

MALAYSIAN NATIONAL NEONATAL REGISTRY (CRF 2015)

Centre Name: 	☐ New Case ☐ Readmission ☐ Transfer from another SDP Hospital or IJN:	MNNR No. (Office use): Centre:
Date of Admission: (dd/mm/yy)		

Admitted to neonatal ward: ☐ Yes → (Proceed to complete all sections in this CRF) ☐ No → (Proceed to complete [Sections 1,2,4(No.47) and 5])

☐ Abandoned baby → (if box is ticked, item # 1,4a, 6-16 not mandatory)

Instruction: Where check boxes ☐ are provided, check (✓) one or more boxes. Where radio buttons ☐ are provided (✓) one box only.

SECTION 1 : PATIENT PARTICULARS & MATERNAL HISTORY

*1. Name of mother:			
2. Name of baby (Optional):			
*3. RN of baby:			
*4a. Mother's I/C number:	MyKad:	-	
	Other ID document No:		
	Specify document type (if others):	☐ Passport ☐ Armed Force ID ☐ Driver's License ☐ Old IC ☐ Hospital RN ☐ Father's I/C ☐ Work Permit number ☐ Police ID Card ☐ Immigration permit ☐ Other, specify:.....	
4b. Baby's MyKid number:	-		
*5a. Date of birth of baby: (dd/mm/yy)	/ /	5b. Time of birth: (24- hour format) (enter the best estimated time of birth if the exact time unknown)	
*6. Ethnic group of Mother:	☐ Malay ☐ Indian ☐ Bumiputra Sabah, specify:..... ☐ Other, Malaysian ☐ Chinese ☐ Orang Asli ☐ Bumiputra Sarawak, specify:..... ☐ Non-citizen, specify country:.....		
*7. Maternal age:			
*8. GPA: (current pregnancy before delivery of this child)	*Gravida:		*Parity:
			*Abortion:
*9. Maternal diabetes (including gestational diabetes):	☐ Yes ☐ No ☐ Unknown		
*10. Maternal hypertension, chronic pregnancy included:	☐ Yes ☐ No ☐ Unknown		
*11. Maternal Eclampsia:	☐ Yes ☐ No ☐ Unknown		
*12. Maternal Chorioamnionitis:	☐ Yes ☐ No ☐ Unknown		
*13. Maternal Anaemia:	☐ Yes ☐ No ☐ Unknown		
*14. Maternal abruption placenta:	☐ Yes ☐ No ☐ Unknown		
*15. Maternal Bleeding placenta praevia:	☐ Yes ☐ No ☐ Unknown		
*16. Cord prolapse:	☐ Yes ☐ No ☐ Unknown		

SECTION 2 : BIRTH HISTORY

*17. Antenatal steroid:	☐ Yes → ☐ 1 dose ☐ 2 doses ☐ No ☐ Unknown		
*18. Intrapartum antibiotic:	☐ Yes ☐ No ☐ Unknown		
*19. Birth weight:	(grams)		
*20a. Gestation:	(weeks)	*20b. Gestational age based on: (if patient died)	☐ LMP ☐ Ultrasound ☐ Neonatal assessment ☐ Unknown
*21. Growth status:	☐ SGA ☐ AGA ☐ LGA		
*22. Gender:	☐ Male ☐ Female ☐ Ambiguous/ Indeterminate		
*23. Place of birth:	☐ Inborn ☐ Home ☐ University hospital ☐ Others/specify ☐ Health Clinic ☐ Enroute/ during transport ☐ Unknown ☐ Private Hospital ☐ Maternity home with specialist ☐ Government hospital with specialist ☐ Maternity home without specialist ☐ District ☐ General ☐ Alternative Birthing centre (ABC) ☐ Urban ☐ Rural ☐ Government hospital without specialist		
*24. Multiplicity:	☐ Singleton ☐ Twin ☐ Triplet ☐ Other, specify:		Specify birth order if not a singleton:
*25. Final Mode of delivery:	☐ Vaginal delivery → ☐ SVD ☐ Breech ☐ Caesarean section → ☐ Elective ☐ Emergency ☐ Instrumental → ☐ Vacuum ☐ Forceps ☐ Others, specify:..... ☐ Unknown		

SECTION 2 : BIRTH HISTORY (continue)

*26. Apgar score at 1 min and 5 min (0-10)	a) Score at 1 min:	☐ Unknown	b) Score at 5 min: (Please score even if the baby is intubated)	☐ Unknown
27. Initial resuscitation: (applicable for inborn only)	a) Oxygen:	☐ Yes ☐ No	d) Endotracheal tube vent:	☐ Yes ☐ No
	b) CPAP :	☐ Yes ☐ No	e) Cardiac compression:	☐ Yes ☐ No
	c) Bag and mask ventilation:	☐ Yes ☐ No	f) Adrenaline:	☐ Yes ☐ No
*28. Admission temperature: (mandatory if admitted to Neonatal ward)		. (°C)		

SECTION 3: NEONATAL EVENT

*29. Respiratory support: If < 12 hours = state 0.5 days If > 12 to 24 hours = state 1 day If > 24 hours = state to next completed days Complete entry a) to d) for each type of respiratory support given	☐ Yes →	a) CPAP done?	☐ Yes ☐ No	i) Early CPAP during initial stabilization at birth: ☐ Yes ☐ No Day(s)	
	☐ No	b) Conventional ventilation:	☐ Yes ☐ No	i) Total duration of Conventional ventilation at your centre: Day(s)	
		c) HFJV/HFOV:	☐ Yes ☐ No	i) Total duration of HFJV//HFOV at your centre: Day(s)	
		d) Nitric Oxide:	☐ Yes ☐ No	i) Total duration of Nitric Oxide at your centre: Day(s)	
*30. Total number of days on ventilation support at your centre:		. (autocalculate)			
*31. Surfactant:		☐ Yes → ☐ < 1 hr ☐ 1-2 hrs ☐ > 2 hrs ☐ No			
*32. Parenteral nutrition:		☐ Yes ☐ No			

SECTION 4: PROBLEMS/ DIAGNOSES

33. Respiratory:	☐ Meconium aspiration syndrome ☐ Pulmonary ☐ Pneumonia ☐ Transient tachypnoea of newborn ☐ Pulmonary interstitial emphysema				
*34. RDS:	☐ Yes ☐ No				
*35. Pneumothorax:	☐ Yes → Pneumothorax developed during: ☐ Spontaneous ☐ CPAP ☐ CMV ☐ HFV ☐ No				
*36. Supplemental oxygen and BPD:	a) Is baby on > 21% oxygen continuously for 28 days or more? ☐ Yes ☐ No b) If Yes (i) for < 32 weeks GA, baby still on oxygen / CPAP / ventilator support at 36 weeks corrected age? ☐ Yes ☐ No (ii) for >= 32 weeks GA, baby still on oxygen / CPAP / ventilator support at day 56 of life? ☐ Yes ☐ No				
*37. Cardiovascular	PPHN: ☐ Yes ☐ No ☐ Unknown				
*38. PDA:	☐ Yes → a) ECHO done: ☐ Yes ☐ No ☐ No b) Indomethacin/Ibuprofen: ☐ Yes ☐ No c) Ligation: ☐ Yes ☐ No				
*39. NEC (stage 2 and above):	☐ Yes → a) surgical treatment: ☐ Yes ☐ No ☐ No b) NEC present before admission to your centre: ☐ Yes ☐ No (for outborn baby only)				
*40. ROP Retinal Exam Done	☐ Yes → (If yes, worst stage of ROP): a) Date of first screening: / / b) Post conceptional age at 1st screening: (autocalculate) c) ☐ No ☐ Stage 1 ☐ Prethresh ☐ Thresh ☐ Stage 4 ☐ Stage 5 ☐ PLUS disease d) Laser Therapy: ☐ Yes ☐ No e) Cryotherapy: ☐ Yes ☐ No f) Vitrectomy/AntiVEGF: ☐ Yes ☐ No g) ROP present prior to admission? ☐ Yes ☐ No (for outborn baby only) ☐ No → Appointment given: ☐ Yes ☐ No Date of appointment: / / ☐ Not Applicable				

SECTION 4: PROBLEMS/ DIAGNOSES (continue)

*41. IVH:	☐ Yes <i>If yes, worst grade:</i> → ☐ Grade 1 ☐ Grade 2 ☐ Grade 3 ☐ Grade 4 ☐ No ☐ Not applicable (term infant) ☐ Ultrasound not done
*42. Seizures :	☐ Yes ☐ No
*43. CLABSI:	☐ Yes ☐ No
*44. Confirmed sepsis: (Blood culture positive only)	☐ Yes ☐ No ☐ ≤ 72 hours of life II) Type of organism: (can tick more than one) ☐ Group B Streptococcus ☐ Staphylococcus aureus ☐ Acinetobacter ☐ ESBL organisms ☐ MRSA ☐ Klebsiella ☐ Fungal ☐ E.Coli ☐ CONS ☐ Pseudomonas ☐ Others, specify: ☐ > 72 hours of life II) Type of organism: (can tick more than one) ☐ Group B Streptococcus ☐ Staphylococcus aureus ☐ Acinetobacter ☐ ESBL organisms ☐ MRSA ☐ Klebsiella ☐ Fungal ☐ E.Coli ☐ CONS ☐ Pseudomonas ☐ Others, specify:
*45. Neonatal meningitis:	☐ Yes ☐ No CSF Culture positive : ☐ Yes ☐ No II) If Yes, type of organism: (can tick more than one) ☐ Group B Streptococcus ☐ Staphylococcus aureus ☐ Acinetobacter ☐ ESBL organisms ☐ MRSA ☐ Klebsiella ☐ Fungal ☐ E.Coli ☐ CONS ☐ Pseudomonas ☐ Others, specify:
*46. HIE: (Only for ≥ 36 weeks GA)	☐ None ☐ Mild ☐ Moderate ☐ Severe
*47. Congenital anomalies:	
*47a. Major congenital anomalies: ☐ Yes ☐ No ☐ Syndrome (known) ☐ Down ☐ Edward ☐ Patau ☐ Others, specify (Refer to ICD 10): ☐ Not a recognized syndrome ☐ Isolated major abnormality	*47b. Types of abnormalities (check all that are present. Applies to all including 'known syndromes', 'not a recognized syndrome' or 'isolated major abnormality') ☐ CVS → ☐ Cyanotic ☐ Acyanotic ☐ ECHO done ☐ CNS → ☐ Hydrocephalus ☐ Hydrancephaly ☐ Holoprosencephaly ☐ Others (Refer to ICD 10):_____ ☐ Neural Tube Defect → ☐ Spina bifida ☐ Anencephaly ☐ Encephalocele ☐ Others (Refer to ICD 10):_____ ☐ Skeletal dysplasia ☐ Respiratory ☐ GIT ☐ Hydrops ☐ Renal ☐ Cleft ☐ Lip ☐ Palate ☐ Lip and Palate ☐ Others, specify (Refer to ICD10): ☐ None of the above

SECTION 5: OUTCOME

*48a. Date of discharge / transfer / death: (dd/mm/yy)		/ /	48b. Time of Death: (24 hour format) (mandatory for death cases)	(enter the best estimated time of death if the exact time is unknown)
*49. Weight and growth status on discharge:	a) Weight:	(grams)		
	b) Growth status:	☐ SGA ☐ AGA ☐ LGA		
*50. Total duration of hospital stay (neonatal/ peads care):			(in completed days) (autocalculate)	

*51. Outcome:							
☐ Alive →	Place discharged to: ☐ Home ☐ Social welfare home ☐ Other non Paeds ward ☐ Still hospitalized as of 1st birthday ☐ Transfer to other hospitals →						
	<table border="1"> <tr> <td>a) Name of hospital:</td> <td> </td> </tr> <tr> <td>b) Reason for transfer:</td> <td> ☐ Growth/ stepdown care ☐ Acute medical/ ☐ Social/ Logistic reason ☐ Lack of NICU bed diagnostic services ☐ Other, specify: ☐ Chronic/ Palliative care ☐ Surgery </td> </tr> <tr> <td>c) Post transfer disposition: (Please fill this section if place transferred is not part of the NNR Network)</td> <td> ☐ Home ☐ Transferred again to another hospital ☐ Death ☐ Readmitted to your hospital ☐ Still in ward </td> </tr> </table>	a) Name of hospital:		b) Reason for transfer:	☐ Growth/ stepdown care ☐ Acute medical/ ☐ Social/ Logistic reason ☐ Lack of NICU bed diagnostic services ☐ Other, specify: ☐ Chronic/ Palliative care ☐ Surgery 	c) Post transfer disposition: (Please fill this section if place transferred is not part of the NNR Network)	☐ Home ☐ Transferred again to another hospital ☐ Death ☐ Readmitted to your hospital ☐ Still in ward
	a) Name of hospital:						
	b) Reason for transfer:	☐ Growth/ stepdown care ☐ Acute medical/ ☐ Social/ Logistic reason ☐ Lack of NICU bed diagnostic services ☐ Other, specify: ☐ Chronic/ Palliative care ☐ Surgery 					
c) Post transfer disposition: (Please fill this section if place transferred is not part of the NNR Network)	☐ Home ☐ Transferred again to another hospital ☐ Death ☐ Readmitted to your hospital ☐ Still in ward						
☐ Dead →	Place of death: ☐ Labour room/OT ☐ Neonatal unit ☐ In transit ☐ Others, specify:						

----------------------	----------------------	----------------------

Name : _____ Signature: _____

Date: _____ (dd/mm/yy)

MALAYSIAN NATIONAL NEONATAL REGISTRY

Supplementary Form

Instruction:

1) For term babies please fill in according to the most pertinent underlying cause of death.

2) For preterm babies please fill in according to the most immediate cause of death.

1. Centre Name :				Office use: /
2. Name :		3. RN :		Centre:
4. Mother's I/C Number :	New IC :	Passport :		

Immediate cause of death (Modified Wigglesworth): Tick relevant button to reach correct classification

NEONATAL DEATH
(Is there any LCM?)

Note: LCM = Lethal Congenital Malformation

☐ LCM present

a) Lethal congenital malformation/defect, sepecify:

☐ Neural tube defects

☐ Anencephaly

☐ Encephalocele

☐ Others, specify
(Refer to ICD 10):

☐ CVS

☐ Complex/ cyanotic heart disease

☐ Acyanotic

☐ CNS

☐ Hydrocephalus

☐ Hydrancephaly

☐ Holoprosencephaly

☐ Others, specify
(Refer to ICD 10):

☐ Recognisable syndrome

☐ Down

☐ Edward

☐ Patau

☐ Others, specify
(Refer to ICD 10):

☐ Not recognisable syndrome

☐ Skeletal dysplasia

☐ Respiratory (eg. lung hypoplasia)

☐ GIT

☐ Hydrops foetalis

☐ Renal

☐ Others, specify:

☐ LCM absent

b) (is gestation <37 weeks?)

☐ Yes

c) Gestation <37 weeks conditions associated with immaturity

☐ IVH

☐ Septicaemia

☐ PDA in failure

☐ Pulmonary hemorrhage

☐ NEC

☐ Pneumonia

☐ PIE / BPD

☐ Pneumothorax

☐ Extreme prematurity

☐ Acute intrapartum event

☐ No

Gestation ≥ 37 weeks
(Did the baby have an asphyxial condition?)

☐ d) Asphyxial condition absent
(Did the baby die from infection?)

☐ Asphyxial condition present

☐ e) Infection present

☐ Group B streptococcal septicaemia

☐ Meningitis

☐ Congenital pneumonia

☐ Congenital Infection

☐ Others, specify

☐ Infection absent
(Are there any other specific causes of death?)

☐ f) Otherspecificcauses:

☐ Kernicterus/severe neonatal jaundice

☐ Haemorrhagic disease of newborn/Vitamin K deficiency

☐ Intracranial bleed / SAH

☐ Pneumothorax

☐ Pulmonary hemorrhage

☐ IEM

☐ MAS

☐ Surgical, specify:

☐ Others, specify:

☐ Unknow causes

Name : _____ Signature : _____ Date : (dd/mm/yy)

MALAYSIAN NATIONAL NEONATAL REGISTRY (READMISSION FORM)

Centre Name: _____

MNNR No.
(Office use):Date of Admission: (dd/mm/yy)

SECTION 1 : PATIENT PARTICULARS & MATERNAL HISTORY

*1. Name of mother:			
2. Name of baby (Optional):			
*3. RN of baby:			
*4a. Mother's I/C number:	MyKad: - - Other ID document No: Specify document type (if others): ☐ Passport ☐ Armed Force ID ☐ Driver's License ☐ Old IC ☐ Hospital RN ☐ Father's I/C ☐ Work Permit number ☐ Police ID Card ☐ Immigration permit ☐ Other, specify:.....		
4b. Baby's MyKid number:	- -		
*5. Date of birth of baby: (dd/mm/yy)	/ /		
*6a. Birth weight:	(grams)	*6b. Gestation at birth:	(weeks)

SECTION 2 : PARTICULARS OF THIS ADMISSION

*7. Date of first discharge: (dd/mm/yy)	/ /		
*8. Age at readmission:	(days) (autocalculate)		
*9. Weight at this readmission:	(grams)		
*10. Reason for readmission:	☐ Apnoea ☐ Aspiration ☐ Cardiac surgery ☐ Confirmed sepsis ☐ Cyanosis due to sucking / swallowing incoordination ☐ Fever ☐ Hernia operation ☐ Jaundice ☐ Nearer to home ☐ LRTI ☐ Poor weight gain ☐ Post-op care ☐ ROP laser ☐ Step down care ☐ URTI ☐ Others, Specify:.....		
*11. Ventilated:	☐ Yes (fill in main CRF section 3&4) ☐ No		

SECTION 5: OUTCOME

*48a. Date of discharge / transfer / death: (dd/mm/yy)	/ /	48b. Time of Death: (24 hour format) (mandatory for death cases)	(enter the best estimated time of death if the exact time is unknown)												
*49. Weight and growth status on discharge:	a) Weight: (grams) b) Growth status: ☐ SGA ☐ AGA ☐ LGA														
*50. Total duration of hospital stay (neonatal/ paed care):	(in completed days) (autocalculate)														
*51. Outcome:	☐ Alive → Place discharged to: ☐ Home ☐ Social welfare home ☐ Other non Paeds ward ☐ Still hospitalized as of 1st birthday ☐ Transfer to other hospitals → <table border="1"> <tr> <td>a) Name of hospital:</td> <td colspan="3"></td> </tr> <tr> <td>b) Reason for transfer:</td> <td colspan="3"> ☐ Growth/ stepdown care ☐ Acute medical/ diagnostic services ☐ Social/ Logistic reason ☐ Lack of NICU bed ☐ Surgery ☐ Other, specify:..... ☐ Chronic/ Palliative care </td> </tr> <tr> <td>c) Post transfer disposition: (Please fill this section if place transferred is not part of the NNR Network)</td> <td colspan="3"> ☐ Home ☐ Transferred again to another hospital ☐ Death ☐ Readmitted to your hospital ☐ Still in ward </td> </tr> </table>			a) Name of hospital:				b) Reason for transfer:	☐ Growth/ stepdown care ☐ Acute medical/ diagnostic services ☐ Social/ Logistic reason ☐ Lack of NICU bed ☐ Surgery ☐ Other, specify:..... ☐ Chronic/ Palliative care			c) Post transfer disposition: (Please fill this section if place transferred is not part of the NNR Network)	☐ Home ☐ Transferred again to another hospital ☐ Death ☐ Readmitted to your hospital ☐ Still in ward		
a) Name of hospital:															
b) Reason for transfer:	☐ Growth/ stepdown care ☐ Acute medical/ diagnostic services ☐ Social/ Logistic reason ☐ Lack of NICU bed ☐ Surgery ☐ Other, specify:..... ☐ Chronic/ Palliative care														
c) Post transfer disposition: (Please fill this section if place transferred is not part of the NNR Network)	☐ Home ☐ Transferred again to another hospital ☐ Death ☐ Readmitted to your hospital ☐ Still in ward														
☐ Dead →	Place of death: ☐ Labour room / OT ☐ Neonatal unit ☐ In transit ☐ Others, specify:														

Name : _____ Signature: _____

Date: (dd/mm/yy)

Fetal-infant Growth Chart for Preterm Infants (WHO Growth Standards version)

