



On approval of the Pediatric Care Standard in the Republic of Kazakhstan

Invalidated Unofficial translation

Order № 1027 of the Minister of Health of the Republic of Kazakhstan as of December 29, 2017. Registered by the Ministry of Justice of the Republic of Kazakhstan on January 25, 2018 under № 16279. Abolished by the Order of the Minister of Health of the Republic of Kazakhstan dated 03/15/2022 No. KR DSM -25

Unofficial translation

Footnote. Abolished by the Order of the Minister of Health of the Republic of Kazakhstan dated 03/15/2022 No. KR DSM -25 (effective after ten calendar days after the date of its first official publication).

In accordance with subparagraph 6) of paragraph 1 of Article 7 of the Code of the Republic of Kazakhstan “On Public Health and the Healthcare System” as of September 18, 2009, **I hereby ORDER:**

1. To approve the appended Pediatric Care Standard in the Republic of Kazakhstan.
2. In accordance with the procedure established by the legislation of the Republic of Kazakhstan, the Medical Care Department of the Ministry of Healthcare of the Republic of Kazakhstan shall:
 - 1) ensure state registration of this order with the Ministry of Justice of the Republic of Kazakhstan;
 - 2) within ten calendar days of the state registration of this order, send its Kazakh and Russian hard and soft copies to the Republican Center of Legal Information Republican State Enterprise with the Right of Economic Management for its official publication and inclusion into the Reference Control Bank of Regulatory Legal Acts of the Republic of Kazakhstan;
 - 3) within ten calendar days of the state registration of this order, send its copy to periodicals for its official publication;
 - 4) place this order on the website of the Ministry of Healthcare of the Republic of Kazakhstan after its official publication;
 - 5) within ten working days of the state registration of this order, submit the information on the implementation of measures, provided for in subparagraphs 1), 2), 3) and 4) of this paragraph, to the Legal Department of the Ministry of Health of the Republic of Kazakhstan.
3. Control over execution of this order shall be entrusted to L.M. Aktaeva, Vice-Minister of Healthcare of the Republic of Kazakhstan.

4. This order shall take effect ten calendar days after the day of its first official publication.

*Minister of Healthcare of
the Republic of Kazakhstan*

Y. Birtanov

Approved by
order № 1027 as of
December 29, 2017 of the Minister
of Healthcare of the Republic of
Kazakhstan

The Pediatric Care Standard in the Republic of Kazakhstan Chapter 1. General provisions

1. This Pediatric Care Standard in the Republic of Kazakhstan (hereinafter referred to as the Standard) has been developed in accordance with subparagraph 6) of paragraph 1 of Article 7 of the Code of the Republic of Kazakhstan “On Public Health and the Healthcare System” as of September 18, 2009 (hereinafter referred to as the Code) and sets forth general principles of medical care provision to children in health facilities.

2. The Standard shall provide for the implementation of measures to prevent, reduce morbidity, disability and child mortality.

3. The staff of health facilities providing pediatric care shall be approved in accordance with the staffing standards of health facilities approved by Order № 238 of the Minister of Healthcare of the Republic of Kazakhstan “On Approval of the Standard Staff and Staffing Standards of Health Facilities” as of April 7, 2010 (registered in the Register of State Registration of Regulatory Legal Acts under № 6173).

4. The terms and definitions used in this Standard shall be as follows:

1) regionalization of perinatal care - distribution of medical facilities within a region into three levels of inpatient perinatal care provision to women and newborns by the risk score of the course of pregnancy and labor;

2) integrated management of childhood illnesses (hereinafter referred to as IMCI) - a strategy recommended by the World Health Organization (hereinafter referred to as WHO) and the United Nations International Children’s Emergency Fund (hereinafter referred to as UNICEF), aimed at providing timely and high-quality medical care, reducing morbidity, mortality and disability of children under 5 years of age, as well as at improvement of their physical, psychosocial and emotional development;

3) patronage - preventive and outreach activities carried out by health workers at home (patronage of a newborn, patronage of a pregnant woman, an obstetric patient, a patient under regular health check-ups);

4) active visit – a visit to a patient at his/her place by a doctor/a nurse at the initiative of the doctor, and also after primary care (hereinafter referred to as PC)

facilities' receipt of information on discharged patients from hospitals, from ambulance stations after their visits to patients in need of active examination by a health worker.

Chapter 2. Main activities and structure of pediatric care facilities

5. Pediatric care to children under the age of eighteen (hereinafter referred to as children) shall be provided in the form of:

1) outpatient-polyclinic care, including PC and consultative and diagnostic care (hereinafter referred to as CDC);

2) inpatient care;

3) day-patient care;

4) emergency medical care;

5) air ambulance.

6. Medical care to children within the guaranteed volume of free medical care (hereinafter referred to as the GVFM) shall be provided in accordance with the List of the Guaranteed Volume of Free Medical Care approved by Resolution № 2136 of the Government of the Republic of Kazakhstan as of December 15, 2009 by health facilities that are providers of the GVFM services.

7. Pharmaceutical provision to children at medical facilities (hereinafter referred to as MFs) within the GVFM shall be available on the basis of the Rules for the Development and Coordination of Formularies of Health Facilities approved by Order № 762 of the Minister of Healthcare of the Republic of Kazakhstan as of November 23, 2009 (registered in the Register of State Registration of Regulatory Legal Acts under № 5900) (hereinafter referred to as Order № 762) and in accordance with the List of Pharmaceuticals and Healthcare Products for the provision of citizens within the guaranteed volume of free medical care and in the system of compulsory social medical insurance, including the provision of some categories of citizens having certain diseases (conditions) with pharmaceuticals, healthcare products and foods for special medical purposes for free or on a reduced price on the outpatient basis, approved by Order № 666 of the Minister of Healthcare of the Republic of Kazakhstan as of August 29, 2017 (registered in the Register of State Registration of Regulatory Legal Acts under № 15724).

8. Pediatric care to children on the outpatient-polyclinic basis shall be provided by PC and CDC health workers: physicians specializing in Pediatrics (neonatology) (hereinafter referred to as a pediatrician), General Practice (family medicine) (hereinafter referred to as a GP), nurses specializing in General Medicine (a nurse practitioner, a general nurse practitioner) (hereinafter referred to as a nurse practitioner), Nursing Care (a nurse, a general nurse, a specialized nurse) (hereinafter referred to as a nurse).

9. Pediatric care to children on the inpatient basis shall be provided in maternity hospitals, multispecialty and specialized children's hospitals by pediatricians, physicians specializing in Anesthesiology and Intensive Care (pediatric) (cardiovascular perfusion, toxicology, neonatal resuscitation), other medical specialists and paramedical personnel (nurse practitioners, nurses).

10. Pediatric care to children shall be provided in accordance with clinical guidelines for diagnosis and treatment, as well as clinical guidelines approved by the Joint Commission on the Quality of Medical Services of the Ministry of Healthcare of the Republic of Kazakhstan.

11. MFs shall maintain registration and reporting medical records in accordance with the forms of original medical records of health facilities, approved by Order № 907 of the Acting Minister of Healthcare of the Republic of Kazakhstan as of November 23, 2010 (registered in the Register of State Registration of Regulatory Legal Acts under № 6697) (hereinafter referred to as Order № 907).

12. Main activities of MFs providing pediatric care shall be as follows:

1) provision of pre-hospital, inpatient, specialized medical care and high-tech medical services to children, including newborns;

2) implementation of measures to ensure access to medical care and medical services' quality;

3) provision of high-quality consultative, diagnostic, medical care, IMCI observance;

4) clinical examination and medical rehabilitation for children;

5) provision of preventive care:

patronage of pregnant women;

formation and promotion of a healthy lifestyle, recommendations for a rational and healthy diet;

outreach work with parents on child care, warning signs of diseases and life-threatening conditions;

counseling on support for breastfeeding and lactation, on exclusive breastfeeding of children up to 6 months and continuation of babies' breastfeeding up to 2 years;

screening examinations to identify congenital pathology and disorders of infants' psychophysical development, vision and hearing;

counseling on early child development;

preventive medical examinations;

vaccination;

clinical examination and case follow-up, patronage of children, including newborns

;

socio-psychological counseling;

6) measures to prevent and reduce morbidity, to early detect socially significant diseases, including oncological or hematologic diseases, hepatitis B and C, HIV infection and tuberculosis, as well as to identify risk factors for children's diseases, disability and mortality.

13. MFs shall ensure the implementation of measures aimed at prevention, early diagnosis, treatment of patients with adherence to continuity at all stages of medical care.

14. In case of detection of facts of violence and bodily injuries, it shall be necessary to provide medical and preventive care, carry out medical rehabilitation, inform internal affairs bodies.

Chapter 3. Organization of pediatric care on the outpatient-polyclinic basis

15. Healthcare facilities providing outpatient-polyclinic care to children shall carry out their activity in accordance with the Regulations on the Activity of Health Facilities Providing Outpatient-Polyclinic Care approved by Order № 7 of the Acting Minister of Health of the Republic of Kazakhstan as of January 5, 2011 (registered in the Register of State Registration of Regulatory Legal Acts under № 6774).

16. The child development from the day of discharge from a maternity hospital or maternity unit of a multispecialty hospital shall be monitored in accordance with Form № 112, approved by Order № 907.

17. On the outpatient-polyclinic basis, in accordance with the Rules for Primary Care Provision and the Rules for Citizens' Registration with Primary Care Facilities approved by Order № 281 of the Minister of Health and Social Development of the Republic of Kazakhstan as of April 28, 2015 (registered in the Register of State Registration of Regulatory Legal Acts under № 11268), the following activities shall be carried out:

1) provision of consultative, diagnostic, medical care, clinical examination and medical rehabilitation for children;

2) the patronage of and active visits to pregnant women, newborns and infants as required by the universal progressive patronage model;

3) the planning, organizing and conducting of vaccination in accordance with the terms of preventive vaccinations, approved by Resolution № 2295 "On Approval of the List of Vaccine-Preventable Diseases, the Rules for Vaccination and Population Groups subject to Routine Vaccinations" of the Government of the Republic of Kazakhstan as of December 30, 2009;

4) children's referral to consultations with medical specialists given indications;

5) diagnosing of acute and chronic diseases, timely implementation of emergency and routine therapeutic measures;

6) children's referral to a 24-hour inpatient facility, day hospital and organization of home care given indications;

7) case follow-up of children with chronic conditions under regular health check-ups, their treatment and rehabilitation;

8) rehabilitation treatment and medical rehabilitation;

9) screening surveys in accordance with Order № 704 "On Approval of the Screening Rules" (registered in the Register of State Registration of Regulatory Legal Acts under № 6490) of the Minister of Healthcare of the Republic of Kazakhstan as of September 9, 2010, to identify congenital pathology and disorders of infants' psychophysical development, vision and hearing;

10) organization of children's rehabilitation before their preschool or school enrollment;

11) outreach work with parents and family members or with their legal representatives on a rational diet, prevention of childhood illnesses and formation of a healthy lifestyle.

18. Emergency medical care to children at a medical facility (or an aid post) shall be provided in accordance with the clinical guidelines for diagnosis and treatment approved by the Joint Commission on the Quality of Medical Services of the Ministry of Healthcare of the Republic of Kazakhstan.

19. To provide emergency medical care to children, a medical facility (or an aid post) it shall be required to have pharmaceuticals and medical products in accordance with the clinical guidelines for diagnosis and treatment approved by the Joint Commission on the Quality of Medical Services of the Ministry of Health of the Republic of Kazakhstan.

20. Medications and medical products for emergency medical care provided on the outpatient-polyclinic basis shall be in special plastic containers - "suitcases" made of treatable material, which are easily portable and kept in a convenient and accessible place.

21. The volume of emergency medical care provided to a patient shall be fixed in the medication administration and observation record, indicating heart rate, blood pressure, pulse, body temperature, name and dose of a drug, methods and time of its administration.

22. Medical care to students and pupils of educational institutions shall be provided in accordance with the Rules for the Provision of Medical Care to Students and Pupils of Educational Institutions, approved by Order № 141 of the Minister of Healthcare of the Republic of Kazakhstan as of April 7, 2017 (registered in the Register of State Registration of Regulatory Legal Acts under № 15131).

23. If chronic diseases are detected, a patient shall have regular health check-ups based on medical indications, the results of examination shall be recorded in an

outpatient medical chart of № 025/y form, approved by Order № 907, a patient pathway shall be drawn up, a check-list of regular health check-ups of № 30/y form, approved by Order № 907, shall be filled in.

24. Anti-epidemic and preventive measures at a health district shall be taken to prevent the spread of infections among children.

25. Preventive vaccinations shall be fixed by making appropriate records in registration forms that are stored at health facilities at the place of vaccination, at educational, preschool institutions: a registry of preventive vaccinations of № 064/y form, a child development record of № 112/y form, a vaccination record card of № 063 /y form, a child medical chart of № 026/y form, approved by Order № 907.

26. A pediatrician or a GP shall draw up medical records for children in need of sanatorium-resort treatment.

27. Childcare sick leaves certificates (certificates) to parents (guardians) based on medical indications, a certificate of temporary disability of a child to excuse him/her from attending preschool and school institutions for the period of illness shall be executed and issued in accordance with the Rules for Examination of Temporary Disability, Issuance of a Sick Leave and Certificates of Temporary Disability, approved by Order № 183 of the Minister of Healthcare and Social Development of the Republic of Kazakhstan as of March 31, 2015 (registered in the Register of State Registration of Regulatory Legal Acts under № 10964).

28. The issue of excusing children studying at educational institutions from end-of-year and final exams in case of their illness shall be considered by the medical consultative board (hereinafter referred to as the MCB).

29. If a child is found to have persistent disruption of bodily functions and relevant examination results are recorded in his/her outpatient medical chart, the MCB shall consider the issue of his/her referral to a socio-medical expertise in accordance with the Rules for Socio-medical Expertise, approved by Order № of the Minister of Healthcare and Social Development of the Republic of Kazakhstan as of January 30, 2015 (registered in the Register of State Registration of Regulatory Legal Acts under № 10589).

30. If disability is confirmed, individual rehabilitation programs for children with disabilities shall be developed and carried out, with the involvement of social services.

31. A pediatrician, a GP and a paramedical worker shall maintain registration and reporting medical records and submit reports on main medical and statistical indicators of morbidity, disability and mortality of children living in the health service district to the head of subunit (head of unit).

32. The PC MFs shall provide preventive care to children organizing:

1) the work of a child development room (hereinafter referred to as a CDR) at all medical facilities providing PC to the child population, a CDR shall be equipped in accordance with Appendix 1 to this Standard;

2) neonatal screening, newborn and infant hearing screening, infant psychophysical development screening, eye screening of premature babies for early diagnosing of congenital and hereditary diseases in children, reducing child morbidity and disability;

3) patronage visits to pregnant women, newborns and infants.

33. A CDR physician or paramedical worker shall be engaged in:

counseling on infant care and development of parenting skills of mothers and their family members, explaining the meaning of games, reading, communication for the child development;

informing a pregnant or breastfeeding mother on a healthy diet, family planning, pregnancy, breastfeeding support issues;

teaching the parent(s) to timely add complementary foods and cook them in real life observing sanitary safety standards and with account of calorie needs;

explaining to the parent(s) measures to create a safe environment for children, preventing injury, poisoning and accidents;

monitoring the child psychomotor and speech development and counseling parents on the problems identified;

counseling on how to care for sick children at home and for children with developmental disabilities;

prevention of domestic violence and child abuse.

34. Preventive visit (monitoring) of children to (at) a MF shall include comprehensive assessment and monitoring of the child's development: physical, sexual development, assessment of hearing, vision, fine and gross motor skills, expressive and receptive language, emotions, self-regulation and ability to establish relationships, to play and be engaged in mutual participation.

35. In case of diagnosing chronic diseases, hearing and vision impairments, abnormal development of the sensory organs, as well as laryngeal and tracheal stenosis, a district doctor shall refer the child to medical specialists to specify the diagnosis and prescribe treatment.

36. When identifying children with the risk of psychophysical developmental delays, hearing and vision impairment, neurological symptoms, a health worker shall direct them to psychological, medical and pedagogical consultation.

37. Patients with neuropsychological developmental delays caused by somatic pathology, syncopal conditions, floppy infant syndrome, febrile seizures shall be monitored by pediatricians, after a physician specializing in (pediatric) Neurology rules out a nervous system pathology.

38. In case of absence of physician specializing in (pediatric) Neurology, a district pediatrician or a GP shall deal with the organization and conduct of additional examination or hospitalization in the specialized unit of a hospital for the provision of inpatient specialized medical care.

39. The CDC to children shall be provided by medical specialists of a consultative-and-diagnostic center or a polyclinic (unit) based on a referral from a PC physician or another specialist, except for cases of urgent and emergency medical care.

40. Patronage visits to pregnant women, newborns and infants shall be organized as required by the universal progressive model, recommended by the United Nations International Children's Emergency Fund (UNICEF) in order to identify and reduce medical or social risks that threaten life, health, child development, and also to reduce the number of mandatory visits to risk-free families. Along with mandatory scheduled visits (universal approach), the universal progressive patronage model shall introduce additional active visits according to an individual plan (progressive approach) for pregnant women, newborns and children in need of special support due to medical or social risks to the life, health or development of a child.

41. Universal (mandatory) patronage shall be provided to all pregnant women and children up to 5 years of age and shall include 2 antenatal patronage visits to a pregnant woman (before 12 weeks and at 32 weeks of gestation) and 9 visits to children according to the General Monitoring Schedule of Pregnant Women, Newborns and Children under 5 Years of Age by a physician/nurse practitioner and a paramedical worker at home and at the doctor's office at a PC MF in accordance with Appendix 2 to this Standard.

42. The progressive approach shall provide for patronage visits to pregnant women and children with medical or social risks threatening their life, health, development and safety as required by the Universal Progressive Model of Patronage of Pregnant Women and Children Under 5 Years of Age (patronage visits at home by a paramedical worker) according to Appendix 3 to this Standard.

43. In case of identifying moderate risk (including problems with breastfeeding, complementary foods, difficulties with hygiene skills, playing, communication and others), a paramedical worker shall take efforts to eliminate them independently or jointly with a district doctor. In case of high risk (abuse, violence, neglect, disability of a child, etc.), when a family needs social support, information shall be submitted to a social worker, psychologist or representatives of other sectors (such as education, social protection, internal affairs, akimats, non-governmental organizations and others), where necessary.

44. When visiting newborns and infants at home, a nurse practitioner or a nurse shall have an infant blood pressure cuff, a tape measure, a thermometer with her/him.

45. When paying a patronage visit to a pregnant woman, a paramedical worker shall:

- 1) ask a pregnant woman about her complaints, measures her blood pressure, examine for edema and signs of anemia;
- 2) evaluate her mood (the presence of depression), the safety of home environment and living conditions, room cleanliness and personal hygiene, pregnancy risk factors;
- 3) inform on physical and mental changes associated with pregnancy; on harmful effects of stress during pregnancy; on harmful effects of smoking and alcohol and drug use;
- 4) make recommendations on a balanced diet, weight control, physical activity, oral hygiene, personal hygiene;
- 5) train the family to identify pregnancy warning signs, when it is necessary to immediately consult a doctor, and plan prenatal monitoring by a general practitioner and gynecologist;
- 6) consult and teach how to prepare for birthing, a room, place, items of care and clothing for a newborn, basic care of a newborn, the importance of exclusive breastfeeding and breastfeeding techniques.

46. When paying a patronage visit to a newborn, a paramedical worker shall:

- 1) assess the signs of a disease or local bacterial infection in a newborn and, if any, immediately inform a doctor;
- 2) evaluate the mood of the mother (parent or another legal representative) in order to identify depression, the safety of home environment and needs of the newborn;
- 3) ask about the health of the new mother (complaints, condition of mammary glands, physical activity, nutrition, sleep, contraception);
- 4) inform, advise and train the mother (parent or another legal representative) on (in) basic care of the newborn: breastfeeding, temperature control, developmental care and child-centered attitude of mind, participation of both parents (if available) in raising the child, hygiene and washing hands, safe bathing, sleep safety, prevention of sudden infant death syndrome, hygienic care of the umbilical cord and skin;
- 5) teach the family to identify warning signs of diseases requiring an immediate visit to a medical facility, such as: feeding problems, reduced activity of the newborn, rapid breathing of more than 60 breaths a minute, breathing problems, fever or temperature decrease, convulsions, chills and others;
- 6) help conduct timely vaccination;
- 7) conduct primary assessment of social risks threatening the child's life, health, safety and development and, if risks are identified, inform a MF social worker providing outpatient-polyclinic care;
- 8) identify newborns in need of additional care and plan individual visits to them (children with low birth weight, sick or born to HIV-infected mothers).

47. When paying a patronage visit to infants, a paramedical worker shall:

1) assess common danger signs, main symptoms of diseases (cough, diarrhea, fever, etc.), examine for anemia or low weight; evaluate the mood of the mother (parent or another legal representative) in order to identify depression; needs of the child depending on his/her age; home safety in terms of injuries and accidents; signs of neglect, abuse and violence against a child;

2) conduct the monitoring of physical, motor, psychosocial development;

3) ask about the new mother's health (complaints, condition of mammary glands, physical activity, nutrition, sleep, contraception), talk with the new mother about exclusive breastfeeding up to 6 months, adding complementary foods at 6 months;

4) teach the parent(s) or legal representative to promote the child development through playing, communication, reading; talk about hygiene, joint participation of both parents (if any) in the upbringing of a child, warning signs of diseases requiring immediate medical care;

5) inform the parent(s) or legal representative on signs of childhood illnesses (cough, diarrhea, fever, etc.) and make recommendations if they occur;

6) help to conduct vaccination;

7) assess the social risks threatening the child's life, health, safety and development and, if risks are identified, inform the polyclinic's social worker.

48. In case of detection of moderate risk, a paramedical worker together with a social worker, a psychologist and with participation of a pregnant woman or parent(s) of the child or legal representative, as part of a progressive approach, shall make an individual plan for patronage events in accordance with Appendix 4 to this Standard. For the purposes of reducing or eliminating risks to the life, health, development and safety of the child, the individual plan of events include the assessment of the child's needs, analysis of the child's situation in the family, informing of the senior nurse, the district doctor, the head of unit and the social worker.

Chapter 4. Organization of inpatient and day-patient care to children

49. Medical care to newborns, depending on medical indications, shall be provided in accordance with the regionalization level of perinatal care.

50. The first-level MFs shall be intended for the provision of medical care to healthy newborns born to mothers with uncomplicated pregnancy and physiologic labor at term and the provision of emergency care to newborns in emergency medical situations.

51. The structure of inpatient facilities of the first regionalization level of perinatal care shall include: single maternity patient rooms, a rooming-in unit, a vaccination

room, patient rooms in the newborn intensive care unit, as well as the salary of a doctor specializing in Pediatrics (neonatology) and a 24-hour neonatal nurses' station provided for in a staff schedule.

52. The first-level MFs shall provide a sick newborn with:

- 1) primary resuscitation;
- 2) intensive and supportive therapy;
- 3) oxygen therapy;
- 4) invasive or non-invasive respiratory therapy;
- 5) phototherapy;
- 6) therapeutic hypothermia;
- 7) infusion therapy and/or parenteral nutrition;
- 8) treatment according to approved clinical guidelines for diagnosis and treatment.

53. Second-level MFs shall arrange resuscitation and intensive care rooms for newborns with a full resuscitation set, medical ventilators with various ventilation modes (continuous positive airway pressure), infant incubators, a clinical diagnostic laboratory, and a 24-hour station (neonatologist and pediatric nurse) provided for in a staff schedule.

54. The provision of medical care to newborns in second-level MFs shall include:

1) primary resuscitation of a newborn and condition stabilization, nursing of premature babies born after 34 weeks of gestation;

2) central venous and peripheral catheterization;

3) identification and treatment of congenital malformations, intrauterine growth retardation, hypoglycemia in a newborn, hyperbilirubinemia, neonatal sepsis, central nervous system disorders, respiratory distress syndrome, pneumothorax, necrotizing enterocolitis and other pathological neonatal conditions;

4) intensive therapy, including the correction of vital functions (respiratory, cardiovascular, metabolic disorders), invasive and non-invasive respiratory therapy, infusion therapy and parenteral nutrition;

5) If the provision of highly specialized care is required, it shall be necessary to determine the degree of readiness for transportation together with a mother to a third-level maternity hospital or a facility of Republican significance.

55. Medical facilities of the third regionalization level of perinatal care shall include maternity hospitals with a 24-hour neonatal station, clinical, biochemical and bacteriological laboratories, a resuscitation and intensive care unit for women and newborns, as well as units of neonatal pathology and premature babies' nursing, rooming-in.

56. The structure of third-level MFs shall include neonatal intensive care units, neonatal pathology and premature nursing units, equipped with modern medical and

diagnostic equipment, drugs, a 24-hour (doctors' and nurses') station, an express laboratory.

57. The provision of medical care to newborns at third-level medical facilities shall include:

- 1) primary resuscitation of newborns and care of newborns;
- 2) intensive and supportive therapy: respiratory therapy, central venous and peripheral catheterization, therapeutic hypothermia, parenteral nutrition, nursing of premature babies;
- 3) diagnosing and treatment of congenital malformations, intrauterine growth retardation (small for gestational age), hypoglycemia in a newborn, neonatal sepsis, respiratory distress syndrome, hyperbilirubinemia, necrotizing enterocolitis, pneumothorax, bronchopulmonary dysplasia, persistent pulmonary hypertension of a newborn, perinatal central nervous system disorders and other pathological neonatal conditions.
- 4) intensive and supportive therapy, therapeutic hypothermia, parenteral nutrition;
- 5) invasive and non-invasive respiratory therapy;
- 6) nursing of premature babies;
- 7) familiarization with and introduction into clinical practice of modern methods of diagnosing and treatment of pathologies in newborns, prevention of complications applying the principles of evidence-based medicine;
- 8) development and implementation of measures aimed at improving the quality of the units' medical and diagnostic work and reducing hospital mortality;
- 9) provision of 24-hour counseling and diagnostic and treatment assistance to specialists of the first and second level of regionalization, provision of urgent and emergency medical care at a medical facility.

58. Indications for hospitalization in neonatal units, depending on infants' condition and level of medical care, shall be specified in Appendix 5 to this Standard.

59. Carrying out diagnostic examination of newborns, it shall be necessary to make the minimum volume of newborn screening tests, depending on the level of regionalization of perinatal care in accordance with Appendix 6 to this Standard.

60. Maternity hospitals, depending on the level of medical care provided, shall be equipped in accordance with the List of Medical Equipment and Medical Products for Maternity Hospitals, depending on the level of regionalization of perinatal care in accordance with Appendix 7 to this Standard.

61. Immediately after birth, the condition of a newborn shall be evaluated in accordance with clinical guidelines for diagnosis and treatment.

62. A healthy newborn shall be provided with basic care, including prevention of hypothermia using "warm chain", skin contact with a mother or skin-to-skin contact,

early breastfeeding within the first hour (if there are signs indicating the infant's readiness for it), prevention of hospital-acquired infections.

63. The anthropometry of a healthy newborn, his/her full examination and other measures shall be taken 2 hours after his/her birth, since, during this time period, a baby is being breastfed lying on the mother's stomach.

64. If a neonatologist diagnoses health problems in a newborn, emergency medical care shall be provided, if clinically indicated, the newborn shall be taken to the intensive care unit or the neonatal resuscitation unit.

65. After operative vaginal delivery (cesarean section), the medical staff helps a mother, as soon as she can react, to latch her baby onto her breast for the first time, through skin contact, for at least 30 minutes, except for cases of the mother's or baby's being in a critical condition. In cases where the baby's first latch onto his/her mother's breast is impossible due to her condition, the newborn shall be put on the birth partner's breast.

66. The parent(s), legal representatives and family members of newborns in the intensive care unit shall be given an opportunity to have a bodily (skin) contact and take care of him/her.

67. In a labor ward, a mother and her healthy newborn shall be monitored by an obstetrician, within two hours after the baby's birth by:

1) measuring the newborn's body temperature 15 minutes after his/her birth, then - every 30 minutes;

2) monitoring the heart rate and respiratory rate, respiratory pattern (expiratory groaning detection, evaluation of the degree of lower chest retraction), skin color, activity of suck reflex, and, if necessary, by measuring oxygen saturation using a pulse oximeter.

68. Two hours after birth, a healthy newborn and his/her mother shall be transferred to the rooming-in unit.

69. In the postnatal unit, in rooming-in patient rooms, a mother and a baby shall be under 24-hour monitoring by medical staff and the mother shall be involved in constant care of her baby, except for cases of moderate and severe degrees of the mother's condition.

70. Thanks to case follow-up, health problems in a newborn shall be discovered, necessary screening shall be conducted, examination by the head of unit shall be carried out, a case conference shall be arranged in order to specify the management. Emergency medical care shall be provided based on medical indications, a patient shall be transferred to either an intensive therapy ward or the neonatal resuscitation unit.

71. In rooming-in patient rooms, physicians specializing in Obstetrics and Gynecology (pediatric gynecology, functional diagnostics, ultrasound diagnostics in the major specialty profile, endoscopy in the major specialty profile) (hereinafter

referred to as an obstetrician-gynecologist), pediatricians, neonatologists and paramedical personnel (nurses, obstetricians, nurse practitioners) shall:

- 1) strongly support baby-led breastfeeding without fixed time intervals;
- 2) advise on breastfeeding benefits, on the techniques and frequency of breast milk expression by hand, visually assess the situation with breastfeeding to give practical help in correct the baby's positioning and latching onto the mother's breast to avoid nipple trauma or lactostasis;
- 3) in case of contraindications to breastfeeding, teach a mother (parent or legal representative) alternative methods of feeding children; advise new mothers how to maintain lactation if newborns are separated from them.

72. Absolute contraindications to breastfeeding for infants shall be their congenital metabolic diseases (enzymopathies) - galactosemia, phenylketonuria, maple syrup urine disease, and also their mothers' having tuberculosis, being HIV-infected, taking cytotoxic drugs, radioactive drugs.

73. Relative contraindications to breastfeeding shall be maternal diseases such as eclampsia, psychosis, postnatal depression, active hepatitis B and C, and also mothers' taking drugs that are contraindicated during breastfeeding.

74. A neonatologist shall daily examine newborns, consult mothers on issues related to care, prevention of hypothermia and vaccination.

75. In case of three or more developmental micro-anomalies or detection of congenital pathology in a newborn, a consultation of medical specialists shall be arranged along with taking therapeutic and diagnostic measures and a mother shall be given recommendations on examination, treatment and rehabilitation.

76. In case of emergency conditions in a newborn (asphyxia, respiratory distress syndrome and others), his/her condition shall be stabilized and the degree of readiness for transportation together with his/her mother to a second- or third-level maternity hospital shall be determined.

77. Newborns shall be vaccinated given the voluntary informed consent of parents (mother, father or legal representatives) to preventive vaccinations in accordance with the terms of preventive vaccinations in the Republic of Kazakhstan approved by Resolution № 2295. The data on vaccination shall be entered into the "Newborn Development Record" form № 097/y approved by Order № 907.

78. Neonatal screening shall be carried out for all newborns before their discharge from a MF to identify phenylketonuria, congenital hypothyroidism, as well as vision and hearing screening.

79. A newborn shall be discharged from a maternity hospital if his/her health condition is satisfactory and there are no medical indications for 24-hour medical monitoring on the inpatient basis and information on the baby shall be submitted to a PC facility at the place of actual residence for his/her further monitoring.

80. In case of emergency conditions in a newborn, a neonatologist shall assess the condition severity, stabilize it, assess the degree of readiness for transportation, and organize his/her transfer together with the mother (in consultation with an obstetrician-gynecologist) to a second- or third-level MF.

81. If an acute surgical pathology in a newborn is suspected or diagnosed, an emergency medical consultation shall be held with a physician specializing in Pediatric Surgery (Neonatal Surgery). After stabilization of vital signs, the newborn shall be transferred to the surgery unit of another MF (a children's or multispecialty hospital) or neonatal (or pediatric) surgery unit, if there is any in the maternity hospital, provide him/her with appropriate specialized medical care.

82. Full-term newborns after the age of 28 days or premature newborns, after the post-conceptual age of 42 weeks, who need further 24-hour medical supervision, shall be transferred to a children's hospital.

83. When a newborn gets ill at home, he/she shall be hospitalized at the neonatal pathology unit or the resuscitation and intensive care unit of a children's hospital.

84. When an acute surgical pathology is detected in a newborn, he/she shall be transferred to the surgery unit.

85. Children under the age of eighteen years shall be hospitalized in children's hospitals or units based on indications.

86. Inpatient care to children shall be provided in accordance with the Rules for Providing Inpatient Care approved by Order № 761 of the Minister of Healthcare and Social Development of the Republic of Kazakhstan as of September 29, 2015 (registered in the Register of State Registration of Regulatory Legal Acts under № 12204).

87. Day-patient (emergency and planned) care to children shall be provided in accordance with the Rules for Providing Day-Patient Care approved by Order № 669 of the Minister of Healthcare and Social Development of the Republic of Kazakhstan as of August 17, 2015 (registered in the Register of State Registration of Regulatory Legal Acts under № 12106).

88. Pediatric care to children on the inpatient and day-patient bases shall include:

- 1) provision of specialized medical care and high-tech medical services;
- 2) triage of all children arriving at a hospital according to urgent signs and depending on the condition severity;
- 3) provision of emergency and planned medical care to children;
- 4) laboratory and instrumental methods of examination;
- 5) use of modern methods of diagnosis, treatment of diseases and pathological conditions in children in accordance with the identified nosology and clinical guidelines for diagnosis and treatment;

6) daily examination by a physician , examination of the head of unit (upon admission on the first day, re-examination at least once a week and if necessary);

7) consultations of medical specialists (if indicated) and case conferences (depending on the severity of the patient’s condition);

8) registration and maintenance of medical records, entry of data into information systems;

9) provision of supportive care (adequate nutrition, water balance maintenance, controlling of pain, fever management, oxygen therapy, emotional support for a child through access to toys and possibility to play);

10) use of less painful alternative treatment methods, if any, of equal effectiveness to avoid unreasonable painful procedures;

11) counseling and training the parent (legal representative or other caregivers in the hospital) on a rational diet, emotional support for the child, their role in monitoring the condition and treatment of the child, explaining possible causes of disease, treatment and expected result of the therapy in a clear way.

12) making children and parents (legal representatives) aware of issues of prevention of childhood illnesses and formation of a healthy lifestyle.

89. Medical rehabilitation shall be carried out in rehabilitation centers, units, on beds of rehabilitation treatment and medical rehabilitation of multispecialty hospitals, sanatorium-type medical facilities.

90. Inpatient care to children and newborns shall be provided by specialists with higher medical education who majored in Pediatrics (neonatology), Anesthesiology and Resuscitation (perfusion, toxicology, neonatal resuscitation) (pediatric), as well as other medical specialists.

91. If it is difficult to verify the diagnosis or determine the management, it shall be possible to use telemedicine counseling and other means of communication with relevant republican medical facilities.

92. In case of disease progression or difficulty in verifying the diagnosis at the regional level, the patient shall be referred to republican specialized medical facilities.

Chapter 5. Organization of emergency medical care and air medical ambulance services to children

93. Emergency medical care and air ambulance services to children shall be provided in accordance with Article 50 of the Code of the Republic of Kazakhstan “On Public Health and the Healthcare System” as of September 18, 2009.

94. Emergency medical care and air ambulance services shall be provided to children in accordance with the Rules for the Provision of Emergency Medical Care

and Air Ambulance Services approved by Order № 269 of the Minister of Healthcare and Social Development of the Republic of Kazakhstan as of April 27, 2015 (registered in the State Registration of Regulatory Legal Acts under № 11263).

95. Critically ill newborns shall be transported for the third-level perinatal care to republican health facilities on the basis of regionalization, by an air ambulance service team (hereinafter referred to as an AAST).

96. When transporting critically ill newborns:

1) their body temperature, respiratory rate, heart rate, blood pressure, oxygen saturation shall be monitored;

2) oxygen concentration, humidity and temperature in a transport incubator shall be monitored;

3) infusion therapy with account of the volume, start and duration of therapy shall be carried out;

4) appropriate lung ventilation and maintenance of vital functions of the body (setting the optimal mode and appropriate parameters of a medical ventilator) shall be carried out;

5) resuscitation (given medical indications) shall be carried out;

6) adherence to the principles of continuity of earlier initiated therapy (based on indications - inotropic therapy, analgesia, sedation, adequate decompression of the gastrointestinal tract in congenital malformations) shall be observed.

97. Newborns shall be transported on the “pull” principle in a special vehicle equipped according to the list of medical equipment and medical products for newborns’ transportation in a vehicle of a resuscitation team in accordance with Appendix 8 to this Standard.

98. A health worker accompanying a baby shall fill in a newborn transportation protocol in accordance with Appendix 9 to this Standard in 2 copies and submit it to a medical facility for hospitalization and to a regional branch of air ambulance.

Appendix 1 to the
Pediatric Care Standard in the
Republic of Kazakhstan

Equipment for a child development room

1) weight scales for children, adults, a stadiometer for children up to 2 years of age and over 2 years of age, a measuring tape;

2) the minimum set of developmental toys for infants, children’s books, pictures, colored pencils, drawing paper, colored paper, children’s scissors, plasticine;

3) a set for skills building sessions on thermal protection of a newborn, training in bathing, feeding, conducting re-lactation, creating a safe environment and providing first aid at home in case of injuries or an accident;

- 4) a doll for warm chain demonstration, teaching the correct positioning and baby's latching onto the breast, and rendering emergency aid;
- 5) a computer and another device for video demonstration;
- 6) a room for sessions, a table, chairs;
- 7) a resource center for teaching to cook complementary foods for a baby (given conditions for compliance with safety regulations);
- 8) a device for measuring otoacoustic emission;
- 9) the minimum set of teaching materials and visual aids (in Russian and Kazakh): an IMCI chart booklet, a memo to moms, a booklet of information cards on the patronage of a healthy baby, a training manual "Physical and Psychosocial Development of Infants", a personal health record of baby's growth and development, "Family Infant Care" Calendar, "Forms of Notes on a Healthy Baby", "Form of Notes on 24-hour Diet of a Pregnant Woman and a Breastfeeding Mother", a video on breastfeeding, a video on complementary feeding techniques, a memo to moms on hand expression of breast milk. Educational posters: breastfeeding attachment techniques and proper breastfeeding positioning, nutrition pyramid, fathers' involvement, safe environment and prevention of injuries and accidents, monitoring and screening of child development, playing, reading and communication with children . A memo to mom on feeding methods and hand expression of breast milk.

Appendix 2 to the
Pediatric Care Standard in the
Republic of Kazakhstan

General schedule of monitoring of pregnant women, newborns and children under 5 years of age by a doctor/nurse practitioner and a paramedical worker at home and at the doctor's office at a PC

Age	Child's age	Number of visits by	
		a district doctor/nurse practitioner	a patronage paramedical worker
1	2	3	4
All pregnant women	Up to 12 weeks of pregnancy or at first attendance	Check-up at the doctor's office – 1	Check-up at home – 1
	32 weeks of pregnancy	Check-up at the doctor's office – 1	Check-up at home – 1
Check-ups of a pregnant woman, total	2	Check-ups at home –2	2 home visits
Check-ups of a new mother after her discharge from a maternity hospital	During the first 3 days after her discharge from a maternity hospital	Check-up at the doctor's office – 1	1 home visit, if a woman failed to attend the doctor during the first three days after her discharge from a maternity hospital

All newborns and children

During the first 3 days after discharge from a maternity hospital	Check-up at home – 1	Check-up at home – 1 (together with a doctor)
7 days	-	Check-up at home – 1
14 days	Check-up at home – 1	-
21 days	-	-
1 months	Check-up at the doctor's office – 1	Check-up at home – 1
2 months	Check-up at the doctor's office – 1	
3 months	Check-up at the doctor's office – 1	Check-up at home – 1
4 months	Check-up at the doctor's office – 1	-
5 months	Check-up at the doctor's office – 1	-
6 months	Check-up at the doctor's office – 1	Check-up at home – 1
7 months	Check-up at the doctor's office – 1	-
8 months	Check-up at the doctor's office – 1	-
9 months	Check-up at the doctor's office – 1	-
10 months	Check-up at the doctor's office – 1	-
11 months	Check-up at the doctor's office – 1	-
12 months (1 year)	Check-up at the doctor's office – 1	Check-up at home – 1
15 months (1 year 3 months)	Check-up at the doctor's office – 1	-
18 months (1 year 6 months)	Check-up at the doctor's office – 1	Check-up at home – 1
21 months (1 year 9 months)	Check-up at the doctor's office – 1	
24 months (2 years)	Check-up at the doctor's office – 1	Check-up at home – 1
27 months (2 years 3 months)	Check-up at the doctor's office – 1	-
30 months (2 years 6 months)	Check-up at the doctor's office – 1	-
33 months (2 years 9 months)	Check-up at the doctor's office – 1	-
36 months (3 years)	Check-up at the doctor's office – 1	Check-up at home – 1

	48 months (4 years)	Check-up at the doctor's office – 1	
	60 months (5 years)	Check-up at the doctor's office – 1	
Check-ups of children, total	34	2 home visits +23 check-ups at the doctor's/nurse practitioner's office	9 home visits by a paramedical worker

Appendix 3 to the
Pediatric Care Standard in the
Republic of Kazakhstan

Universal progressive model of patronage of pregnant women, newborns and children under 5 years of age (patronage visits by a paramedical worker)

Service type	Service recipients	Time	Who makes a home visit
Universal health service package	All pregnant women	1. Up to 12 weeks of pregnancy or at first attendance 2. 32 weeks of pregnancy	A patronage nurse
	All newborns and babies up to 3 years of age	1. The first 3 days after discharge from a maternity hospital 2. 7 days 3. 1-2 months 4. 3 months 5. 6 months 6. 12 months 7. 18 months 8. 24 months 9. 36 months	A patronage nurse
Progressive health service package	At-risk pregnant women	According to an individual plan	A patronage nurse, a social worker
	At-risk newborns and children up to 5 years of age	According to an individual plan	A patronage nurse, a social worker, a general practitioner/pediatrician – according to the baby's personal needs

Appendix 4 to the
Pediatric Care Standard in the
Republic of Kazakhstan

Individual plan of patronage events

Facility:	№ PC district, last and first names and patronymic of a paramedical worker	Last and first names and patronymic of a social worker helping a family
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The Plan's commencing date:	The Plan's ending date:	The family's residence address:		
Personal data of the child (children):				
The child's first name	The child's last name	Date of birth (or expected date of birth)	Sex	
			F <input type="checkbox"/>	M <input type="checkbox"/>
			F <input type="checkbox"/>	M <input type="checkbox"/>
Family members, including children, involved in the planning process of family development (parents/guardians, relatives, other family members, etc.):				
Full name		Relationship to the child		Contact details:
1				
2				
3				
Representatives of state bodies, NGOs, local social services and others involved in the planning process of family development:				
Full name		Organization		Contact details:
1				
2				
3				

Drawing up an individual family plan (events, deadlines):

No	Goal: activities, events	Responsible persons/ Organization	Deadlines	Status
1	Give examples		___/___/___ day/month/year	Yes No
2			___/___/___ day/month/year	Yes No

Signatures:

Full name of the parents/guardians	Signature	Date
Full name of the child (children)	Signature	Date
Full name of the paramedical worker	Signature	Date
Full name of the general practitioner	Signature	Date
Full name of the social worker	Signature	Date

The list of indications for newborns' hospitalization by levels of regionalization of perinatal care

1 - level	2 - level	3 - level
<p>Healthy and stable newborns born at term ≥ 37 weeks and body weight ≥ 2500 grams: newborns not requiring additional nursing care or special treatment;) newborns in need of phototherapy.</p>	<p>Newborns born at term of gestation ≥ 34 weeks and birth weight ≥ 1500 grams. Newborns in need of:</p> <ul style="list-style-type: none"> - incubator care due to immaturity and prematurity; - oxygen therapy, with an oxygen concentration of not more than 60%; - constant monitoring of the cardiopulmonary system; - blood gas tests; - constant monitoring of blood pressure; - medical lung ventilation during 3 days; - non-invasive (CPAP, NIPPV) lung ventilation, - exchange blood transfusion (EBT); - treatment of seizures responding to treatment. 	<p>Newborns requiring intensive care:</p> <ul style="list-style-type: none"> - in long-term assisted ventilation with endotracheal intubation, in tracheostomy for forced ventilation, -in arterial catheterization for ABB test and blood pressure measuring. - with persistent convulsions. <p>Newborns after extended surgery, including open abdominal surgery, surgical treatment of a defect of the central nervous system (CNS). Newborns in need of intensive medical care.</p>

Appendix 6 to the
Pediatric Care Standard in the
Republic of Kazakhstan

Minimum volume of newborn screening tests, depending on the level of regionalization of perinatal care

First level	Second level	Third level
1	2	3
<p>Laboratory tests: complete blood count, determination of blood group and Rh factor, blood glucose, blood clotting time, serum bilirubin level and its fraction, Coombs test. X-ray examination</p>	<p>Laboratory tests: complete blood count, determination of blood group and Rh factor, blood glucose, blood clotting time, level of bilirubin and its fractions, Coombs test, acid-base balance, blood electrolytes; hemostasiogram (prothrombin time, partial thromboplastin time, fibrinogen), liver function test, C-reactive protein . Cerebrospinal fluid analysis. Diagnosis of TORCH infections, virological testing, bacteriological examination of blood. X-ray</p>	<p>Laboratory tests: complete blood count, determination of blood group and Rh factor, blood glucose, blood clotting time, level of bilirubin and its fractions, Coombs test, acid-base balance, blood electrolytes, hemostasiogram (prothrombin time, partial thromboplastin time, fibrinogen), liver function test, C-reactive protein, procaltitonin, triglycerides. Cerebrospinal fluid analysis. Diagnosis of TORCH infections, virological testing, bacteriological examination of blood . Ultrasound scans of brain and internal organs. Color Doppler</p>

	examination. Ultrasound scans of brain and internal organs. Color Doppler echocardiography	echocardiography, magnetic resonance tomography and computed tomography, electroencephalographic study (EEG study). Examination for the presence of metabolic and endocrine disorders
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Appendix 7 to the
Pediatric Care Standard in the
Republic of Kazakhstan

The list of medical equipment and medical products for maternity hospitals, depending on the level of regionalization of perinatal care

1 level of regionalization of perinatal care	
Maternity unit	
A newborn resuscitation kit: laryngoscopes with straight blades of two sizes (for full-term № 1 and preterm № 0) , endotracheal tubes (from 2.5 to 4.0 mm), aspiration catheters № 4, 6, 8, 10, masks of two sizes № 0; 1, Ambu bag, syringes, scissors, tweezers, sterile goods, antiseptic, adhesive plaster, umbilical catheter FR № 5, 6, meconium aspirator, peripheral catheters G 22, G 24-providing access to vessels and for infusion therapy, T-shaped system	1 per labor ward
Electronic scales for newborns	1 per labor ward
Medical consoles (wall outlet for oxygen, air and vacuum)	Per each bed in the intensive care unit
Equipment for oxygen therapy (oxygen flow meters, gas mixers and humidifiers)	1 per bed
Pulse oximeters with neonatal sensors	1 per bed
Blood glucose meter	1 per unit
Perfusors for infusion therapy	2 per bed
Non-invasive medical ventilator with the mode of continuous positive airway pressure, consumable material (disposable circuits, cannulas (sizes S, M, L, XL), masks (sizes S, M, L, XL), generators and caps by size.	1 per unit
Mechanical ventilator (hereinafter - MV) (ordinary or expert) to stabilize the condition of a newborn	1 per unit
Open topped resuscitation tables with a source of radiant heat (ordinary)	1 per labor ward
Incubators	1 per unit
Heart monitors with additional options (electrocardiography, capnograph, measurement of non-invasive blood pressure and others)	1 per bed
Separate tables for documentation and medical products (hereinafter - MPs)	1 per bed

Neonatal transport incubator with a MV	1 per unit
Patient room in Neonatal intensive care unit (hereinafter - ICUR)	
Electronic scales	1 per single patient room
Medical consoles (wall outlet for oxygen, air and vacuum)	1 per each bed in the intensive care unit
Equipment for oxygen therapy (oxygen flow meters, gas mixers and humidifiers)	1 per bed
Electric suction pump	1 per 1 bed
Pulse oximeters with neonatal sensors	1 per 1 bed
Blood glucose meter	1 per unit
Portable X-ray machine	1 per medical facility
Phototherapy unit	1 per unit
Perfusors for infusion therapy	2 per 1 bed
Pneumothorax set	1 per unit
Non-invasive medical ventilator with the mode of continuous positive airway pressure, consumable material (disposable circuits, cannulas (sizes S, M, L, XL), masks (sizes S, M, L, XL), generators and caps by size.	1 per unit
Mechanical ventilator with disposable circuits	1 per unit
Hyperthermia unit	1 per unit
Open topped resuscitation tables	1 per 2 ICUR beds
Incubators	1 per unit
Heart monitors with additional options	1 per ICUR bed
Portable X-ray machine	1 per hospital
Vision and hearing screening equipment	1 per hospital
Separate tables for documentation and MPs	1 per ICUR bed
2 level of regionalization of perinatal care	
Maternity unit	
A newborn resuscitation kit: laryngoscopes with straight blades of two sizes (for full-term № 1 and preterm № 0) , endotracheal tubes (from 2.5 to 4.0 mm), aspiration catheters № 4, 6, 8, 10, masks of two sizes № 0; 1, Ambu bag, syringes, scissors, tweezers, ligature, sterile goods, antiseptic, adhesive plaster, umbilical catheter FR № 5, 6, meconium aspirator, peripheral catheters G 22, G 24-providing access to vessels and for infusion therapy, T-shaped system	1 per labor ward
Electronic scales for newborns	1 per labor ward
Equipment for oxygen therapy (oxygen flow meters, gas mixers and humidifiers)	1 per bed
Centralized medical gas supply system (console outlets for depressed air, oxygen and vacuum)	available
Pulse oximeters with neonatal sensors	1 per bed
Blood glucose meter	1 per unit

Perfusors for infusion therapy	3 per bed
Pneumothorax set	1 per unit
Non-invasive medical ventilator with the mode of continuous positive airway pressure, consumable material (disposable circuits, cannulas (sizes S, M, L, XL), masks (sizes S, M, L, XL), generators and caps by size.	1 per labor ward
Mechanical ventilators (ordinary or expert) with disposable circuits	1 per labor ward
Open topped resuscitation tables with a source of radiant heat	1 per labor ward
Incubators	1 per labor ward
Heart monitors with additional options (electrocardiography, capnograph, measurement of non-invasive blood pressure and others)	1 per bed
Neonatal transport incubator with a built-in MV with disposable circuits	1 per labor ward
Acid-base balance unit	1 per labor ward
Vacuum aspirator (suction)	1 per bed
Separate tables for documentation and MPs	1 per labor ward
Neonatal resuscitation and intensive care unit (hereinafter - NRICU)	
Invasive MV for newborns (pressure- and volume-controlled) with disposable circuits	1 per NRICU bed+(1 in reserve)
Ambu bag (hand-held ventilator) with a set of soft masks	1 per NRICU bed+(1 in reserve)
Open resuscitation system	1 per NRICU bed+(1 in reserve)
Neonatal incubator	1 per NRICU bed+(1 in reserve)
Phototherapy unit	1 per 2 NRICU beds
Heart monitors with additional options (electrocardiography, capnograph, measurement of non-invasive blood pressure and others) with a set of neonatal sensors, cuffs	1 per NRICU bed+(1 in reserve)
Laryngoscope with a set of blades for newborns	1 per NRICU bed+(1 in reserve)
Phonendoscope for a newborn	1 per NRICU bed
Acid-base balance unit, devices measuring electrolytes, bilirubin	1 per unit
Glucose meter	1 per NRICU
Transcutaneous blood gas monitoring system	1 per NRICU
Medical consoles (wall outlet for oxygen, air and vacuum)	1 per resuscitation bed
EEG device	1 per unit
Portable ECG device	1 per medical facility
Portable X-ray machine	1 per hospital
High-frequency mechanical ventilator with disposable circuits	1 per 6 beds

Non-invasive medical ventilator with the mode of continuous positive airway pressure with consumable material (disposable circuits, cannulas (sizes S, M, L, XL), masks (sizes S, M, L, XL), generators and caps by size.	1 per 1 bed (+1)
Hyperthermia unit	1 per unit
Portable ultrasound machine for newborns with a set of sensors and a Doppler unit	1 per medical facility
Active pleural aspiration system	1 per unit
Laminar air flow cabinet for preparing infusion solutions	1 per unit
Transport incubator with built-in MV (with oxygen cylinders for 3+ hours)	1 per unit
Nebulizer	1 per 2 NRICU beds
Negatoscope	1 per NRICU
Closed system for preparing infusion solutions and parenteral nutrition with consumables	1 machine for neonatal units
Electronic scales for newborns	1 per 2 beds
Medication dispenser	2 per bed
Newborn resuscitation kit	1 set per 2 beds
Mobile medical lamp	1 per 2 beds
General-list medicine cabinet	1 per unit
Tripod for continuous infusion	1 per bed
Electric pump	1 per 1 bed
Stationary germicidal irradiator	1 per unit
Medicine refrigerator	1 per unit
Transcutaneous bilirubinometer	1 per hospital
Negatoscope	1 per unit
Patient room in Rooming-in unit	
Phototherapy unit	1 per unit
Electronic scales for newborns	1 per unit
source of radiant heat	1 per unit
Neonatal bed	1 per bed
Baby changing table	1 per patient room
Stationary germicidal irradiator	1 per unit
Electric pump	1 per unit
Vision and hearing screening equipment	1 set per unit
Newborn resuscitation kit	1 kit per unit
3 level of regionalization of perinatal care	
Maternity unit	
A newborn resuscitation kit: laryngoscopes with straight blades of two sizes (for full-term № 1 and preterm № 0) ; № 00), endotracheal tubes (from 2.0 to 4.0 mm), aspiration catheters № 4, 6, 8, 10, masks of two sizes №	

0;1, laryngeal mask for a newborn, Ambu bag, syringes, scissors, sterile goods, antiseptic, tweezers, adhesive plaster, umbilical catheter FR № 5,6,8 meconium aspirator, ligature, peripheral catheters G 22, G 24-providing access to vessels and for infusion therapy, T-shaped system	1 per labor ward
Electronic scales for newborns	1 per labor ward
Equipment for oxygen therapy (oxygen flow meters, gas mixer and humidifier)	1 per bed
Centralized medical gas supply system (console outlets or bridge system for vacuum, oxygen, depressed air)	shall be available in a labor ward
Pulse oximeters with neonatal sensors	1 per bed
Blood glucose meter	1 per each unit
Perfusors for infusion therapy	2 per bed
Pneumothorax set with consumables	1 per ward
Non-invasive medical ventilator with the mode of continuous positive airway pressure, consumable material (disposable circuits, cannulas (sizes S, M, L, XL), masks (sizes S, M, L, XL), generators and caps by size	1 per bed
Mechanical ventilators (ordinary or expert) with disposable circuits	1 per labor ward
Open topped resuscitation tables with a source of radiant heat	1 per labor ward
Incubators	1 per labor ward
Heart monitors with additional options (electrocardiography, capnograph, measurement of non-invasive blood pressure and others) with a set of neonatal electrodes, sensors and cuffs	1 per labor ward
Neonatal transport incubator with a built-in MV with disposable circuits	2 per unit
Acid-base balance unit	1 per unit
Patient room in Neonatal resuscitation and intensive care unit	
Invasive MV for newborns (pressure- and volume-controlled, time- and flow-cycled, with triggering design, nebulizers) with disposable circuits	1 per bed (+1 in reserve)
Closed system for preparing infusion solutions and parenteral nutrition with consumables	1 system per unit
Hand-held ventilator for a newborn with a set of soft masks of various sizes (Ambu bag)	1 per bed (+1 in reserve)
T-shaped system	1 per bed
Open resuscitation system	1 per bed (+1 in reserve)
Neonatal incubator (for intensive care)	1 per bed (+1 in reserve)
Phototherapy unit	1 per 1 bed
Hyperthermia unit	1 per 6 beds
Heart monitors with additional options (electrocardiography, capnograph, measurement of	

non-invasive blood pressure and others) with a set of neonatal electrodes, sensors, cuffs	1 per bed (+1 in reserve)
Laryngoscope with a set of blades for newborns	1 per bed (+1 in reserve)
Newborn resuscitation kit	1 set per unit
Phonendoscope for a newborn	1 per bed
Acid-base balance unit, devices measuring electrolytes, bilirubin	1 per unit
Transcutaneous bilirubinometer	1 per unit
Glucose meter	1 per unit
Transcutaneous blood gas monitoring system	1 per 6 beds
Centralized medical gas supply system (console outlets or bridge system for vacuum, oxygen, depressed air)	1 per bed
EEG device (portable monitor)	1 per unit
High-frequency oscillatory mechanical ventilator with disposable circuits	1 per 6 beds
Non-invasive medical ventilator for newborns (with variable flow) with consumable material (disposable circuits, cannulas (sizes S, M, L, XL), masks (sizes S, M, L, XL), generators and caps by size	1 per bed (+1 in reserve)
Attachment to mechanical ventilator for supplying nitric oxide with disposable gas supply circuits, 10-20-liter cylinders with nitric monoxide.	1 per unit
Portable ultrasound machine for newborns with a set of neonatal sensors and a Doppler unit and cardiac program	1 per unit
Portable ECG device for a newborn protected from electric interference	1 per unit
Portable X-ray machine	1 per hospital
Ophthalmoscope	1 per unit
Negatoscope	1 per unit
Patient room in Neonatal pathology and special care nursery unit	
Phototherapy unit	1 per 2 beds
Electronic scales for newborns	1 per patient room
Glucose meter	1 per unit
Medication dispenser	1 per bed
Neonatal incubator	1 per 2 beds
Neonatal bed	1 per bed
Neonatal bedside monitor with sensors, and cuffs for measuring non-invasive blood pressure	1 per bed
Nebulizer	1 per 2 beds
Newborn resuscitation kit	1 per 6 beds
General-list medicine cabinet	1 per unit
Tripod for continuous infusion	1 per bed
Electric pump	1 per bed
Stationary germicidal irradiator	1 per unit

Centralized medical gas supply system (console outlets or bridge system for vacuum, oxygen, depressed air)	1 per 2 beds
Non-invasive medical ventilator for a newborn with consumable material (disposable circuits, cannulas (sizes S, M, L, XL), masks (sizes S, M, L, XL), generators and caps by size	1 per 10 beds
Open resuscitation system	1 per 2 beds
Laminar air flow cabinet for preparing sterile solutions or closed system for preparing infusion solutions and parenteral nutrition with consumables	1 cabinet/system per unit
Transcutaneous bilirubinometer	1 per unit
Negatoscope	1 per unit
Baby bath	3 per unit
Vision and hearing screening equipment	1 set per unit
Phonendoscope for a newborn	1 per bed
Patient room in Rooming-in unit	
Phototherapy unit	1 per 10 beds
Electronic scales for newborns	1 per 10 beds
Source of radiant heat	2 per unit
Neonatal bed	1 per bed
Baby changing table	1 per patient room
Stationary germicidal irradiator	1 per patient room
Electric pump	1 per unit
Vision and hearing screening equipment	1 set per unit
Newborn resuscitation kit	1 set per unit
Phonendoscope for a newborn	2 per unit

Appendix 8 to the
Pediatric Care Standard in the
Republic of Kazakhstan

The list of medical equipment and medical products for newborns' transportation in a vehicle of a resuscitation team

1. Equipment:

- 1) incubator (portable or transportable);
- 2) "heater" to warm the passenger compartment of a vehicle;
- 3) heat insulation film for a baby;
- 4) baby clothing (blanket, diapers, clothes, etc.);
- 5) ECG and blood pressure monitor with a set of cuffs and sensors,
- 6) pulse oximeter with disposable cuffs;
- 7) a clock with second hand;
- 8) electronic thermometer;
- 8) phonendoscope.

2. Equipment for respiratory support:

- 1) oxygen cylinder;
- 2) an air compressor for mechanical ventilation and vacuum devices;
- 3) oxygen dosimeter for cylinders;
- 4) portable mechanical ventilator with the system of humidification and heating of breathing gas;
- 5) oxygen mixer;
- 6) Ambu bag, the volume not exceeding 700 cc;
- 7) a set of masks of different sizes for mechanical ventilation;
- 8) oral airways;
- 9) nasal continuous positive airway pressure N CPAP.

3. Equipment and medical products for tracheal intubation and airway clearance:

- 1) laryngoscope with straight blades № 0 and № 1;
- 2) endotracheal tubes (D-diameter 2,5; 3,0; 3,5; 4,0);
- 3) electric or vacuum pump, single-use bulb syringe and a set of aspiration catheters (№ 5, 6, 8, 10, 12, 14);
- 4) nasogastric tube – diameter of 6 mm.

4. Equipment and medical products for drug administration:

- 1) infusion pump, syringe pump (2-3 battery-powered pieces);
- 2) sets of peripheral venous catheters;
- 3) infusion systems;
- 4) various-sized syringes;
- 5) T-joints;
- 6) butterfly needles;
- 7) surgical tweezers, scalpel, scissors;
- 8) sterile gloves.

Appendix 9 to the
Pediatric Care Standard in the
Republic of Kazakhstan

A newborn transportation protocol

Date of birth:	Gestational age:	Postconceptual age:
Age:	Birth weight:	Actual weight:
Sex of the child:	A reason to transfer the newborn:	Transportation duration

The mother’s diagnosis

- 1. _____
- 2. _____

The newborn's diagnosis

1. _____

2. _____

The newborn's diagnosis before transportation _____

Transportation conditions

Transportation mode: car, another medical vehicle, air transport

Type of respiratory therapy: MV, AssV, oxygen therapy _____

Infusion therapy unit – infusion pump or system

Monitoring: pulse oximetry, blood pressure measurement, thermometry

Time (hours, minutes) _____

Indicators	Readiness for transportation	Transportation
Temperature in incubator (degrees Celsius)		
Oxygen level (FiO2), %		
MV parameters		
Flow (l/min)		
Respiratory rate (RR) per minute		
Ventilation mode		
Inspiratory pressure (Pi/e), cm wc		
Expiratory pressure (PEEP), cm wc		
Infusion		
Fluid (ml.)		
Speed (ml/hour)		
Medications		
Monitoring		
RR (per min.)		
Heart rate (HR), bpm/BP (mm of mercury)		
Body temperature (degrees Celsius)		
Oxygen saturation (SpO2), %		
Probe (losses) ml		
Convulsive disorder		
Hemorrhagic syndrome (skin manifestations, gastro-intestinal tract, airway)		

Complications during transportation

Death

Deterioration in the condition

Other situations

Additional information _____

Transportation date and duration

Full name of the physician (the transportation team and the newborn's admitting person)