, provisions, contracts, statements, transcription) and educational and methodological documentation (work program, working curriculum, syllabus, journals), assessments (profiles for students and teachers, tests, Check lists, statements), certificates, evidences and verifications.

All experts got acquainted with documents on additional and non-formal education, it was identified the need to unify and update the documents of the Centre for Educational and Scientific Affairs.

The transparency of documentation is confirmed by the presence of the approved nomenclature of cases for which folders were presented (work plan, working curricula and other documents).

Record keeping has been introduced, including electronic, which experts have become familiar with. Record keeping is conducted in the state and Russian languages

Storage of documentation of the educational process is carried out in accordance with the order of the acting Minister of Culture and Sports of the Republic of Kazakhstan dated September 29, 2017 No. 263 "On approval of the list of standard documents formed in the activities of state and non -state organizations, indicating the term of storage".

At the end of the storage period, student documents are transferred to the state archive in accordance with the rules of documentation and documentation management ([https://drive.google.com/file/d/1OYivK4hX-LbUJmCJoNj6zXRCXILD1r53/view?usp=drive\\_link](https://drive.google.com/file/d/1OYivK4hX-LbUJmCJoNj6zXRCXILD1r53/view?usp=drive_link)).

Portfolio of programs of additional and non-formal education is presented by a certificate of CDP program.

The actual training of the listener is confirmed by the issuance of certificates indicating the training organization, topic, number of hours (credit units).

*Conclusions of the EEC according to the criteria* correspond to 10 standards: completely - 9, partially - 1, do not correspond - 0.

*Recommendations for improvement:*

- 1) To unify and update all centre documents related to educational and scientific affairs in accordance with current regulations (3.2.1).

## **Standard 4: STUDENTS AND LISTENERS**

### **4.1 Admissions policy and selection**

The organization has a policy for the admission of students of additional education - “Academic policy in the field of postgraduate, additional and non-formal education.” The head of the training centre, M.K. Kaydaulov, provided detailed information about the policy for accepting students. Approaches to accepting students are based on the requirements of the country and internal regulations, namely, in accordance with the order of the Ministry of Health of the Republic of Kazakhstan dated December 21, 2020 No RK MOH-303/2020 “On approval of the rules for additional and non-formal education of specialists in the field of health care, qualification requirements to organizations implementing educational programs of additional and non-formal education in the field of healthcare, as well as rules for recognizing learning outcomes obtained by healthcare professionals through additional and non-formal education” and the Regulations on the training centre. For each student admitted in additional and non-formal education, an individual portfolio is formed and a database is created in electronic format.

A balance has been ensured between the existing potential of the educational organization and the opportunities for training and admission of students and listeners, since the organization is one of the leading phthysiology centres in Kazakhstan, with a modern treatment and diagnostic base aimed at the prevention, diagnosis and timely detection of tuberculosis.

Consulting of students on the choice of training topic and event format is carried out while choosing a CDP cycle indicated on the website. For this purpose, on the website of the NSCP of the Republic of Kazakhstan, on the training centre page, information about the ongoing training is posted (calendar plan of educational events for 2024). Phone calls are accepted and correspondence is carried out by e-mail.

Students are accepted in accordance with the Order of the head of the NSCP of the Republic of Kazakhstan, which guarantees the transparency and fairness of the process of admitting cadets in CDP cycles.

A balance is ensured between the existing potential of the educational organization and the opportunities for training and admission of students, since the organization has its own clinic. The experts reviewed the documentation for student admission.

### **4.2 Motivation**

The National Scientific Centre for Phthysiology of the Republic of Kazakhstan has ensured a balance between the existing potential of the educational organization and the opportunities for training and admission of students, since the organization is one of the leading institutes of phthysiology in Kazakhstan, with a modern treatment and diagnostic base aimed at the prevention, diagnosis and timely detection of tuberculosis.

There is a mechanism for stimulating and rewarding listeners, namely, providing a package of methodological material (presentations, guidelines, clinical protocols, case studies, etc.).

### **4.3 Number of students and listeners**

For the period 2020-2024 1,357 students were trained in 2020, 2,048 students in 2021, 2,878 students in 2022, 3,707 students in 2023, and as of June 1, 2024, 394 students in additional and non-formal education programs.

NSCP RK provides students with the CDP programs, by evaluating the quality of programs, feedback at the end of training, as well as by conducting a survey of employers on employers' satisfaction with the quality of training.

### **4.4 Support and advice**

Students of additional and non-formal education are given the opportunity to independently choose additional education programs, as well as choose disciplines from the disciplines of the selective component of the educational program. At the same time, they can count on advisory support from the staff of the training centre of the NSCP of the Republic of Kazakhstan, which contributes to a more informed and targeted choice.

#### **4.5 Representation of students and listeners**

CPD students are involved in the process of developing programs, generating results and content of programs through questionnaires. The survey is conducted after the end of each course. The survey includes open questions “What educational services would you like to receive additionally”, “Your wishes to improve the educational process”.

In accordance with the recommendations of the CDP students, an educational program was developed in 2023 for chief doctors of primary health care organizations, which contributed to a deeper understanding of the importance of tuberculosis prevention and monitoring at the primary health care level by the heads of these organizations.

#### **4.6 Teaching strategies**

The organization uses teaching methods such as lectures, seminars, practical classes, innovative technologies, case-based (CBL), team-oriented learning (TBL); role-playing games, brainstorming method, group discussion method, small group teaching method.

IT technologies are used in the survey. Seminars, conferences, and master classes are held ranging from 8 hours to 24 hours. The choice of a particular teaching method is based on the topic of the cycle (course), duration, number of students (doctors, researchers, nursing staff), and the results of feedback from students. The teaching method is determined by the teacher who forms the working curriculum, which is enshrined in the document “Standard for the development and approval of educational programs” of the NSCP of the Republic of Kazakhstan.

Distance learning at the NSCP of the Republic of Kazakhstan is implemented in accordance with the Regulations on Distance Educational Services using the Moodle system.

Distance learning technologies are more often used in CDP programs, seminars, and webinars. This allows students from different cities of the country to undergo full-fledged training without interrupting their work.

During conversations with teachers and students, experts found that the proposed teaching methods were satisfactory for students.

#### **4.7 Working conditions**

The organization has the authority to determine the technical or other forms of implementation of CDP and non-formal training programs. This makes it possible to take into account the working and employment conditions of trainees at their main place of work (maintaining the average salary, access to patients in phthisiology, pulmonology (differential diagnostics department), anaesthesiology (anaesthesiology department), radiological (radiology department), as well as in the laboratory). In the event of a student’s illness during the CDP cycle, the opportunity is provided to extend the training for a year while forming a group on this topic, with the provision of an evidentiary document (illness report). This requirement is stated in the document “Academic Policy in the Field of Postgraduate, Additional and Non-Formal Education” Order of the NSCP of the Ministry of Health of the Republic of Kazakhstan, approved on January 4, 2023 No. 28.

At the end of the training, the organization conducts a survey that includes questions about satisfaction with the training process, the qualifications of teachers, and wishes for improving educational programs. Thus, the results of a survey of students over the past 5 years show that employers’ satisfaction with the quality of training on the basis of the NSCP of the Republic of Kazakhstan is 97.5%. As the main drawback, respondents pointed to the need to increase the practical part of training. In general, employers' satisfaction with the practical and theoretical training of their employees is 100%. Only 47% of respondents expressed a desire for employers to participate in the development of educational programs.

*Conclusions of the EEC according to the criteria.* Complies with 11 standards: fully – 11.

## **Standard 5: PROVIDING POST-GRADUATE AND ADDITIONAL EDUCATION**

### **5.1 Recognition policy**

The personnel policy of the NSCP of the Republic of Kazakhstan has been developed for 2021-2024 and approved by Order of the Director No. 100 dated May 3, 2021 in accordance with the centre's development plan, the main goals, objectives, directions and mechanisms for their implementation were identified. The basis of the personnel policy is the professional and social development of personnel capable of providing solutions to strategic and tactical tasks at a high professional level, which is aimed at ensuring: effective and appropriate use of human resources to achieve goals and objectives of the NSCP of the Republic of Kazakhstan; a high level of human resources as a critical element of production in order to improve medical activities; bringing all areas of organizational human resource management in line with modern requirements; increasing the positive image and trust of clients and partners in the NSCP of the Republic of Kazakhstan. The level of professionalism of employees is supported and developed by a system of CDP for employees both at the centre and at the republican level: participation in various seminars, conferences, round tables, trainings such as: XI All-Russian scientific and practical conference with international participation "Topical issues of prevention, diagnosis and treatment of tuberculosis in children and adolescents", Russia, Nizhny Novgorod, 03/29-03/31/2023; VI Congress of the NGO "Kazakh Society of Anaesthesiologists and Resuscitators" with international participation, Almaty, March 31-April 1, 2023; 5th International Conference on Integrated Tuberculosis Control in Central Asia, Tashkent, Uzbekistan, 16-17, 20 September 2023; 41st Annual Meeting of European Society for Paediatric Infectious Diseases 2023, Lisbon, Portugal, May 8-12, 2023; Republican scientific and practical conference with international participation, dedicated to World Tuberculosis Day and held under the WHO motto for 2023 "We can defeat tuberculosis!", Almaty, 03/24/2023; and a number of others.

Academic staff involved in the implementation of the educational process regularly undergo CDP at special training courses on the following topics: Pedagogy "the fundamentals of the pedagogical skills of a teacher in the organization of postgraduate education"; "Introduction of new drugs and treatment regimens for M/XDR-TB during the transition to new WHO recommendations" Minsk, "Pharmacovigilance for IDR and CRL", "Current issues of programmatic management of cases of tuberculosis infection", Advanced course in bioinformatics: "Sequencing of M. tuberculosis genomes new generation: molecular epidemiology", Methodology of medical education, Phthysiology in modern conditions, Differential diagnosis of tuberculosis, Current issues of respiratory diseases, Current issues of pulmonology, Early detection, diagnosis, prevention and treatment of tuberculosis in outpatient settings, etc.

The desire of employees to improve their skills is supported and stimulated by the leadership of the NSCP of the Republic of Kazakhstan.

### **5.2 Obligations and development of postgraduate and additional education organizations**

15 educational programs of additional and non-formal education, 4 programs of certification cycles were developed in accordance with the following LSI: Order of the Minister of Health of the Republic of Kazakhstan dated July 4, 2022 No RK MOH-63 "On approval of state mandatory standards for levels of education in the field of healthcare"; Order of the Minister of Health of the Republic of Kazakhstan dated January 9, 2023 No. 4 "On approval of standard educational programs in medical and pharmaceutical specialties"; Order of the Minister of Science and Higher Education of the Republic of Kazakhstan dated January 5, 2024 No. 4 "On approval of the qualification requirements for the educational activities of organizations providing higher and (or) postgraduate education, and the list of documents confirming compliance with them"; Order of the Minister of Health of the Republic of Kazakhstan dated December 21, 2020 No. RK MOH-303/2020 "On approval of the rules for additional and non-formal education of specialists in the field of health care, qualification requirements for organizations implementing educational programs for additional and non-formal education in the field of health care, as well as rules for recognition learning outcomes obtained by

healthcare professionals through additional and non-formal education"; and the academic policy of the centre, which are presented on the website of the NSCP of the Republic of Kazakhstan (link: <https://www.nncf.kz/normdoc>).

The experts familiarized themselves with reviews of control and measurement tools for the following EP: Laboratory diagnosis of tuberculosis in primary health care; qualifications; Bacteriological diagnosis of tuberculosis; Childhood tuberculosis, with an act of implementation at the EP AT on the topic: early detection, diagnosis and prevention of tuberculosis in the primary health care network; with EP residency in the specialty "Phthiisology for adults, children", "Radiology".

### **5.3 Recruitment and selection policy for teachers**

- The total number of staff members in the NSCP is 629.5, including 107 doctors, of which 30 are full-time teachers, 1 part-time. The degree is 15.9% of which 2 are doctors of science and 15 candidates of science. The experts familiarized themselves with the personnel policy (Personnel Policy of the NSCP RK for 2021-2024, order No. 100 of May 3, 2021), (Regulations on mentoring of NSCP residents, order No. 120 of May 10, 2024), prepared for the admission of residents. The Regulations describe the organization and conduct of clinical practice and mentoring, the rights and responsibilities of mentors and residents, the role of the teacher who coordinates the practice program with the mentor, the time and duration of clinical practice; provides the mentor with the necessary educational and methodological documentation; interacts with the mentor on the development of clinical practice; together with the mentor, evaluates the knowledge and skills of the resident.

While visiting the personnel management department, experts received information on hiring teachers and mentors, which is posted on the website of the NSCP of the Republic of Kazakhstan before the competition. Selection criteria are reviewed every three years (unless there is a change in the LSI). The need for teachers is determined on the basis of implemented educational programs and regulations governing activities in postgraduate education programs and additional non-formal education. Heads of departments and doctors with teaching experience of 10 years or more are invited to conduct CDP cycles. Among the Academic staff involved in the educational process, there are the authors of the utility model patent RK No. 8908 dated December 25, 2023 "Surgical retractor": Yerimbetov K.D., Aubakirov Ye.A., Bektursinov B.U., Adenov M.M. and others. There are also copyright certificates: "Modification of the T-SPOT TB test in a tuberculosis hospital" (Telegina Ye.P., Yeralieva L.T., No. 1957 dated February 25, 2019) and "Comparative analysis of predictors of tuberculosis in Kazakhstan and Ukraine" (Yeralieva L.T. et al.). In addition, among the Academic staff there are specialists with a high Hirsch index (from 1 to 7): (<https://www.scopus.com/authid/detail.uri?authorId=8441834800>;

<https://www.scopus.com/authid/detail.uri?authorId=39261046300>;

<https://www.scopus.com/authid/detail.uri?authorId=57809431200> and others. Holders of the badge "Excellence in health care of the Republic of Kazakhstan" - 9 people, the badge "For contribution to health care of the Republic of Kazakhstan" - 8 people, medals "25 years of independence of the Republic of Kazakhstan" and "30 years of independence of the Republic of Kazakhstan" - 5 people. There are also holders of gratitude and certificates of honour from the Ministry of Health of the Republic of Kazakhstan (6 people) and the government medal "Halyk Algysy" (1 person).

In order to verify the data of standard 5, external experts received the opinion of teachers who highly evaluate the personnel policy of the NSCP: the introduction of transparent and objective criteria for selecting employees helps to attract highly qualified specialists, which has a positive effect on the quality of the educational process and scientific research. Regular revision of selection criteria every three years allows us to take into account changes in legal regulations and the current needs of educational programs, support for professional growth and development of teachers (conducting English language courses), a high H-index demonstrates the centre's commitment to scientific achievements and innovation. The overall personnel policy of the centre creates favourable conditions for the professional and personal growth of employees, which ultimately increases the efficiency of the entire organization. During a conversation with Academic staff about teaching methods, it was

revealed that significant attention is paid to oral analysis of topics and clinical cases, which is confirmed by the survey and amounted to -86.61%.

While surveying teachers, it was found that the majority of 22 people (95.65%) were completely satisfied with the organization of work and workplace in this educational organization, but 4.35% were partially satisfied. At the NSCP, teachers have the opportunity to engage in scientific work and publish research results - 86.96% completely agree, 13.03% partially agree. Satisfied with the work of the HR (personnel) service 95.65% completely agree, 4.35% partially agree. Satisfied with wages - 52.17% completely agree, 0% partially agree, 30.43% have no answer.

#### **5.4 Faculty Commitment and Development**

The training centre, in accordance with the Regulations on the teaching load of teachers of the NSCP of the Republic of Kazakhstan (order No. 120 dated May 10, 2024), is calculating the teaching load of teachers, and has also prepared a preliminary calculation of the average annual load of residency teachers for the upcoming academic year, and is set at 1664 hours, of which 40 % of the time is allocated to the teaching load - 680 hours (classroom classes, IWST, IWS), 20% methodological work - 328 hours, 20% research work - 328 hours, 20% educational work - 328 hours. The Regulations on the teaching load of teachers clearly define the types of work of Academic staff: educational and methodological, scientific and research; social and organizational.

In order to verify the data of standard 5, during a meeting with the head of the HR department and during interviews with teachers, experts received an opinion on approaches to developing the pedagogical competence of teachers, motivation to work with residents, and mentoring, which includes the development and use of practical skills according to the clinical practice program ; motivation for professional activity and development, independence and initiative in professional activities; discipline, diligence in following the instructions of the mentor in professional activities. The most popular AT cycles in 2023 were on the following topics: Early detection, diagnosis, prevention and treatment of tuberculosis in an outpatient setting - 120 hours / 4 credits; Early detection, diagnosis and prevention of tuberculosis in the practice of a primary care doctor - 90 hours/3 credits; Early detection, treatment and prevention of tuberculosis in the primary health care network - 60 hours/2 credits.

The experts received answers about the teacher training program, which is held annually and 30 teachers involved in the implementation of the educational program were trained on 97 topics from 2019 to the 1st quarter of 2024. These activities are financed by the NSCP and through grant funding. The certificates of teachers were checked by an expert: Adenova M.M., Amanzholova L.K. on the topic: Good clinical practice (GCP) in the amount of 54 hours from 08/29/2020; Serikbaeva K.S. on the topic: Phthisiology in the amount of 216 hours from December 26, 2020, Matzhanova AA. on the topic IPC for infection control employees, epidemiologists, doctors in the amount of 210 hours/7 credits from 04/07/2022; Amanzholova L.K. on the topic: "Methodology and methodological support for an integral pedagogical process" in the amount of 72 hours from December 1, 2023.

Experts note significant efforts aimed at establishing and maintaining feedback with students. This aspect of the work is recognized as important for monitoring the educational process and ensuring high quality training. However, the experts indicate insufficient activity in the field of interaction with Academic staff and employers. To fully monitor the educational process, more active participation of these groups is required. It is also worth noting that the NSCP purchased new equipment for the simulation centre. This acquisition represents an important step towards improving the material and technical base of the Training Centre. During interviews with Academic staff and mentors, a significant need was identified for mastering skills in working with new equipment. This emphasizes the importance of not only the availability of modern technologies, but also the ability to use them effectively in the educational process.

In this regard, the experts recommend organizing Academic staff training in modern technologies. Training must be comprehensive and include both theoretical and practical training so that teachers can confidently use the new equipment in their classes. This will not only improve the quality of training, but will also allow students to gain knowledge and skills that meet modern requirements of practical healthcare.



Thus, the integration of new technologies into the educational process and strengthening feedback from key participants - students, Academic staff and employers - are important steps towards improving the quality of education and more accurately monitoring its effectiveness.

There is an opportunity for career growth and development of teacher competencies in the organization - 78.26% of surveyed teachers responded, and 17.39% partially agreed with this. Studied in CDP programs - 47.83% less than 1 year ago, 47.83% within a given year, 0% more than 3 years ago, 0% more than 5 years ago and 4.35% answered "I don't remember when it was."

The organization implements social support programs for teachers - 26.09% answered that "yes, there are such programs", 4.35% "I have already taken advantage of this", 13.04% of respondents answered that there are no such programs, and 52.17 % of respondents do not know about this.

**Strengths:** NSCP closely cooperates with the Kazakhstan Association of Phthiopulmonologists, KNCV in Central Asia, and the Representative Office of "Partners for Health" in Kazakhstan with the active implementation of the results of cooperation in the educational process.

**Conclusions of the EEC according to the criteria.** Compliant out of 9 standards: fully - 8, partially - 1, do not comply - 0.

**Recommendations for improvement:**

- 1) To develop a mechanism and form for analysing feedback from participants in the educational process (Academic staff, employers) (clause 5.2.4.)
- 2) In order to use the available modern simulation equipment in the educational process, train the Academic staff in innovative technologies (clause 5.2.4.).

## **Standard 6: EDUCATIONAL RESOURCES**

### **6.1 Logistics and equipment**

NSCP RK has its own educational premises in the administrative and educational building, which is located on Bekhozhin St., 5.

*Auditor Fund.* The total classroom fund today is 201 m<sup>2</sup>, which is divided into a large and small conference room, a computer lab, and 4 training rooms. Small and large conference rooms are equipped with stationary multimedia projectors. The training rooms are designed for 8 to 30 seats and are located in the main and therapeutic buildings of the NSCP of the Republic of Kazakhstan, they are equipped for conducting seminars, they have the necessary cabinet furniture, educational and methodological equipment.

Educational premises in educational buildings meet sanitary and hygienic requirements, fire safety and meet qualification requirements. Students are familiarized with it when admitting in the cycle. (Journal of familiarizing students with the rules of infectious safety, Journal of familiarizing students with safety rules).

During the conversation with students during the visit to the seminar and advanced training, we received information about complete satisfaction with the resources and practice bases.

The development of communication and practical skills will be carried out on the basis of a simulation centre planned for creation in November 2024. We planned to purchase 12 mannequins and simulators.

They are improving IT technologies and infrastructure to ensure uninterrupted operation of the Internet; a local computer system and a video broadcast system in conference rooms (telemedicine) have been created.

### **6.2 Training bases**

The structure of the NSCP of the Republic of Kazakhstan includes 12 departments:

1. reception - consultation department,
2. treatment of drug-resistant pulmonary tuberculosis No. 1,
3. treatment of drug-resistant pulmonary tuberculosis No. 2,
4. treatment of patients with tuberculosis with bacterial excretion No. 3,
5. differential diagnosis and treatment of patients without bacterial excretion No. 4,

6. treatment of children and adolescents with TB and MDR-TB No. 5,
7. surgical treatment of extrapulmonary TB and MDR TB No. 6,
8. surgical treatment of pulmonary TB and MDR-TB No. 7,
9. anesthesiology and resuscitation No. 8,
10. radiation, instrumental, functional diagnostics,
11. national reference bacteriological laboratory,
12. clinical diagnostic, express laboratory.

The bed capacity of these departments is 350 beds. All teachers of the NSCP for Physics of the Republic of Kazakhstan are provided with access to patients.

In order to implement the outpatient part of the residency programs, agreements on joint activities were concluded by the following clinics:

1. MSE on the REM “City Clinic No.1” DPH of Almaty (number and date of agreement: 230 dated 08/04/2023), KZ22VEG00012785 dated November 3, 2022

2. MSE on the REM “City Clinic No.6” DPH of Almaty, information on accreditation KZ92VEG00011913 dated December 25, 2021

3. MSE on the REM “Central City Clinical Hospital” DPH of Almaty (number and date of agreement: 164-0622 dated 06/13/2022, accreditation information KZ43VEG00011922 dated December 25, 2021

4. JSC “Scientific Center of Pediatrics and Children’s Surgery” (number and date of agreement: 09/PR/73 dated 06/27/2022), accreditation information KZ00VEG00009592 dated December 19, 2019.

A review of the resources showed that they correspond to the goals and objectives of educational activities, for example, the clinical bases of JSC “Scientific Centre of Paediatrics and Children’s Surgery”, the RSE on the REM “Kazakh Research Institute of Oncology and Radiology with a total bed capacity of 650” were visited, and employees of the educational organization ensure collegial and ethical relationships with medical staff and clinical site management to achieve residents' end results. A sufficient number of thematic patients, modern equipment is provided and demonstrates accessibility to students, and employees who simultaneously perform the roles of teachers and curators (mentors) provide high-quality training in compliance with ethics and deontology. Before starting the corresponding discipline of the educational program, the resident receives a syllabus from the teacher and knows what skills he must acquire and develop during his training.

During a visit to clinical sites, where experts examined the resources, their compliance with training programs, and accessibility for teachers and residents, how modern this equipment is and meets the needs of students and practical healthcare. The experts obtained evidence of compliance with standard 6, as well as validation of the self-assessment report information.

### **6.3 Information technology**

There is a library founded in 1933. The total area of the library is 120 square meters, which includes: a subscription, a reading room with 6 seats, a catalogue room, and a book depository.

The library fund contains 141 textbooks (in Kazakh - 43, in Russian - 98), 4261 sources of scientific literature (in Kazakh - 90, in Russian - 4162, in English - 9), 1131 sources of periodicals (in Kazakh - 298, in Russian – 733, in English – 100) and 57 electronic publications.

There are archives of the journals “Pulmonology” and “Nursing” (until 2022). It publishes its own journal “Phthisiopulmonology”.

There is full access to international databases (**Scopus** (<https://www.scopus.com/home.uri>) and **Sciencedirect** (<https://www.sciencedirect.com/>)).

Agreements on mutual cooperation in the field of library and information services have been concluded:

1. NJSC “KazNMU named after S.D. Asfendiyarov” (agreement number 228 – P dated August 3, 2023);
2. National Educational Institution “Kazakhstan-Russian Medical University” (in progress);
3. NJSC “Republican Scientific and Technical Library” (agreement No. 33 dated February 23,

2022).

Based on an agreement with KazNMU named after Asfendiyarov, access to the following databases was obtained:

1. Cochrane Collection Plus
2. eBooks Clinical Collection
3. JoVe Research
4. CiNaHe Complete
5. Scopus
6. Web of Science
7. Sciencedirect
8. Wiley online Leibrary com

At a meeting with the librarian of the NSCP of the Republic of Kazakhstan, we found out that specialized journals are not subscribed to. The library building requires major repairs and renovation of the library's operations. The purchase and replenishment of the library collection has not been carried out since 2021.

It is necessary to improve the conditions for locating the library, as well as replenish the fund with educational and scientific literature on accredited specialties, and provide electronic educational resources.

#### **6.4 Interaction with colleagues**

The program for training students to work in a team and effectively interact with other healthcare specialists in the specialty of CDP cycles includes direct work together with employees of various clinical departments of the NSCP of the Republic of Kazakhstan.

Students manage patients in 12 departments of the NSCP of the Republic of Kazakhstan, participate in advisory examinations of patients from other medical institutions, in weekly work meetings and scientific and practical conferences, work in multidisciplinary teams, which provides them with sufficient experience of working in a team, as colleagues in their main specialty, as well as specialists from other areas of healthcare.

NSCP RK, being the Republican coordinating centre of the Republic of Kazakhstan on issues of combating tuberculosis, promotes the active participation in all ongoing educational events (CDP cycles and certified cycles, master classes, mentoring) of specialists from subordinate anti-tuberculosis organizations (anti-tuberculosis regional dispensaries), sanatoriums.

The training centre and library for each educational residency program have created a portfolio that contains clinical protocols and guidelines, articles and abstracts necessary for the practical activities of the student and resident physician.

NSCP RK widely uses the capabilities of information and communication technologies in the process of training specialists. Today, the centre has telemedicine equipment, the Moodle e-learning system, e-books, educational videos, and the Platonus automated information system with the ability to test residents.

*Students have free access to patients at clinical sites and all conditions for improving their practical skills - 14.29% of teachers completely agree with this, 42.86% partially agree, 0% found it difficult to answer.*

#### **6.5 Formal types of training**

NSCP RK is interested in cooperation and encourages participation in local, national and international CPD programs, scientific meetings and other formalized types of CPD.

NSCP RK annually holds a Republican conference with international participation dedicated to the International Day against Tuberculosis. In 2024, the conference was held under the motto "Yes, we can defeat tuberculosis," within the framework of which a seminar on tuberculosis prevention was held for 60 students and residents of KazNMU named after S.D. Asfendiyarov.

These events were organized in collaboration with Kazakh National Medical University named after S.D. Asfendiyarov, the Global Fund, and the Partnership for Health.

More than 35 educational programs of non-formal education for healthcare specialists have been developed and approved on the basis of the NSCP of the Republic of Kazakhstan.

### **6.6 Medical research and advances**

Today, the NSCP of the Republic of Kazakhstan has a certificate of accreditation as a subject of scientific and (or) scientific and technical activities for a period of five years (Series MK No. 00047 dated August 19, 2022).

By Order No. 343 of July 14, 2023, the scientific and practical journal “Phthisiopulmonology” was included in the List of publications recommended by the Committee for Quality Assurance in Science and Higher Education of the Ministry of Science and Higher Education of the Republic of Kazakhstan.

The Centre, from 2019 to 2023, carried out 48 scientific and technical programs and projects, operational research, which were funded from the EuroWHO, the Global Fund, the END TB project, “Generium” JSC, Columbia University, Otsuka Novel Products GmbH, Etica KZ (USAID), JSC “Scientific Centre of Anti-Infective Drugs”, International Scientific and Technical Centre, KNCV and the Ministry of Health of the Republic of Kazakhstan (Tables to Standard 6, clause 6.5.1).

From 2019 to 2023, 17 protection documents were received, of which: 2019 – 2, 2020 – 4, 2021 – 2, 2022 – 0, 2023 – 9.

In total, 16 certificates were received for entering information into the state register of rights to objects protected by copyright, as well as 1 patent for a utility model of the Republic of Kazakhstan.

There is an Academic Council and a Local Ethical Commission, which includes full-time Academic staff and external specialists from Scientific Centres and the Association of Phthisiatricsians.

Trainees and residents are involved in medical research in basic biomedical and clinical sciences and have access to research equipment and ongoing scientific activities at the training bases. For example, when visiting a cycle of CDP in laboratory science, it was clearly demonstrated how students have the opportunity to work on high-tech equipment while helping scientific staff of the NSCP of the Republic of Kazakhstan.

Interviews with 23 teachers, including 23 full-time teachers, showed that there are both successes and problems in the management of education, depending on the specific base (admission of residents to equipment, a sufficient number of case patients, time to maintain medical records, independent work).

### **6.7 Educational expertise**

Employees of the NSCP of the Republic of Kazakhstan are members of the section of additional and non-formal education of the EMA in the direction of Health. Within the framework of this section, employees of the NSCP of the Republic of Kazakhstan actively participate in the development and examination of educational programs and regulations, create clinical protocols and conduct their examination.

The examination is carried out in the form of an analysis of the needs for specialists, an analysis of resident training methods, and the results allow us to draw conclusions about the quality of innovative changes in postgraduate education. For example, in 2023, employees of the Training Centre, in collaboration with the phthisiology committee of the EMA Healthcare, reviewed the Order of the Minister of Health of the Republic of Kazakhstan dated November 30, 2020 No RK MOH-218/2020 “On approval of the list of specialties and specializations subject to certification of specialists in the field of healthcare” (hereinafter referred to as the Order). According to the results of joint work, changes were made to the Order regarding the training of phthisiatricsians from general practitioners, paediatricians, therapeutic and paediatric specialists. In order to implement the changes made to the Order, the Training Centre developed 5 educational programs for a certification course and approved at the level of the Healthcare Educational Institution.

In order to increase the motivation of teachers to engage in scientific research, the NSCP of the Republic of Kazakhstan has incentives for employees who publish scientific articles in journals recommended by the Committee for Quality Assurance in Science and Higher Education of the

Ministry of Science and Higher Education of the Republic of Kazakhstan and international peer-reviewed journals. (Provision for employee incentives)

We planned to introduce KPI indicators for teachers, where one of the indicators is participation in scientific and technical progress.

### **6.8 Training in other institutions**

Academic exchange of students is carried out on the basis of the following international treaties and agreements between educational organizations of the Republic of Kazakhstan. (Academic policy of the NSCP of the Republic of Kazakhstan):

1. Memorandum of cooperation “Novosibirsk Research Institute of Tuberculosis” of the Ministry of Health of the Russian Federation
2. Cooperation Agreement, Center for Thoracic Surgery of the XUAR People's Republic of China
3. Memorandum of Agreement Tajikistan
4. Memorandum of scientific, technical and educational cooperation, National Center for Tuberculosis and Lung Diseases of the Republic of Georgia
5. Agreement on scientific, technical and educational cooperation of JSC “Generium”
6. Memorandum on scientific, technical and educational cooperation, Republican Center for the Protection of the Population from Tuberculosis of the Ministry of Health and Social Protection of the Republic of Tajikistan
7. Memorandum of Understanding and Cooperation, Center for Global Health Studies in Central Asia

During a visit to the NSCP of the Republic of Kazakhstan, we got acquainted with the information that in the period from May 24 to May 26, 2023, an exchange of experience took place with the participation of a group of specialists from the centre of thoracic surgery at the clinic of Xinjiang Medical University of the People's Republic of China. This experience exchange visit took place within the framework of the Scientific and Technical Partnership Program of the Shanghai Cooperation Organization (SCO) and the international project “Promotion and application of standardized technology for minimally invasive thoracic surgery in the Central Asian region.”

**Conclusions of the EEC according to the criteria.** Comply out of 15 standards: fully 14, partially 1, do not comply - 0

#### **Recommendations for improvement:**

- 1) To improve the conditions for locating the library and replenish the fund with educational and scientific literature on accredited specialties, as well as provide electronic educational resources (6.1.3).

## **Standard 7: EVALUATION OF EDUCATIONAL PROGRAMS**

### **7.1 Monitoring and evaluation mechanisms**

The implementation of the policy on monitoring and evaluation of educational programs is assigned to the Training Centre of the RSE on the REM “NSCP RK”. The system for monitoring the quality of additional education programs at the RSE on the REM “NSCP RK” is carried out continuously and is adjusted in accordance with the requests and professional interests of stakeholders (students, employers, partners, and heads of clinical sites). Examination, monitoring and improvement of EP are carried out by EMC. To adjust the topics in the EP, a survey is conducted. The results obtained are discussed at EMC meetings.

In order to carry out monitoring, the Training Centre annually creates a commission to evaluate programs, which includes heads of structural divisions, employees and Academic staff, and students of the programs of the NSCP of the Republic of Kazakhstan. The results of evaluating the quality of educational programs are reported by the chairman of the evaluation commission at the level of the Educational and Methodological Council and the Academic Council of the NSCP RK, which is confirmed by the minutes of meetings of the AC and EMC. This process is regulated by the Standard for the development and approval of educational programs.

#### **1.2 Feedback**

The RSE on the REM “NSCP RK” annually conducts a survey of students, teachers, and employers. An analysis of the survey results is heard at a meeting of the AC and brought to the attention of all structural divisions, an action plan is developed to eliminate comments or improve work.

Questionnaires are developed by the Training Centre, reviewed by the educational and methodological council and approved by the director of the RSE on the REM “NSCP RK”. Listeners can write proposals to the official website of the NSCP RK (<https://www.nncf.kz/vopros-otvet>), all questions and comments left are considered and transferred to structural units for making a decision or answer on this issue.

The results of the survey show high satisfaction of students with the services of additional and non-formal education of the RSE on the REM “NSCP RK”. Thus, in 2022, student satisfaction with the organization of training was 90.3%, satisfaction with the theoretical part of training was 96.7%, satisfaction with the practical part of training was 95.4%, and satisfaction with the qualifications of teachers was 98.3%. These indicators indicate the high quality of educational programs of additional and non-formal education. A comparative analysis of the quality of education in 2023 shows a relative decline in results. Thus, in 2023, student satisfaction with the organization of training was 86.5%, satisfaction with the theoretical part of training was 80.5%, satisfaction with the practical part of training was 60%, and satisfaction with the qualifications of teachers was 71.4%. The decrease in satisfaction with training was associated with the wishes of students to receive more practical skills, to study on the basis of the NSCP of the Republic of Kazakhstan, so that students would be freed from their main work during training.

In addition, based on the results of the 2023 survey, the RSE on the REM “NSCP RK” developed training programs for bacteriologists and chief doctors.

Systematic receipt of feedback from students of the RSE on the REM "NSCP RK" is regulated by the Academic Policy of the RSE on the REM "NSCP RK" (Order of the Director of the NSCP RK No. 28, dated 01/04/23).

Based on the results of the survey and conversation between the management of the training centre and Customers, the following changes for improvement were implemented:

1. At the request of students, certification courses were developed for general practitioners, pediatricians and pulmonologists;
2. At the request of students, non-formal education programs were developed for chief doctors and bacteriologists, CDP programs for doctors and nurses;
3. The training center began the process of working on the basis of client-oriented training, taking into account the free time of the listener. Over the past two years, the RSE on the REM “NSCP RK” has conducted training in the evening for the convenience of training for medical workers and to eliminate the problems of parallel involvement of workers in the treatment process;
4. In order to develop communication skills, the Training Center conducted CDP cycles in an interdisciplinary way. As phthisiatricians, as GPs and pediatricians from primary health care organizations took part in the training, which, based on the results of an oral survey of students, led to a more in-depth understanding of the issues of combating tuberculosis among primary health care doctors.

The opinions of a wide range of stakeholders are taken into account through official sources (information and analytical reports, an action plan to eliminate comments, etc.) and informal ones (surveys, conversations with consumers of educational services, collection of complaints and suggestions.)

### **7.3 Stakeholder engagement**

In the RSE on the REM “NSCP RK”, the main stakeholders (teachers, students, employers) are involved in the process of monitoring and evaluating the quality of EP by surveying students, teachers and employers. A survey of teachers and employers is carried out once at the end of the year, and a survey of students after each completed course. The results of the survey of teachers, students, and

employers are analysed by the management of the Training Centre at the end of the year, included in the annual report and heard at the AC (AC Protocols).

The participation of a wide range of stakeholders in the evaluation and improvement of educational programs is ensured by authorized bodies in the field of education and healthcare, representatives of the public, professional organizations, as well as persons and structures responsible for education.

The opinions of a wide range of stakeholders are taken into account through official sources (information and analytical reports, an action plan to eliminate comments, etc.) and informal ones (surveys, conversations with consumers of educational services, collection of complaints and suggestions.).

The NSCP RK is introducing a monitoring system for graduates and an annual survey of employers.

The interview with 19 employers was conducted online and included questions such as: knowledge of the university's mission, participation in the development of the mission and proposals for the strategic plan, participation in the work of advisory bodies.

**Strength:** The centre's staff are the authors of the current edition of clinical protocols of the Ministry of Health of the Republic of Kazakhstan for the diagnosis and treatment of tuberculosis.

**Conclusions of the EEC according to the criteria.** Comply out of 10 standards: fully - 9, partially - 1, do not comply - 0

**Recommendations:**

- 1) Together with non-governmental organizations, to develop and implement Educational programs at all levels of education on early detection and treatment of tuberculosis (7.2.6).

## **Standard 8: MANAGEMENT AND ADMINISTRATION**

### **8.1 Documentation and needs for educational planning**

The organizational structure of the RSE on the REM "NSCP RK" was approved by decision of the Supervisory Board No. 5, dated 12/06/22 and posted on the official website <https://www.nncf.kz/>, in the section - Corporate Governance. Responsibility for the development and implementation of policy in the field of education is assigned to the Training Centre of the RSE on the REM "NSCP RK". For the purpose of effective management, an Interaction Map for postgraduate and additional education (Order of the Director No. 120, dated 10.05.24) has been developed at the RSE on the REM "NSCP RK". The functional responsibilities of the Training Centre employees are established by the Regulations on the Training Centre and job descriptions. During the visit to the training centre, it was found that employees were familiar with their job responsibilities.

In order to effectively implement the educational process, the Training Centre interacts with all structural divisions of the RSE on the REM "NSCP RK", including the public procurement department, the accounting and reporting department, and the HR department. The responsibilities of structural units in the educational process are determined by the Regulations of structural units and job descriptions of employees of the NSCP RK.

The information system "Platonus" has been introduced at the RSE on the REM "NSCP RK" to conduct training for residents.

### **8.2 Academic leadership**

During the work of the EEC, a meeting was held with the head of the National Training Centre of the RSE on the REM "NSCP RK", M.K. Kaydaulov and deputy head - Sidorenko O. A. EPs undergo discussion and examination at the level of the Educational and Methodological and Academic Councils, the work of which is regulated by the Regulations on the Academic Council and the Regulations on the Educational and Methodological Council.

Transparency in the management of EP is carried out through the discussion of educational and methodological documentation (EMCD, Syllabuses, test tasks) on implemented programs at meetings of the EMC. In order to ensure proper management, planning and organization of the training process

for students, in the RSE on the REM “NSCP RK”, the “Policy for ensuring internal quality in the field of education” was developed and approved at a meeting of the Academic Council.

*To the question of the expert questionnaire “Do the heads of the organization listen to your opinion regarding issues related to the educational process, research work, clinical work,” 78.26% of teachers answered that systematically, 8.7% answered “sometimes”, 0% “rather rarely”, 0% “never”, have no answer 13.04%.*

### **8.3 Allocation of budget and resources for education**

The determination of the main priorities for spending funds in the NSCP RK is approved by the Supervisory Board (Approved by Order of the Ministry of Health of the Republic of Kazakhstan No. 453 dated June 27, 2017).

The Supervisory Board annually reviews the implementation of the financial and economic activity plan based on the results of the financial year. Accounting and preparation of financial statements are carried out in accordance with the National Financial Reporting Standard No. 2. Separate accounting for the implementation of the business plan is maintained in the context of government programs and income from paid services, and is controlled by the internal audit department.

To ensure effective planning for the implementation of the educational program, a staffing table, class schedule, etc. are formed.

The training centre annually submits applications to the Planning and Economic Analysis Department for the purchase of goods that support the implementation of the EP

The library (Regulation No. 194/p dated October 10, 2018) annually generates an application for the purchase of educational and methodological literature.

Financial resources allocated annually for the organization of educational activities: 2019 – 19,893,500 tenge, 2020 – 8,749,600 tenge, 2021 – 5,919,700 tenge, 2022 – 24,491,620 tenge, 2023 – 19,947,180 tenge.

In order to ensure high-quality educational process and stimulate teachers, the administration of the NSCP RK provides payment to teachers involved in the learning process. Payment is carried out in accordance with the Regulations on paid educational services, on the basis of a concluded agreement and a certificate of completion of work.

NSCP RK has a system of paid educational services. The price list for educational services is formed and approved by the planning and economic analysis department, taking into account competitors’ prices and teachers’ salaries. The price list is updated annually, but if programs with a relatively high or low price are discovered, the pricing policy for this educational program is revised in order to ensure the competitiveness of the services of the RSE on the REM “NSCP RK” (Order on approval of the price list for 2024)

### **8.4 Administration**

The academic leader in educational activities is the head of the Training Centre M.K. Kaydaulov. The head is appointed by the director of the NSCP RK, the staff of Academic staff, methodologists and other personnel, the structure of the Training Centre is approved by the director of the NSCP RK.

The composition of teachers involved in the implementation of the educational process is formed by the Director of the NSCP RK, taking into account the requirements of the LSI.

The centre’s employees are the authors of the following methodological developments, which are introduced into the clinical and educational process of the Republic of Kazakhstan and approved at the Republican level (National Scientific Centre for Health Development named after S.Z. Kayrbekova):

1) Infection control for drug-resistant tuberculosis in penitentiary institutions 2020, Authors: Sadykov S.Zh. – coordinator for infection control of the NSCP MOH RK; Adenov M.M. – Director of the NSCP MOH RK, Ismailov Sh.Sh. – Professor, Manager of the SRC “Global Fund in the Republic of Kazakhstan”, Yerimbetov K.D. – Coordinator for tuberculosis control in the penitentiary system of the NSCP MOH RK, Musabekova G.A. - Coordinator of the SRC “Global Fund in the Republic of



Kazakhstan”, Artemasov S.N. – Deputy for medical affairs of the institution EC -166/11 of the Ministry of Internal Affairs of the Republic of Kazakhstan

2) Advocacy, communications and social mobilization in tuberculosis control in the Republic of Kazakhstan. Authors: Ni Z.I., Tsogt G., Adenov M.M., Ismailov Sh.Sh., Musabekova G.A., Sapieva Zh.A., Zheteeva R.

3) Methodological guidance for non-governmental organizations on work in the provision of tuberculosis services. Authors: Adenov M.M., Ismailov Sh.Sh., Kim O., Gombogaram Ts., Pak S.R., Markabaeva T.A., Musabekova G.A., Ramazanova Sh.R.

4) The role of the primary health care network in the control of tuberculosis in Kazakhstan. Authors: Dzhazybekova P.M., Adenov M.M., Ismailov Sh.Sh., Musabekova G.A., Tsogt G., Berikova Ye.A., Arbuzova Ye.V., Tulepova G.Ye., Serikbaeva K. S., Sadykov S.Zh., Sidorenko O.A., Ni Z.I., Ryskulov G.P.

### **8.5 Requirements and regulations**

While planning, developing and implementing the EP residency, the NSCP of the Republic of Kazakhstan follows the recommendations and requirements of the LSI. The Training Centre is responsible for compliance with the relevant regulatory requirements in the RSE on the REM “NSCP RK”. In order to ensure proper management, planning and organization of the training process for students, in the RSE on the REM “NSCP RK”, the “Policy for ensuring internal quality in the field of education” was developed and approved at a meeting of the Academic Council.

The RSE on the REM “NSCP RK” has developed internal regulatory documents - “Standard for ensuring the internal quality of educational activities of the NSCP RK” (Order No. 120, dated 05.10.24), “Academic policy in the field of postgraduate additional and non-formal education” (Order No. 28, from 01/04/23).

**Strengths:** The directions of the scientific and practical journal “Phthiisopulmonology” have been expanded in order to attract specialists of other profiles to publication activities; Methodological recommendations developed and approved at the Republican level (National Scientific Centre for Health Development named after S.Z. Kayrbekova) have been introduced into the clinical and educational process of the Republic of Kazakhstan.

*Conclusions of the EEC according to the criteria.* Complies out of 10 standards: fully – 10.

### **Standard 9: CONTINUOUS RENEWAL**

The NSCP RK developed and approved on May 19, 2022 the Strategic Development Plan for the Centre, which was approved by the Supervisory Board of the NSCP RK (Minutes No. 1 dated 05/19/2022) (hereinafter referred to as the Strategic Plan).

The Centre’s strategic plan was developed on the basis of the Constitution of the Republic of Kazakhstan dated August 30, 1995; Message of the President of the Republic of Kazakhstan “Strategy “Kazakhstan-2050”; Code of the Republic of Kazakhstan dated July 7, 2020 No. 36-VI “On the health of the people and the healthcare system”; Resolution of the Government of the Republic of Kazakhstan dated October 16, 2020 No. 672 “On approval of the list of guaranteed volumes of free medical care and invalidation of certain decisions of the Government of the Republic of Kazakhstan”; Order of the Minister of Health of the Republic of Kazakhstan dated November 30, 2020 No. 214 “On approval of measures to prevent tuberculosis”; WHO Strategies for Ending Tuberculosis 2016–2035.

The Strategic Plan outlines the mission and vision, values and ethical principles of the Centre. An analysis of the current situation and risk management was carried out. Priority areas and measures for their implementation have been identified. Architecture for the relationship between strategic and budget planning has been developed. Strategic directions, goals and target indicators have been established. Resources are planned.

Expanding the list of educational services of the Centre and launching a residency increases the functional responsibilities of the Training Centre staff, thereby leading to an expansion of the structure of the Training Centre in accordance with new realities. In this regard, the Centre plans to expand the

staff of the Training Centre and include the positions of a specialist of office registrar to take into account the evaluation of the knowledge and skills of students, a chief specialist of the simulation centre to ensure control and implementation of the work of mannequins and simulators. Planning for changes in the staff of the training centre is reflected in the memo from the head of the Training Centre and the draft staffing schedule for the new infectious diseases research centre.

The Centre carries out constant monitoring and control over LSI in the field of medical education, which allows eliminating inconsistencies in its activities. The system of monitoring and evaluation of the educational program is carried out at all levels. Monitoring of the implementation of the educational program is carried out by the Training Centre.

Also, work is underway to eliminate documented deficiencies identified during the External Expert Evaluation. Based on the comments of experts from the previous institutional accreditation, the following work was done to eliminate the comments and make recommendations:

1. In the Strategic Plan, provide for the expansion of activities in the field of additional education and determine indicators for the implementation of the plan for the development of human resources. These recommendations have been implemented; the following indicators for evaluating the implementation of educational activities are defined in the strategic plan of the NSCP RK:

– proportion of coverage of primary health care specialists with training in combating tuberculosis. The plan for this indicator is carried out annually. In 2022, the share of PHC staff trained in tuberculosis issues was 15% with a plan of 9.6%, in 2023 17.8% with a plan of 9.8%;

– number of training programs on tuberculosis issues for primary care specialists. The plan for this item for 2023 is 48 programs.

2. To improve the mechanism for involving stakeholders in the development of the mission, goals and final learning outcomes. These recommendations have been implemented; teachers, students of additional education, Centre's staff, heads of structural units and members of the association of phthiopulmonologists take part in the development of the mission, goals and learning outcomes. The developed educational programs are annually reported at the coordination meeting on combating tuberculosis, and thus the mission, goals and results of educational programs are brought to the attention of employers and representatives of the authorized body in the field of healthcare. If there are proposals and comments from interested parties, these proposals are considered at meetings of the educational and methodological council.

3. To ensure a multidisciplinary systematic approach to providing medical care to patients with tuberculosis and lung diseases, develop integrated educational programs with the involvement of specialists in related disciplines. These recommendations were implemented; in 2023, CDP within the framework of PPE 005 was organized in an interdisciplinary format. General practitioners and phthiatricians were trained in one group, which helped in-depth study of the problems of combating tuberculosis by general practitioners.

4. To expand the number of students attending educational programs, taking into account an interdisciplinary approach (nursing medical personnel, social workers, NGOs, the public, etc.). These recommendations have been implemented; educational programs have been developed for a contingent of students consisting of general practitioners, phthiatricians, paediatricians, and nurses.

5. To improve the mechanism and identify responsible persons for the development of educational programs on the basis of internal regulatory documents developed in accordance with LSI in the field of education. These recommendations have been implemented. According to internal documents, educational programs are developed by specialized specialists and are evaluated by the educational and methodological and Academic Councils.

6. To develop a procedure for determining the compliance of the tools used to evaluate the development of students' competencies with the established requirements of LSI in the field of education. These recommendations have been implemented; all tools for evaluating the level of competence before use by students are tested among the teachers of the Centre and receive internal and external expertise.

7. To improve the documentation process and identify responsible persons for issuing strict reporting documents (certificates, identification, etc.). The process of documenting and issuing certificates has been improved. The Training Centre is responsible for this process. Each issued certificate is recorded in the electronic certificate issuance journal.

8. To provide students with access to modern simulation technologies. The Centre's management has taken measures to supply simulation technologies. Simulation technologies will be delivered to the new centre at the end of 2024.

9. To make more active use of information and communication technologies as an integrated part of training and evaluation of the development of students' competencies (computer testing). The Centre actively uses the Moodle system in the process of training and evaluating the knowledge of students in additional and non-formal education. Also, the NSCP RK has introduced an automated system "Platonus", which has the ability to test residency students.

10. To improve mechanisms for monitoring and evaluating educational programs by stakeholders in order to improve the quality of additional education. Taking into account the results of benchmarking with KazNMU, monitoring and evaluation of the Centre's programs is planned to be carried out by a commission to evaluate quality by filling out checklists. Recommendations will be reported at a meeting of the Academic Council. Also, evaluation of educational programs will be carried out during internal audits.

The structure of the Centre should include a unit responsible for the implementation of educational programs of additional education with a specific staffing structure and established procedures for documenting processes in accordance with the requirements of the QMS. The structure of the Centre includes a Training Centre for the implementation of additional and non-formal education programs. All procedures of the educational process are documented.

In order to improve the learning environment, the Training Centre conducts benchmarking with educational organizations of the Republic of Kazakhstan. While benchmarking the educational program of the NSCP RK and medical universities (KazNMU and KRMU), a high level of provision of universities with access to international databases, the organization of training on a modular basis (where applicable), the use of an interdisciplinary approach in the learning process, and the use of simulation technologies in the learning process were revealed. As a result of the benchmarking, the Centre entered into an agreement with the libraries of KazNMU and KRMU, introduced a modular approach to some educational residency programs, and introduced the practice of an interdisciplinary approach in additional education. In addition, by the end of 2024 it is planned to equip the training centre with simulation equipment.

Monitoring of the equipment of educational programs with the material and technical base is carried out by all structural divisions (library, Training centre, scientific department). Every year, an application for the necessary material and technical equipment is generated and submitted to the planning and economic analysis department for inclusion in the economic plan and procurement.

At the Centre, the decision on spending funds is made by the Supervisory Board (Approved by Order of the Ministry of Health of the Republic of Kazakhstan No. 453 of June 27, 2017).

Also, the equipment will be checked when monitoring the quality of educational programs by a quality evaluation commission.

Over the past 5 years, the following changes have occurred in the material and technical base:

1. Expansion of the classroom fund. The total classroom fund has increased by 60% since 2019 and currently amounts to 201 m<sup>2</sup>;

2. A separate block has been allocated for students (offices of the Training Center, departments of KazNMU and KRMU);

3. The library collection has been expanded. Over the past 5 years, the Library's collections have been replenished with 19 textbooks in areas of residency and 12 dissertation abstracts;

4. The Moodle distance learning system was purchased and implemented;

5. Access to international databases Scopus, Sciencedirect, Webofscience is provided;

6. The AIS “Platonus” system was purchased and implemented to record and monitor the knowledge of residency students;

7. A system for checking text borrowings (anti-plagiarism) was purchased and implemented;

8. It is planned to purchase simulation technologies through funding from the Government of the Republic of Kazakhstan as part of the construction of a new infectious diseases center.

Teachers are trained in pedagogical methods.

The distribution of resources to improve educational activities is carried out on the basis of the formation of applications from structural divisions. The completed application is sent to the planning and economic analysis department for inclusion in the procurement plan. The decision to allocate funds for planned services is made by the Supervisory Board

In order to ensure compliance of the Centre’s resource base with the requirements of LSI, internal and external quality evaluations are carried out. The Training Centre is responsible for implementing recommendations made by members of the external expert group.

Over the past 5 years, 80,749,389.6 tenge have been allocated from the budget for the development of educational activities.

In order to attract extra-budgetary funds, we recommend generating a QR code for the pages of the official Internet site, which contain up-to-date information about prices and services provided by the Centre.

Sponsor support is provided regularly free of charge at the expense of international and domestic organizations: the Global Fund, KNCV, USAID, Partners for Health, and Association of Phthisiopulmonologists of the Republic of Kazakhstan.

The Centre has various mechanisms for providing training with educational literature and has free electronic access to the unified bibliographic and abstract database Scopus (<https://www.scopus.com/home.uri>) and the full-text Sciencedirect database (<https://www.sciencedirect.com/>). Residents of the Centre receive access to the above databases after registering in the databases through computers installed in the Centre (access is given to the organization’s IP address).

**Conclusions of the EEC according to the criteria.** Comply out of 5 standards: fully - 4, partially - 1, do not comply - 0.

**Recommendations for improvement:**

- 1) For ease of navigation on the official Internet site, to generate a QR code to obtain the necessary operational information about prices and services provided by the Centre (9.2).

Thus, during the external institutional evaluation, compliance with 9 accreditation standards was established, including 62 basic standards and 30 improvement standards. 6 basic standards and 3 improvement standards are partially met. No non-compliance with standards has been identified. Compliance with improvement standards indicates compliance of the educational organization with international consensus in such areas as “Phthisiology for adults, children”; “Pulmonology for adults, children”; "Radiology".

**5. Improvement recommendations of the institutional activities of the educational organization of the RSE on the REM “National Scientific Centre for Phthisiopulmonology of the Republic of Kazakhstan” of the Ministry of Health of the Republic of Kazakhstan:**

- 1) It is recommended to digitize the unique archive of radiographs available at the centre for further use by all medical universities of the Republic in the form of an electronic textbook (2.3.1).
- 2) Using the experience of highly qualified specialists in advanced technologies for treating tuberculosis; to develop an Educational program on socially significant diseases of adults and children (2.3.1).
- 3) To unify and update all centre documents related to educational and scientific activities in accordance with current regulations (3.2.1).

- 4) To develop a mechanism and form for analysing feedback from participants in the educational process (Academic staff, employers) (clause 5.2.4.)
- 5) In order to use the available modern simulation equipment in the educational process, to train the Academic staff in innovative technologies (clause 5.2.4.).
- 6) To improve the conditions for locating the library and replenish the fund with educational and scientific literature on accredited specialties, as well as provide electronic educational resources (6.1.3).
- 7) Together with non-governmental organizations, to develop and implement Educational programs at all levels of education on early detection and treatment of tuberculosis (7.2.6).
- 8) For ease of navigation on the official Internet site, to generate a QR code to obtain the necessary operational information about prices and services provided by the Centre (9.2).

ЕЦАОА

## 6. Recommendation to the ECAQA Accreditation Council

The members of the EEC came to a unanimous opinion to recommend that the ECAQA Accreditation Council RSE on the REM “National Scientific Centre for Phthisiopulmonology of the Republic of Kazakhstan” of the Ministry of Health of the Republic of Kazakhstan, to accredit the above-mentioned organization for a period of 5 years.

Chairman	Imasheva Bagdat Sakenovna	
Foreign expert	Ryzhkin Sergey Alexandrovich	
Academic expert	Kurmanova Almagul Medeubaevna	
Academic expert	Ramazanova Sholpan Khamzaevna	
Academic expert	Bugakov Anatoly Alekseevich	
Academic expert	Iztleuov Yerbolat Maratovich	
Expert employer	Ursasheva Gulmira Sayynbaevna	
Expert student	Tertyubaeva Zhazira Orumbekovna	

**Профиль качества и критерии внешней институциональной оценки  
РГП на ПХВ Национальный научный центр фтизиопульмонологии МЗ РК  
(обобщение)**

Standard	Критерии оценки	Количество стандартов	Базовые стандарты/ Стандарты улучшения	Оценка		
				Полностью соответствует	Частично соответствует	Не соответствует
1.	<b>МИССИЯ И КОНЕЧНЫЕ РЕЗУЛЬТАТЫ</b>	9	7/2	7/2	0	0
2.	<b>ОБРАЗОВАТЕЛЬНЫЕ ПРОГРАММЫ</b>	13	9/4	8/4	1	0
3.	<b>ОЦЕНКА КОМПЕТЕНЦИЙ СЛУШАТЕЛЕЙ И ДОКУМЕНТАЦИЯ</b>	10	7/3	6/3	1	0
4.	<b>СПЕЦИАЛИСТЫ ЗДРАВООХРАНЕНИЯ (ИНДИВИДУАЛЬНОЕ ПРОФЕССИОНАЛЬНОЕ РАЗВИТИЕ)</b>	11	8/3	8/3	0	0
5.	<b>ПРЕПОДАВАТЕЛИ</b>	9	4/5	4/4	1	0
6.	<b>ОБРАЗОВАТЕЛЬНЫЕ РЕСУРСЫ</b>	15	10/5	9/5	1	0
7.	<b>ОЦЕНКА ПРОГРАММ ДОПОЛНИТЕЛЬНОГО И НЕФОРМАЛЬНОГО ОБРАЗОВАНИЯ</b>	10	5/5	5/4	1	0
8.	<b>ОРГАНИЗАЦИЯ</b>	10	7/3	7/3	0	0
9.	<b>НЕПРЕРЫВНОЕ УЛУЧШЕНИЕ</b>	5	5/0	4/0	1	0
	<b>Итого:</b>	<b>92</b>	<b>62/30</b>	<b>58/28</b>	<b>6</b>	<b>0</b>
			<b>92</b>			

**Список документов, изученных членами ВЭК в рамках проведения внешней оценки организации: Национальный научный центр фтизиопульмонологии РК**

<b>№</b>	<b>Наименование документа</b>	<b>Примечание</b>
1	Лицензия образовательная лицензия «Здравоохранения»	№ KZ02LAA00009671 Дата выдачи: 04.07.2017 г.
2	Рецензия на образовательную программу послевузовского образования	Резидентура Фтизиатрия взрослая, детская 140 кредитов
3	Рецензия на силлабус	Повышение квалификации Туберкулез детского возраста 60 часов
4	Рецензия на контрольно-измерительные средства (КИС)	Повышение квалификации Бактериологическая диагностика туберкулеза 60 часов
5	Рецензия на контрольно-измерительные средства (КИС)	Повышение квалификации Лабораторная диагностика туберкулеза в ПМСП 60 часов
6	Акт внедрения	Повышение квалификации Раннее выявление, диагностика и профилактика туберкулеза в сети ПМСП 120 часов/ 4 кредита
7	Дополнительное соглашение к Трудовому договору Жапаркулова М.А.	Оказание услуг по ННР
8	Копия - Меморандум о сотрудничестве «Новосибирский научно-исследовательский институт туберкулеза» МЗ РФ	Срок договора 3 года Заключен 2018 году
9	Копия – Соглашение о сотрудничестве Центр грудной хирургии СУАР КНР	Срок договора с 2020 года по 2022г.
10	Копия – Меморандум о соглашении Таджикистан	Срок договора не указан Подписан в 2021 году
11	Копия – Меморандум о научно-техническом и образовательном сотрудничестве Национальный центр Туберкулеза и заболеваний легких Республики Грузии	Подписан в 2021 году
12	Копия – Соглашение о научно-техническом и образовательном сотрудничестве АО «Генериум»	Подписан 2019 года
13	Копия – Меморандум о научно-техническом и образовательном сотрудничестве Республиканский центр по защите населения от туберкулеза МЗИСЗ Республики Таджикистан	Подписан 2019 года
14	Копия – Меморандум о взаимопонимании и сотрудничестве Центр изучения Глобального здоровья в Центральной Азии	Подписан 2018 года



15	Положение об информационной политике	03.05.2021г.
16	Кодекс чести и академической честности резидента	10.05.2024г.
17	Договор о совместной деятельности АО «Научный центр педиатрии и детской хирургии»	27.06.2022г.
18	Договор о совместной деятельности «Городская поликлиника №1» г.Алматы	04.08.2023г.
19	Договор о совместной деятельности ГКП на ПХВ «Центральная городская клиническая больница» г.Алматы	13.06.2022
20	Соглашение о сотрудничестве – РГП на ПХВ «Казахский научно-исследовательский институт онкологии и радиологии»	30.04.2024г.
21	Договор о совместной деятельности «Городская поликлиника № 6» г.Алматы	10.05.2024г.
22	Положение о наблюдательном совете	
23	Кодекс корпоративного управления для медицинских организаций в форме ННЦФ РК с наблюдательным советом	31.12.2019г.
24	Положение о службе внутреннего аудита	2021г.
25	Журнал «ФТИЗИОПУЛЬМОНОЛОГИЯ»	№ 01/2023
26	Положение о научном стимулировании сотрудников	2023г.
27	Журнал ознакомления слушателей с правилами инфекционной безопасности	За 2023 год
28	Договор №287-С о предоставлении услуг ФО «Plagiat.pl»	24.10.2023г.
29	Журнал ознакомления слушателей с правилами техники безопасности	За 2023 год
30	Выписка из протокола Ученого совета №2 от 10.05.2024г.	Утверждение миссии
31	Личные дела: Серикбаева К.С. Кастыкпаева Л.В. Бисмилда В.Л.	
32	Трехсторонний договор оказания услуг № 165-Г от 03.06.2024г. ОО «Цифра»	
33	Кадровая политика ННЦФ РК на 2021-2024 гг.	приказ № 100 от 3 мая 2021 года
34	Положение об информационной политике	03.05.2021г.
35	Прейскурант цен на платные образовательные услуги	На 2024г.
36	Приказ о утверждении прейскуранта цен на 2024г.	
37	Дополнительное соглашение № 2 к ТД от 03.02.2022г. Жапаркуловой М.А.	Согласие на преподавание
38	Журнал выдачи свидетельств за 2019 г.	Электронная версия
39	Рецензия на образовательную программу послевузовского образования	Резидентура Радиология 140 час.

40	Кодекс чести ППС	10.02.2024г.
41	Положение об Ученом совете	02.01.2022г.
42	План работы Ученого совета	2024г.
43	Положение учебно-методического совета	2022-2025
44	Положение о поддержке и стимулировании резидентов	2024-2028
45	Положение о совете резидентов	2024-2027
46	Положение о порядке подачи документов для получения акта внедрения инновационных технологий в образовательный процесс	2024-2027
47	Анкета слушателей	
48	Перечень технологического оборудования	
49	Академическая политика	2023-2026
50	Образовательная программа резидентуры по специальности «Фтизиатрия взрослая, детская»	2023-2025
51	Приказ «О создании Локальной комиссии по биоэтике»	№4-п от 05.01.2021г.
52	Годовой план работы Локальной комиссии по биоэтике	На 2024 год.
53	Положение о наставничестве резидентов ННЦФ	приказ №120 от 10 мая 2024 года
54	Положение о педагогической нагрузке преподавателя ННЦФ РК	приказ №120 от 10 мая 2024 года
55	Сертификаты по ПК: Аденова М.М., Аманжоловой Л.К. Серикбаевой К.С. Матжановой АА.	

## ПРОГРАММА

**посещения Внешней Экспертной Комиссии Евразийского Центра Аккредитации и обеспечения качества образования и здравоохранения (ЕЦА) Национального научного центра фтизиопульмонологии МЗ РК (ННЦФ РК) в рамках институциональной аккредитации с 11.06. по 13.06.2024 года (г. Алматы, ул. Бекхожина 5)**

№	МЕРОПРИЯТИЯ	ПРИМЕЧАНИЯ
<b>День заезда членов ВЭК – 10.06.2024 (понедельник)</b>		
	Предварительная встреча всех членов Внешней экспертной комиссии (ВЭК). Знакомство, распределение ответственности членов ВЭК Краткий обзор по Отчету по институциональной самооценке ННЦФ РК и отчетам по самооценке образовательных программ резидентуры по специальностям пульмонология, фтизиатрия, радиология. обсуждение ключевых вопросов. Обсуждение программы и графика посещения ННЦФ РК	Транспорт, встреча и сопровождение.
<b>День первый – 11.06.2024 (вторник)</b>		
08:45	Сбор членов ВЭК - г. Алматы, ул. К. Бекхожина, д. 5 Главное здание	
08.50-09.20 (30')	Совещание членов ВЭК. Обсуждение программы и графика посещения ННЦФ РК в 1-й день визита. г. Алматы, ул. К. Бекхожина, д. 5 Главное здание, Малый конференц-зал	<b>Стандарты аккредитации*</b>
09.20-09.35 (15')	<b>Встреча председателя и членов ВЭК с руководством ННЦФ РК</b> Представление членов ВЭК, ознакомление с целями визита. Интервью с руководством, директором Аденовым М.М. (миссия, цели, задачи, оргструктура, перспективы).	Стандарты 1,8,9
09.35-09.55 (20')	<b>Обзорная презентация о деятельности ННЦФ РК</b> (миссия, стратегический план, программы НПР, статистика набора слушателей в динамике по годам, преподаватели, ресурсы, перспективы развития в дополнительном образовании). <i>Руководитель учебного центра Кайдаулов М.К.</i> ул. К. Бекхожина, д. 5 Главное здание, Малый конференц-зал	Стандарты 1,2,8,9
09.55-10.15 (15')	<b>Интервью с главным научным сотрудником Ералиева Ляззат Тасбулатовна</b> <b>Интервью с и.о замдиректора по экономическим вопросам Рыскулов Галымжан Пернебекович</b>	Standard 6,8,9
10.15-10.30 (15')		Стандарты 8,9
10.30-10.45 (15')	Совещание ВЭК. Обсуждение полученной информации.	
10.45-11.45 (60')	<b>Посещение Национального Учебного центра ННЦФ РК</b> Руководитель – Кайдаулов Мухтар Кенжебекович	Standard 2-8,9

	Заместитель руководителя – Сидоренко Ольга Альбертовна			
11.45-12.05 (20')	<b>Интервью с международными и республиканскими партнерами</b>			Стандарты 2,3,4,6
12.05-12.25 (20')	<b>Интервью с работодателями (онлайн)</b>			
12.25-12.45 (20')	<b>Интервью со слушателями и выпускниками программ повышения квалификации</b> (+бланочное анкетирование) <i>ул. К. Бекхожина, д. 5 Главное здание, Малый конференц-зал</i>			Стандарты 2,3,4,6
12.45-13.00 (15')	<b>Интервью с руководителями структурных подразделений</b> <i>ул. К. Бекхожина, д. 5 Главное здание, Малый конференц-зал</i>			
13:00-14:00	<b>Перерыв на обед</b>			
14.00-14.10 (10')	Совещание ВЭК. Обсуждение полученной информации.			
14.15-14.45 (30')	<b>Встреча с членами Ученого совета, секретарем</b> (рассмотрение и утверждение учебно-методических материалов)			Стандарты 2,8
14.50-15.30 (40')	<b>Интервью с преподавателями</b> (+бланочное анкетирование) <i>ул. К. Бекхожина, д. 5 Главное здание, Малый конференц-зал</i>			Стандарты 1,2,3, 4,5,6,7
15.35-15.55 (50')	<b>Локальный этический комитет.</b> Встреча с заместителем председателя ЛЭКАманжолова Лайля Кусаиновна и членами ЛЭК <i>ул. К. Бекхожина, д. 5 Главное здание, Малый конференц-зал</i>			Стандарты 6,7,8,9
16.00-16.40 (40')	<b>Библиотека</b> <b>Редакция журнала «Фтизиопульмонология».</b>			Стандарты 2,6,8,
16.40-17.40 (60')	Изучение учебных программ, информационно-методических и образовательных материалов по дополнительному образованию и программам резидентуры.			
17.40-18.00	<b>Совещание ВЭК, подведение итогов 1-го дня визита</b>			
<b>День второй – 12.06.2024 (среда)</b>				
08:45	Сбор членов ВЭК - г. Алматы, ул. К. Бекхожина, д. 5 Главное здание			
09.00-09.15 (15')	Совещание членов ВЭК. Обсуждение программы и графика посещения ННЦФ РК во 2-й день визита. <i>г. Алматы, ул. К. Бекхожина, д. 5 Главное здание, Малый конференц-зал</i>			
09.15-10.30 (75')	<b>Осмотр ресурсной базы ННЦФ РК</b> для проведения программ повышения квалификации врачей и среднего медицинского персонала (посещение отделений, беседы с руководителями) и программ резидентуры:			Стандарты 2,5,6,7
	Резидентура по пульмонологии	Резидентура по фтизиатрии	Резидентура по радиологии	

	<p>– Отделение дифференциальной диагностики и лечения больных без бактериовыделения №4. Руководитель: к.м.н., Егенова Лаура Пернебаевна</p>	<p>– Отделение лечения больных туберкулезом с бактериовыделением №3. Руководитель: Жапаркулова Майра Алтынбековна</p> <p>– Отделение лечения детей и подростков ТБ и МЛУ ТБ №5. Руководитель: к.м.н., Серикбаева Кагаз Султангалиевна</p>	<p>– Отделение лучевой, инструментальной, функциональной диагностики. Руководитель: к.м.н., Караев Оруч Суманиевич</p>	
10.30-10.45 (15')	Совещание ВЭК. Обмен мнениями.			
10.45-12.35 (50')	<p><b>Посещение практических и семинарских занятия для слушателей</b></p> <p><b>Тема:</b> Лабораторные методы выявления ТБ. Инвазивные методы диагностики, применяемые во фтизиатрии <i>Преподаватель: Чингисова Ляйля Турсынбековна</i></p> <p><b>Тема:</b> Раннее выявление, диагностика и профилактика туберкулеза в сети ПМСП <i>Преподаватель: Сидоренко Ольга Альбертовна</i></p>			Стандарты 2,3,4,5,6,7
12.35-13.00 (25')	Отдел по управлению персоналом			Стандарты 5,8
13:00-14:00	<b>Перерыв на обед</b>			
14.00-14.10 (10')	Совещание ВЭК. Обмен мнениями.			
14.15-14.30 (15')	Встреча с сотрудником Службы безопасности и охраны труда			Стандарты 2,6,9
14.35-15.20 (45')	<p>- Посещение Национальной референс бактериологической лаборатории Руководитель: Чингисова Ляйля Турсынбековна</p> <p>- Клинико-диагностической экспресс-лаборатории Руководитель: Телегина Елена Петровна</p>			Стандарты 2,6
15.20-16.00 (40')	Отдел науки, стратегического развития и международного сотрудничества			Стандарты 2,6,7,8
16.00-17.30	Изучение документации Программы дистанционного обучения			

17.30-18.00	<b>Совещание ВЭК, подведение итогов 2-го дня визита</b>	
<b>День третий – 13.06.2024 (четверг)</b>		
08:45	Сбор членов ВЭК - г. Алматы, ул. К. Бекхожина, д. 5 Главное здание	
09.00-09.15 (15')	Совещание членов ВЭК. Обсуждение программы и графика посещения ННЦФ РК в 3-й день визита. г. Алматы, ул. К. Бекхожина, д. 5 Главное здание, Малый конференц-зал	
09.15-09.45 (30')	Посещение зала Телемедицины, беседа с участниками (слушатели, преподаватели, сотрудники)	Стандарты 2,5,6,7
09.50-11.30	Посещение смежных клинических баз для реализации программ резидентуры пульмонологии, радиологии и фтизиатрии Дополнительные встречи с сотрудниками ННЦФ по запросу членов ВЭК Изучение документации по дополнительному запросу членов ВЭК	Стандарты 2,5,6,8,9
11.30-13.00	Проектирование отчета, разработка рекомендаций по улучшению	
13.00-14.00	<b>Перерыв на обед</b>	Standard 2,3
14.00-15.30	Обработка результатов, заполнение профилей качества и критериев внешней оценки	
15.30-15.50	Оглашение результатов институциональной и программной внешней оценки руководству ННЦФ	
15:50-16:30	Завершение работы ВЭК	
16:30	Выезд ВЭК из ННЦФ	