



RESIDENCE EDUCATIONAL PROGRAM
7R01136
GENERAL SURGERY

OŃTÚSTIK-QAZAOSTAN MEDISINA AKADEMIASY «Оңтүстік Қазақстан медицина академиясы» АҚ Surgery department Educational program 7R01136 General Surgery SOUTH KAZAKHSTAN MEDICAL ACADEMY AO «Южно-Казахстанская медицинская академия» 044-44 / 11 P () 2 p. of 18

The educational residency program General Surgery was developed on the basis of the order of the Minister of Health of the Republic of Kazakhstan dated January 25, 2024 No. 46 «On approval of professional standards in the field of healthcare».

| Position | Full name | Signature |
|--|------------------|-----------|
| Developed | | |
| Teaching staff of the Department of Surgical Disciplines | | 0 00 |
| Head of the Department Ph.D., Associate Professor | Zhumagulov K.N. | Karel |
| And about. Associate Professor of the Department, Ph.D. | Baimedetov R.E. | There |
| Representative of practical healthcare | | Ma |
| Deputy.the chief physician of the OKB UOZ TO | Aimagambetov M.B | 544) |
| Resident of the EP General Surgery | Ryskulbekov E.B. | (July |
| Minutes of the meeting of the department No. 615 from "25" " January "2024 | | 110 |
| Discussed at a meeting of the KOP residency | | |
| Chair of the CEP on "Surgical Profiles" PhD, Ass. Professor | Kulbaeva S.N. | Ryl |
| from "LG" " January "2024 | | |
| First Vice-Rector of SKMA Ph.D., professor Protocol No ot « 50 » « Journ» 2024 y. | Yesirkepov M.M. | u.u.sf_ |
| Approved by the Academic Council | | |
| ProtocolNo. 14 from "31" " January " 2024 | | |

SOUTH KAZAKHSTAN MEDICAL

ACADEMY

АО «Южно-Казахстанская медицинская академия»

Surgery department

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Educational program passport

SKMA

1. The mission of the educational program: To be a recognized leader in the training of highly specialized, competitive surgeons.

Duration of study: 2 years

Qualification awarded upon completion of study - doctor-surgeon.

- 2. The purpose of the educational program: training a qualified surgeon who has a system of universal, professional competencies, capable and ready for independent professional activity in primary health care: palliative care for surgical patients.
- 3. Rationale for the educational program: Achieving a high quality of postgraduate medical education by presenting mandatory requirements for the level of training of students in residency in surgery; Regulation of the educational process and the creation of a system for monitoring the effectiveness of the work of educational and scientific organizations that train residents in surgery; Streamlining the rights and responsibilities of students in residency, stimulating independent educational and practical activities of residents in surgery; ensuring the integration of practice and theory; to consolidate the skills of basic medical diagnostic and preventive interventions; improvement of practical skills according to modern principles of early, differential diagnosis, interpretation of the results of the examination from the standpoint of evidence-based medicine, treatment and prevention of surgical diseases using surgical methods; to teach to comply with the requirements of medical ethics and deontology when conducting expert, preventive and therapeutic and diagnostic measures.
- 4. The professional standard on the basis of which the educational program was developed:
- Order of the Minister of Science and Higher Education of the Republic of Kazakhstan "On Approval of State Generally Binding Standards for Higher and Postgraduate Education" dated 20.07.2022, N

 2, as amended and supplemented by February 20, 2023 No. 66;
- Order of the Minister of Health of the Republic of Kazakhstan "On the Approval of State Generally Binding Standards for Education in the Field of Health" dated 04.07.2022, No. KR DSM-63;
- Order of the Minister of Health of the Republic of Kazakhstan "On approval of standard training programs in medical and pharmaceutical specialties" of 09.01.2023 No. 4;
- Order of the Vice-Minister of Health of the Republic of Kazakhstan "On approval of the phased introduction of continuous integrated medical education" dated 08.08.2022 No. 661;
- Law of the Republic of Kazakhstan "On Education" of 27.07.2007 No. 319-III, as amended and supplemented by 04.07.2022.
- 7. Order of the Minister of Education and Science of the Republic of Kazakhstan dated 16.10.2013 No. 420 "On Approval of the Model Rules for the Activities of Organizations of Higher and (or) Postgraduate Education" with amendments and additions dated 29.12.2021;
- Order of the Minister of Education and Science of the Republic of Kazakhstan dated 20.04. 2011 No.
 "On Approval of the Rules for Organizing the Educational Process on Credit Training Technology" (as amended and supplemented as of 06.05.2021)
- Order of the Minister of Health of the Republic of Kazakhstan of 30.01.2008 No. 27 "On Approval
 of the List of Programs of Continuous Integrated Education in Clinical Specialties" (as amended and
 supplemented as of 14.05.2021;
- 10. "On Approval of the Model Rules for the Activities of Educational Organizations of Relevant Types and Types," Order of the Minister of Education and Science of the Republic of Kazakhstan of 30.10.2018 N° 595 with amendments and additions dated 29.12.2021

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11. Professional standard: Standard of organization of surgical (abdominal, thoracic, coloproctological) care in the Republic of Kazakhstan

Order of the Minister of Health of the Republic of Kazakhstan dated March 20, 2023 No. 41.

"Guidelines for the Development of Educational Programs of Higher and Postgraduate Education"
 Order of the Director of CBP AM No. 45

Ministry of Education and Science of the Republic of Kazakhstan dated June 30, 2021

- "Regulation on Procedure and Procedures for Development of Educational Programs" "SKMA" dated 29.05.2019.
- 14. Internal regulatory documents of SKMA.
- **5.** Area of professional activity: development of the educational program 7R01136 General surgery includes the provision of surgical care to the population at the prehospital and hospital levels.

6. Objects of professional activity:

- 1. organization of health management;
- 2. organization of education:

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АСАDEMY АО «Южно-Казахстанская медицинская академия»

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General information

| No | Characteristics of EP | Data |
|----|---|---|
| 1 | Registration number | 7R09100125 |
| 2 | Code and classification of the field of education | 7R01 Health (medicine) |
| 3 | Code and classification of areas of study | 7R011 Health care |
| 4 | Group of educational programs | R036 General surgery |
| 5 | Code and name of the educational program | 7R01136 General surgery |
| 6 | OP type | Updated EP |
| 7 | ISCED level | 7 |
| 8 | NQF level | 7 |
| 9 | ORC level | 7 |
| 10 | Distinctive features of the EP | No |
| | Partner HEI (JEP) | No |
| | Partner HEI (Double degreeEP) | No |
| 11 | List of competencies | and scientific medical knowledge to provide qualified medical assistance CC 2 Communications: Effectively interact with the patient, his environment, healthcare professionals in order to achieve the best results for the patient CC 3 Clinical skills: Delivering qualified medical care in a basic category of difficulty. Definition of the strategy for the provision of qualified health care to the population of the second category of complexity CC 4 Professionalism: Coordination of activities in healthcare organizations. Ability to make decisions and be held accountable for the outcome of qualified medical care CC 5 Personal and professional development: Ability to study independently and train other members of the professional team, actively participate in discussions, conferences and other forms of continuous professional development CC 6 Regulatory and legal knowledge: Ability to act within the legal and organizational framework of the health care system of the Republic of Kazakhstan. CC 7 Research: Ability to research and evaluate the results of their professional activities, the application of the principles of diagnosis of diseases based on scientific evidence. |
| 12 | Learning Outcomes | LO1 Able to formulate a clinical diagnosis, prescribe a treatment plan and evaluate its effectiveness based on evidence-based practice at all levels of surgical care. |

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| | | LO2 Able to interact effectively with the patient, his environment, healthcare professionals in order to achieve the best results for the patient LO3 is able to assess risks and use the most effective methods to ensure a high level of safety and quality of surgical care. LO4 Able to act within the legal and organizational framework of the healthcare system of the Republic of Kazakhstan in his specialty, provide basic assistance in emergency situations, work as part of interprofessional teams to implement the policy of promoting the health of the nation LO5 is able to formulate adequate research questions, critically evaluate professional literature, effectively use international bases in their daily activities, participate in the work of a research team. LO6 Able to learn independently and train other members of a professional team, actively participate in discussions, conferences and other forms of continuous professional development. |
|----|---|---|
| 13 | Form of study | full-time |
| 14 | Language of instruction | Kazakh and Russian |
| 15 | Volume of credits | 210 |
| 16 | Period of training | 3 year |
| 17 | Awarded qualification | Surgeon |
| 18 | Availability of an application to the license for the direction of personnel training | KZ22BFA00167288 |
| 19 | Availability of EP accreditation | Yes |
| | Name of the accreditation body | NM «Independent Accreditation and Rating Agency» |
| | Validity of accreditation | № AB 3985 |
| | | Residency 10.06.2022 -09.06.2027 |
| 19 | Information about disciplines | Application 1.2 |

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Application 1.1

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Matrix of correlation of educational program results with competencies to be formed

| | LO1 | LO2 | LO3 | LO4 | LO5 | LO |
|-----|-----|-----|-----|-----|-----|----|
| CC1 | + | | + | | + | |
| CC2 | | + | | + | | + |
| CC3 | + | | + | + | | |
| CC4 | + | + | + | + | | |
| CC5 | | + | | | + | + |
| CC6 | | | + | + | | + |
| CC7 | + | | + | | + | + |

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Surgery department

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Educational program 7R01136 General Surgery

Application 1.2

Competency/Learning Outcomes Achievability Matrix

| № | Name of the discipline | Brief description of the discipline | Cycle (PD) | Component (UC) | Number of credits | Formed learning outcomes (codes) |
|---|------------------------|---|---------------|-------------------|-------------------------|---|
| 1 | Planned surgery | Formation of knowledge, skills in clinics and surgical diseases of the esophagus, stomach, intestine and rectum, hepatobyllic zone, mediastinum and diaphragm, parasitic diseases, blood and endocrine system, abdominal hernia, metabolic syndrome and obesity. Surgical treatment with application of scientific research and knowledge of evidence-based medicine in practical practices and research. Prevention of work. | PD | UC | 58 | LO1 LO2 LO6 |
| 2 | Emergency surgery | Formation of knowledge, skills and mastery of practical skills in modern highly specialized methods of diagnosis and treatment of emergency surgical diseases and injuries. Emergency surgical care with the application of scientific research and knowledge of evidence-based medicine in medical practices and research. | PD | UC | 60 | LO1 LO2 LO4 |
| 3 | Purulent surgery | Formation of knowledge, skills in the diagnosis of purulent-inflammatory diseases of the skin and soft tissues, purulent-septic signs of surgical disease of internal organs, clinical-laboratory and instrumental diagnostics, skills in differential diagnosis, | PD | UC | 32 | LO1 LO2 LO6 |

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| | | diagnosis, prescription of surgical treatment using scientific research and knowledge of evidence- based medicine in practical practices and research. | | | | |
|---|---------------------------|--|----|----|----|-------------------|
| 4 | Surgery in the polyclinic | Formation of knowledge, skills and mastery of practical skills for independent implementation of diagnostic, therapeutic and preventive measures in outpatient surgery. Clinical protocols. Surgical care with application of scientific research and knowledge of evidence-based medicine in practical practices and research. | PD | UC | 16 | LO2 LO3 |
| 5 | Thoracic surgery | Deepening theoretical knowledge on modern high- tech methods of diagnostics and surgical interventions for surgical diseases and injuries of the chest organs. Mastering the practical skills necessary for the development of new operations by residents, able to successfully independently solve problems in professional activities, to be well oriented in an effort to deepen knowledge of related disciplines. | PD | UC | 8 | LO1 LO2 LO6 |
| 6 | Pediatric surgery | As development progresses, the resident will gradually determine the definition, etiology, pathogenesis, clinic of surgical disease in children, examination, diagnosis, determination of conservative treatment, based on the obtained basic knowledge. Surgical treatment using scientific | PD | UC | 8 | LO1 LO2 LO6 |

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| | | research and knowledge of evidence-based medicine. Able to independently and successfully solve professional problems and master the professional sphere, possessing developing thinking. | | | | |
|---|---------------------------------|--|----|----|---|-------------------|
| 7 | Gastroenterology with endoscopy | Formation of knowledge and skills on modern highly specialized endoscopic methods for diagnosing the pathology of the esophagus, stomach, small and large intestines, biliary tract, bleeding from the digestive tract, foreign bodies of the digestive system. Endoscopic devices and tools. Appointments and contraindications for the use of minimally invasive technologies in emergency and elective surgery. Scientific research and knowledge of evidence-based medicine. | PD | UC | 5 | LO3 LO5 |
| 8 | Traumatology | Formation of knowledge and skills on general issues of organizing traumatological and orthopedic care in the Republic of Kazakhstan, etiology, pathogenesis, clinical symptoms, knowledge of the main traumatological diseases, their prevention, treatment for fractures of tubular bones and spine. Emergency care for traumatological and orthopedic diseases. Treatment from the standpoint of evidence-based medicine. The resident is able to independently and successfully solve professional problems. | PD | UC | 5 | LO1 LO2 LO6 |

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| 9 | Urology | Semiotics of urological diseases. Endoscopic methods of examination and treatment. Nephrolithiasis. Acute and chronic diseases of the prostate gland, appendages of the testicle. Emergency urology. Acute and chronic renal failure. Hydrocele, spermatocele. Varicocele. Neoplasms of the genitourinary system. Parasitic diseases of the genitourinary organs. Infertility, impotence. Genital injuries. | PD | UC | 5 | LO1 LO2 LO6 |
|----|--|---|----|----|-----|-------------------|
| 10 | Anesthesiology and resuscitation | Formation of residents' knowledge of anesthesiology and resuscitation in surgery. Rules for conducting infusion and transfusion therapy during anesthesia. The ability to control breathing and blood circulation, diagnose various complications during anesthesia and surgery, diagnose circulatory arrest, perform resuscitation (CPR), diagnose brain death. Emergency surgical care using evidence-based medicine. | PD | UC | 3 | LO3 LO4 |
| | Total | medicine. | | | 200 | |
| 1 | Endovideolaparoscopic interventions in abdominal surgery | Formation of knowledge on endovideolaparoscopic interventions in abdominal surgery. Principles of work with endosurgical equipment. Modern highly specialized laparoscopic surgery: peptic ulcer of the stomach and duodenum, hepatobiliary zone, diseases of the spleen. Laparoscopic appendectomy, removal of Meckel's diverticulum. | PD | OC | 2 | LO3 LO5 |

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| | | laparoscopic resection of the small intestine. Laparoscopic hernioplasty. Scientific research and knowledge of evidence-based medicine. | | | | |
|---|---|--|----|----|---|------------|
| 2 | Interventional radiology in surgery | Formation of knowledge on interventional radiology in surgery. X-ray endovascular interventions, main types. Scientific research and knowledge of evidence-based medicine in medical practices and research. | PD | OC | 2 | LO3 LO5 |
| | Actual problems of surgical endocrinology | Invocation methods of diagnosis and differential diagnosis, and treatment: type 1 and 2 diabetes mellitus, complications of diabetes mellitus, diabetic foot syndrome, endocrine tumors of the pancreas, parathyroid diseases, obesity, metabolic syndrome, thyroid diseases, adrenal glands. | PD | OC | | LO2 LO6 |
| 3 | Actual problems of coloproctology | Formation of knowledge on modern highly specialized methods of diagnosis, differential diagnosis and treatment in the field of coloproctology. Clinical protocols of the Republic of Kazakhstan. Scientific research and knowledge of evidence-based medicine in medical practices and research. | PD | OC | 4 | LO2 LO6 |
| | Actual problems of oncology and radiation therapy | Innovative high-tech diagnostic methods in oncology. Modern radiation, chemotherapeutic and surgical methods for the treatment of tumors: head and neck, organs of the chest and abdominal cavities, genitourinary system, | PD | OC | | LO3 LO5 |

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| Surgery departme | ent |
|-----------------------------|-----------------|
| Educational program 7R01136 | General Surgery |

| | musculoskeletal system, hematopoietic system, skin. Clinical protocols of the Republic of Kazakhstan. Scientific research and knowledge of evidence- based medicine. | |
|-------------------|--|-----|
| Total | | 8 |
| Final examination | | 2 |
| Total | | 210 |

The matrix of achievement of RO by various teaching methods

| LO | Teaching and learning methods | | |
|--|---|--|--|
| LO1 Able to formulate a clinical diagnosis, prescribe a treatment plan and evaluate its effectiveness based on evidence-based practice at all levels of surgical care. | Analysis of the treatment plan, feedback from the resident | Simulation of situations. Maintaining medical records | |
| LO2 Able to interact effectively with the patient, his environment, healthcare professionals in order to achieve the best results for the patient | A reflective diary | Maintaining medical records | |
| LO3 is able to assess risks and use the most effective methods to ensure a high level of safety and quality of surgical care. | Supervision of clinical work | | |
| LO4 Able to act within the legal and organizational framework of the healthcare system of the Republic of Kazakhstan in his specialty, provide basic assistance in emergency situations, work as part of interprofessional teams to implement the policy of promoting the health of the nation | Supervision of clinical work | Maintaining medical records | |
| LO5 is able to formulate adequate research questions, critically evaluate professional literature, effectively use international bases in their daily activities, participate in the work of a research team. | Public speaking, Working with scientific literature, | Writing theses, articles | |
| LO6 Able to learn independently and train other members of a professional team, actively participate in discussions, conferences and other forms of continuous professional development. | Observation | | |

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The matrix of compliance with RO assessment methods

| LO | Assessment methods | | | | | |
|--|---|---|--|--|--|--|
| LO1 Able to formulate a clinical diagnosis, prescribe a treatment plan and evaluate its effectiveness based on evidence-based practice at all levels of surgical care. | Testing, solving situational problems. Oral interview | Checklists: Preparation and solution of situational tasks. | | | | |
| LO2 Able to interact effectively with the patient, his environment, healthcare professionals in order to achieve the best results for the patient | implementation of practical skills, a mini-clinical exam. | Checklists: "Criteria for assessing practical skills." Keeping diaries | | | | |
| LO3 is able to assess risks and use the most effective methods to ensure a high level of safety and quality of surgical care. | PS-Examination of the patient. Analysis of the records of the doctor's activities | Checklists: Criteria for evaluating practical skills: professional skills. | | | | |
| LO4 Able to act within the legal and organizational framework of the healthcare system of the Republic of Kazakhstan in his specialty, provide basic assistance in emergency situations, work as part of interprofessional teams to implement the policy of promoting the health of the nation | Standardized patients | Patient reviews Reviews from other residents Checklists Estimate 3600 | | | | |
| LO5 is able to formulate adequate research questions, critically evaluate professional literature, effectively use international bases in their daily activities, participate in the work of a research team. | Presentation, Publications | Checklists: Preparation of thematic presentations on the topic. | | | | |
| LO6 Able to learn independently and train other members of a professional team, actively participate in discussions, conferences and other forms of continuous professional development. | Portfolio | Portfolio evaluation | | | | |

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Work plan for the entire period of study

| Cycle disciplines | | | Name of the discipline/ | nt of its | hours/ | classroo | R | IC. | 1 year | | | The form | FI | | |
|-------------------|----|---|----------------------------------|----------------------|----------------|----------|------|--------------------|-------------|-----------------|-----------------|----------|----|------|---|
| | | Discipline code/ | modules/ | Amount of credits | General hours/ | m / | | POXK/CP P/RTIC/ | of study | of stud y | of stud y | control/ | | | |
| | | CYCLE OF PROFILING DISCIPLINES Mandatory component | | 208 | 6240 6000 | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | R-PS | Purulent surgery | 32 | 960 | 192 | 624 | 144 | 32 | | | Exam | | | |
| | | R-SC | Surgery in the clinic | 16 | 480 | 96 | 312 | 72 | 16 | | | Exam | | | |
| | | R-ES | Elective surgery | 58 | 1740 | 348 | 1131 | 261 | 17 | 41 | | Exam | | | |
| | MC | R-ES | Emergency surgery | 60 | 1800 | 360 | 1170 | 270 | | | 60 | Exam | | | |
| | | R-GE | Gastroenterology with endoscopy | 5 | 150 | 30 | 97 | 23 | 5 | | - 8, | Exam | | | |
| PD | | R-AR | Anesthesiology and resuscitation | 3 | 90 | 18 | 58 | 14 | | 3 | | Exam | | | |
| | | R-TS | Thoracic surgery | 8 | 240 | 48 | 156 | 36 | | 8 | | Exam | | | |
| | | R-Trt | Traumatology | 5 | 150 | 30 | 97 | 23 | | 5 | | Exam | | | |
| | | | | R-Uro | Urology | 5 | 150 | 30 | 97 | 23 | | 5 | | Exam | |
| | | | | | | | R-CS | Children's surgery | 8 | 240 | - 48 | 156 | 36 | | 8 |

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| OC/ | Optional component | | 8 | 240 | 48 | 156 | 36 | | | 8 | | 1 |
|-------|--------------------|--|------|------|------|------|------|----|----|---|------|---|
| | R-EIAS | Endovidolaparoscopic interventions in abdominal surgery | 2 | 60 | 12 | 39 | 9 | | | 2 | Exam | |
| | R-IRS | Interventional radiology in surgery Actual problems of surgical endocrinology | 2 | 60 | 12 | 39 | 9 | | | 2 | Exam | |
| | R-APC R-APORT | Actual problems of coloproctology/ Actual problems of oncology and radiation therapy | 4 | 120 | 24 | 78 | 18 | | | 4 | Exam | |
| | | Total | 208 | 6240 | 1248 | 4056 | 936* | | | | | |
| 2 | | / INTERMEDIATE CERTIFICATION | | | | | | | | | | |
| E | FINAL EXAMINATION | | 2 | 60 | | | | | | 2 | | 6 |
| Total | | 210 | 6300 | 1248 | 4056 | 936 | 70 | 70 | 70 | | - | |