KWAZULU-NATAL PROVINCE
HEALTH
REPUBLIC OF SOUTH AFRICA

INPATIENT SUPPORT PACK

Name:			
Date of birth:		**Unit:**	
Date of admission:		**Time of admission:**	
IP. Number:		**Sequential number:** (From tracking register)	

Resolved Problem List (To be updated daily once the problem is resolved)

Problem	Management	ICD10 Code

Name_____ IP No._____

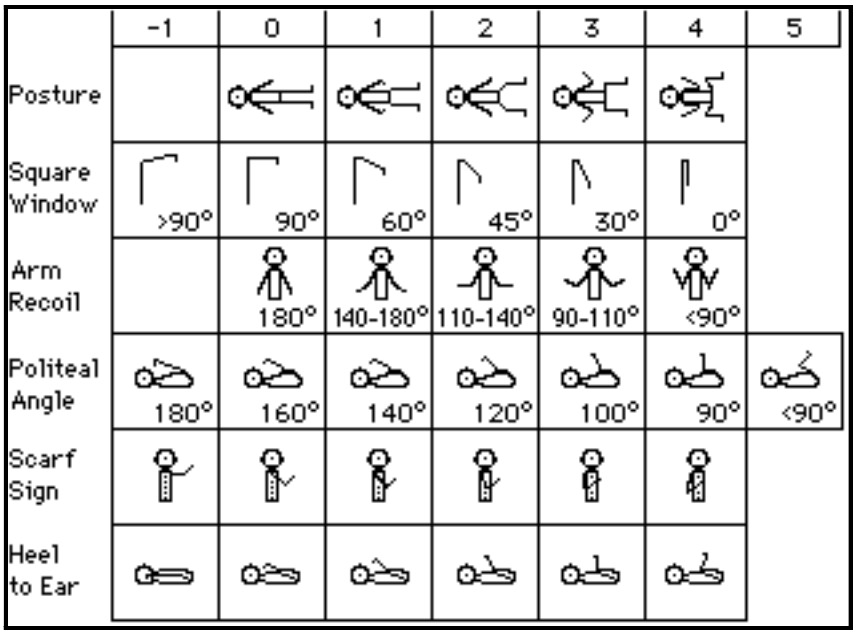
Ballard Exam for Gestational Age (To be completed within 24hrs of birth)

Physical Maturity

	-1	0	1	2	3	4	5
Skin	Sticky, friable, transparent	Gelatinous red, translucent	Smooth pink, visible veins	Superficial peeling and/or rash, few veins	Cracking, pale areas, rare veins	Parchment, deep cracking, no vessels	Leathery, cracked, wrinkled
Lanugo	None	Sparse	Abundant	Thinning	Bald areas	Mostly bald	
Plantar Creases	Heel-toe 40-50 mm = -1,	Heel-toe >50 mm, no creases	Faint red marks	Anterior transverse crease only	Creases over anterior 2/3	Creases over entire sole	
Breast	Imperceptible	Barely perceptible	Flat areola, no bud	Stippled areola, 1-2 mm bud	Raised areola, 3-4 mm bud	Full areola, 5-10 mm bud	
Eye & Ear	Lids fused, loosely = -1, tightly = -2	Lids open, pinna flat, stays folded	Slightly curved pinna, soft with slow recoil	Well-curved pinna, soft but ready recoil	Formed and firm, with instant recoil	Thick cartilage, ear stiff	
Genitals, male	Scrotum flat, smooth	Scrotum empty, faint rugae	Testes in upper cannal, rare rugae	Testes descending, few rugae	Testes down, good rugae	Testes pendulous, deep rugae	
Genitals, female	Clitoris prominent, labia flat	Prominent clitoris, small labia minora	Prominent clitoris, enlarging minora	Majora and minora equally prominent	Majora large, minora small	Majora cover clitoris and minora	

Physical Score: _____

Neuromuscular Maturity



Maturity Rating

Total Score	Gestational Age, Weeks
-10	20
-5	22
0	24
5	26
10	28
15	30
20	32
25	34
30	36
35	38
40	40
45	42
50	44

Neuromuscular Score: _____ Total Score: _____

Gestation by: Dates_____ Ultrasound < 20weeks: _____ SFH: _____ Ballard: _____

Final composite gestational age: _____

NB: Plot birth measurements on the Percentile Growth Chart then decide on:

LGA (Large for gestational age)	**AGA** (Appropriate for gestational age)	**SGA** (Small for gestational age)	**SYMETRICAL**	**ASYMETRICAL**

Scored by: _____ Sign:_____ Date:_____ Time:_____

Daily Summary Chart

Complete the table below daily. It serves as a summary of management given in order to plot progress and assist with completing the discharge summary. Mark with a ✓each day the baby has received the listed interventions.

Day	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	25.	26.	27.	28.	29.	30.
Respiratory																														
Nasal Prong oxygen																														
nCPAP																														
IPPV																														
Oscillation																														
Chest Drain																														
Fluids and nutrition																														
NPO																														
NG feeds																														
Oral feeds																														
TPN																														
Peripheral IV																														
Peripheral arterial																														
Umbilical venous line																														
Umbilical arterial line																														
PICC																														
CVC																														
Urinary Catheter																														
Medications																														
1st line antibiotics																														
2nd line antibiotics																														
3rd line antibiotics																														
Anticonvulsants																														
Inotropes																														
Caffeine/Aminophylline																														
General																														
Phototherapy																														
Blood transfusion																														

Management Checklist – MO and Nurse (Check weekly that the following management /information has been given.)				
Nursing Management	Comments	Date	Sign	Print
First examination completed				
Ballard score sheet completed				
Road to Health Book (RtHB) issued				
Birth registered or advice given				
Mother well-social history obtained				
If mother lodging-Post natal 'visit' given ≤ 6 days				
Immunisations				
Birth Immunisations BCG				
Polio				
NO BCG if baby symptomatic or mum has TB				
6 week post initial immunisations				
Discharge				
All IV devices/strapping removed				
In skin to skin position on discharge				
Family planning given to mother				
Take home medications given				
Discharge education given				
Discharge summary given/filed- In patient record				
Mother-stapled in RtHB				
Unit discharge file				
KMC follow up and growth chart stapled in RtHB				
Medical Management	Comments	Date	Sign	Print
Screening and Consultations-Indicate if performed (P) or booked (B) at referral centre				
Cranial ultrasound- If <32wks/<1500g. Wk 1 & repeat wk 4-5				
Audiology- All patients				
Retinopathy of Prematurity (ROP) If <32wks/<1500g and 1.5-2kg in presence of risk factors. Screen at 4-6wks				
Social worker consulted Teenage mother				
Alcohol/ drug abuse				
Depression/psychosis				
Social issues				
Other				
Rehab team consulted Preterm				
Encephalopathy				
Dietician consulted Poor milk production				
3 days no weight gain/loss				
Other				
HIV management				
Mother taking ARVs				
Mother's viral load known				
PCR baby taken				
PCR result known				
Baby receiving ARVs				
Co-timoxazole commenced (from 4-6 weeks)				
Supplements –Babies <37weeks				
Multivitamins (from 14 days/full feeds)				
Vitamin D (from 14 days/full feeds)				
Folate (from 14 days/full feeds)				
Iron (from 21 days)				
Discharge				
All SOPs completed				
Signed out by Doctor				
RtHB- Pg ii ,27 and 38 completed				
Final summary -cover of Support pack completed				
Follow up appointments given to mother in writing				

Neonatal Invasive Procedure Nursing Record

PROCEDURE	DATE	LOCATION	SIZE & DEPTH	PAIN RELIEF	ERECTED BY	CONSENT If required	REMOVE BY	REMOVED DATE
Peripheral Venous Lines Resite if infiltrated or has phlebitis								
INITIAL								
Peripheral Arterial Lines Perform Alan's test before inserting. Resite if decreased peripheral perfusion, infiltrated or has phlebitis.								
INITIAL								
RESITED								
RESITED								
Umbilical Lines Remove: Venous after 10-14 days; Arterial 5-7 days.								
INITIAL								
REPOSITIONED								
RESTRAPPED								
RESTRAPPED								
Peripherally Inserted Central Catheter (PICC)								
INITIAL								
RESITED								
RESITED								
Central Venous Catheter (CVC) Remove after 7-10days								
INITIAL								
RESITED								
Intubation								
INITIAL								
REINTUBATED								
REINTUBATED								
REINTUBATED								
Chest Drains								
INITIAL								
INITIAL								
Urinary Catheter If silicon replace monthly. If latex replace every 2 weeks.								
INITIAL								
REPLACED								
REPLACED								
Drains (Wound, Peritoneal)								

Name_____ IP No._____

Laboratory results							
General							
Sticker/Track Number and Test							
Date Taken:							
Time Taken:							
WCC							
Neutrophils							
Lymphocytes							
Monocytes							
Hb							
Hct							
MCV							
MCHV							
Platelets							
CRP							
Na							
K							
Cl							
HCO3							
Anion Gap							
Urea							
Creatinine							
Total Protein							
Albumin							
TSB(Total Serum Bilirubin) /Conjugated Bilirubin							
Phototherapy line/ Exchange transfusion							
ALT							
ALP							
GGT							
Ca / Corrected Ca							
Mg							
Phosphate							
PI/ PTT							
INR							
Date Retrieved							
Time Retrieved							
Sign							
Print							

Laboratory results

Microbiology

Date Taken	Specimen/Site	Bar Code	Date Retrieved and Organism	Sensitivity	Sign

Laboratory results

Other

Date Taken	Test	Barcode	Date Retrieved and Result	Sign

Blood Gas (For district hospitals. Regional/tertiary to complete Blood Gas form) A=Arterial V= Venous BE= Base Excess

Date & time	Site A/V	pH	$PaCO_2$ mmHg	PaO_2 mmHg	Sats	Act. HCO_3	Std. HCO_3	BE	Action	Sign

Radiological and other investigations

X-Rays

Date	Time	Type	Results	Sign

Ultrasound

Date	Site	Performed by	Results	Sign

Other

Investigation	Date	Results	Sign
ECG			
EEG			
CT Scan			
MRI			

Screening

Investigation	Date	Results	Sign
Audiology			
Cardiology			
ROP			

Name_____ IP No._____

Health Education				
Orientation to unit	**Date**	**Sign**	**Print**	**Mother sign**
Introduction to staff				
Unit layout and function of various equipment				
Unit routine				
Visiting policy- Parents 24hrs. Siblings and identified visitors during visiting hours				
Roles and responsibilities of the mother				
Support available for mother				
Lodger facilities				
Down referral policy				
Infection control				
Personal hygiene- daily bath, clean clothes.				
Washing hands- process, entry to unit & hand spray				
No sharing of equipment				
No sharing of breast milk				
Daily cleaning incubator / cot				
Not to touch other babies				
Care of the newborn				
Buttock care				
Cord, eye and mouth care				
Temperature control				
Jaundice				
Administration of oral medications				
Breast and tube feeding				
Expressing				
Storage of milk				
Increasing milk production				
Checking tube placement				
Signs of feeding intolerance				
Donor milk				
Readiness for oral feeding				
Benefits of breastfeeding				
Baby friendly initiative				
Nipple preparation				
Frequency of feeds				
Positioning, rooting & latching				
Winding and unlatching				
Developmentally supportive care				
Nesting				
Low light and sound				
Prone lying				
Flexion & containment				
Understanding baby's cues				
Kangaroo care Benefits				
Position –NB extension of the neck				
Support-in hospital and at home				
Nutrition-breast milk only				
Early discharge (KMC at home) and follow up				
Pain management				
Signs of pain				
Comfort measures- Containment (Still holding)				
Non- nutritive sucking (sucrose)				
Swaddling				

Name_____ IP No._____

HIV management/care	Date	Sign	Print	Mother sign
Result of birth HIV PCR				
How to give ARVs				
Importance of adherence				
Dangers of mixed feeding				
Formula if high risk mother				
Continue nevirapine 1 week after stopping breastfeeding				
Repeat HIV PCR 6 weeks after stopping breast feeding				
Special needs				
Dysmorphism				
Wound care				
Stoma care				
Management of cleft palate				
Other conditions				
Physio. OT, Speech therapy				
Screening				
Retinopathy of Prematurity (ROP)				
Intra ventricular Haemorrhage (IVH)				
Hearing				
Other				
Discharge education				
Readiness for discharge				
Discharge baby in KMC position				
Feeding				
Exclusive breast feeding for 6mths-no other solids or water				
Indications for formula-risks discussed				
Preparation of formula				
Cleaning & sterilisation of containers & teats				
Danger signs-go straight to health facility				
Fast breathing				
Not drinking well/decreased activity				
Pale/blue/yellow colour				
Vomiting				
Common conditions and management				
Colic				
Thrush				
Diarrhoea				
Sticky eyes				
Nappy rash				
Take home medications				
Prescription (purpose & duration)				
Supplements (for 6mths-year)				
Dosage and administration				
Where/when to collect				
Dangers of traditional/Dutch/other non-prescribed medications				
Preparation & administration of oral rehydration therapy				
General				
General hygiene and bathing				
"Back to sleep" positioning to prevent SIDS				
Community KMC and follow up at KMC clinic				
-baby in KMC position at all times				
-weekly/biweekly KMC follow up until 2500g				
Use of Road to Health booklet				
Scheduled clinic visits				
Support from community care giver (CCG)				

Name_____ IP No._____

Record of parental education /counselling

Initial Condition and prognosis (On admission)

Diagnosis and underlying conditions					
Planned management					
Expected clinical course & possible complications (Infections, NEC, IVH, ROP, hearing loss etc)					
Mother's understanding/questions/ concerns					
Date:		**Time:**			
Sign (Doctor)		**Print**		**MP No.**	
Sign (Nurse)		**Print**		**SANC No.**	
Sign (Mother)		**Print**			
Indicate names of any translator/ witness/ family member present:					
NB: If baby is for palliative care-Record on palliative care form Y / N Sign: Date:					

Ongoing Counselling (For any change in condition or prognosis)

Diagnosis and underlying conditions					
Management/treatment options, goals & possible side effects					
Complications and adverse events					
Prognosis –severity of illness.					
Mother's understanding/questions/ concerns					
Conclusion					
Date:		**Time:**			
Sign (Doctor)		**Print**		**MP No.**	
Sign (Nurse)		**Print**		**SANC No.**	
Sign (Mother)		**Print**			
Indicate names of any translator/ witness/ family member present:					
NB: If baby is for palliative care-Record on palliative care form Y / N Sign: Date:					

Name_____ IP No._____

Ongoing Counselling (For any change in condition or prognosis)					
Diagnosis and underlying conditions					
Management/treatment options, goals & possible side effects					
Complications and adverse events					
Prognosis –severity of illness.					
Mother's understanding/questions/ concerns					
Conclusion					
Date:		**Time:**			
Sign (Doctor)		**Print**		**MP No**.	
Sign (Nurse)		**Print**		**SANC No.**	
Sign (Mother)		**Print**			
Indicate names of any translator/ witness/ family member present:					
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Ongoing Counselling (For any change in condition or prognosis)					
Diagnosis and underlying conditions					
Management/treatment options, goals & possible side effects					
Complications and adverse events					
Prognosis –severity of illness.					
Mother's understanding/questions/ concerns					
Conclusion					
Date:		**Time:**			
Sign (Doctor)		**Print**		**MP No**.	
Sign (Nurse)		**Print**		**SANC No.**	
Sign (Mother)		**Print**			
Indicate names of any translator/ witness/ family member present:					
NB: If baby is for palliative care-Record on palliative care form Y / N Sign: Date:					

Name_____ IP No._____

PHOTOTHERAPY

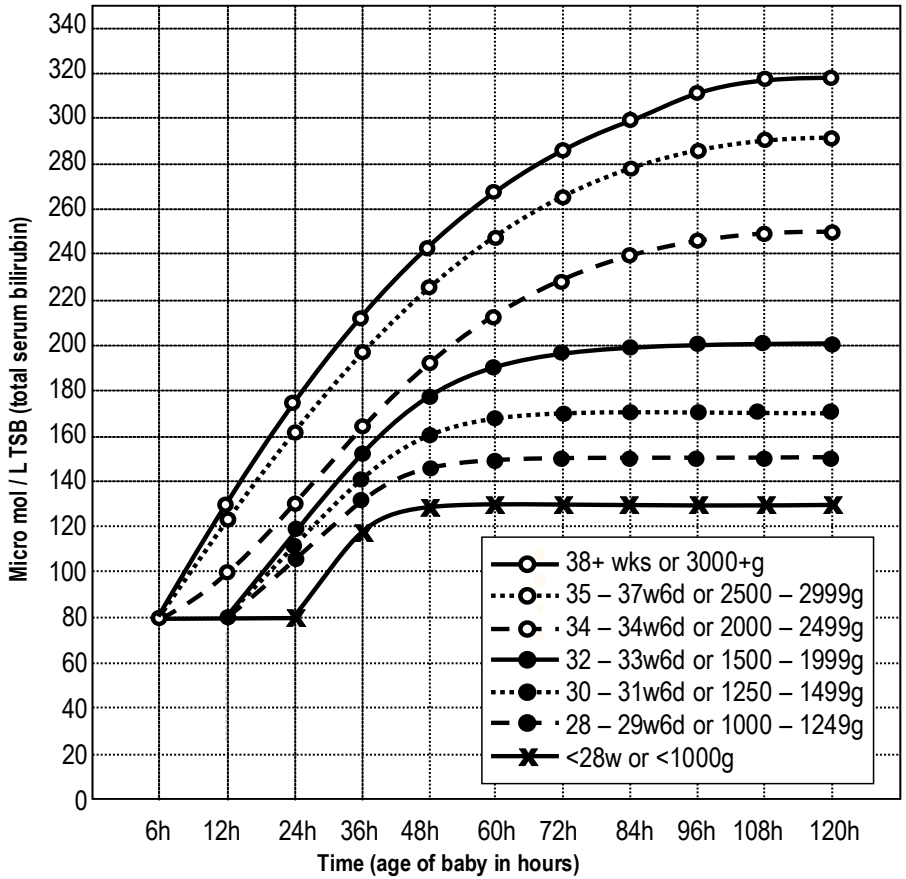
In presence of risk factors use one line lower (the gestation below) until <1000g.

If gestational age is accurate, rather use gestational age (weeks) instead of body weight

Infants > 12 hours old with TSB level below threshold, repeat TSB level as follows:
1- 20µmol/L below line:repeat TSB in 6hrs or start phototherapy and rept TSB in 12- 24hrs,
21 - 50 µmol/L below line: repeat TSB in 12 – 24hrs,
>50 µmol/L below line: rept TSB until it is falling and/or until jaundice is clinically resolving

Infants under phototherapy :
Check the TSB 12 – 24 hly but if TSB >30 µmol/L above the line , check TSB 4 – 6hly.

STOP phototherapy :
If TSB > 50 µmol/L below the line. Recheck TSB in 12 – 24hr.

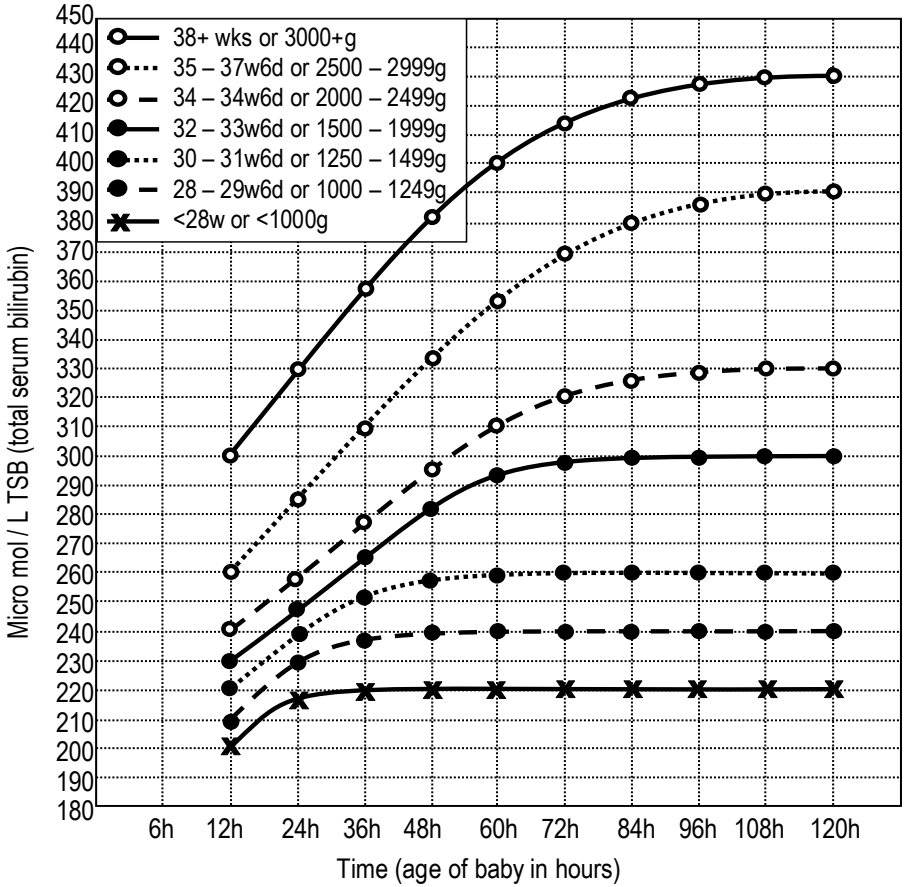


Start intensive phototherapy when the TSB is ≥ the line according to gestation or weight.

EXCHANGE TRANSFUSION

In presence of sepsis, haemolysis, acidosis, or asphyxia,
use one line lower (gestation below) until <1000g
If gestational age is accurate, rather use gestational age (weeks) than body weight

Note: 1. Infants who present with TSB above threshold should have Exchange done if the TSB is not expected to be below the threshold after 6 hrs of intensive phototherapy.
2. Immediate Exchange is recommended if signs of bilirubin encephalopathy and usually also if TSB is >85 µmol/L above threshold at presentation
3. Exchange if TSB continues to rise >17 µmol/L/hour with intensive phototherapy



Name_____ IP No._____

Total Serum Bilirubin (TSB) results and actions taken: TSBs should be taken daily when under phototherapy and at least 6hrly if approaching exchange levels. Phototherapy lights (tubes) should be changed every 1000 hrs or every 3-6months depending on usage. Lights must be as close as possible to the baby. Ensure baby is well hydrated.									
Date Taken									
Time Taken									
TSB									
Conjugated TSB									
Phototherapy line									
Exchange line									
Hours on photo timer									
All lights working Y / N									
Action									
Date Retrieved									
Time Retrieved									
Sign									
Print									

Name_____ IP No._____

ASSESSMENT AND CARE DESCRIPTIONS FOR NEONATAL GENERAL/HIGH CARE

Record the letter of the word that best describes the assessment of the baby in each relevant column in the assessment chart.

CONDITION

W	Well
S	Stable
I	Improving
U	Unstable
ES	Emergency signs
C	Critical
D	Dying

EYES

C	Clear
R	Red
P	Purulent discharge
G	Green discharge
J	Jaundiced
S	Swollen

SKIN, MOUTH, CORD & BUTTOCKS

H	Healthy	N	Necrosis
BR	Bruised	D	Dry
R	Red	M	Moist
PA	Pressure area	T	Thrush
P	Peeling	F	Flare (Umbilicus)
RA	Rash	BL	Bleeding
L	Lesion	CO	Cord off
O	Oedema	PO	Pitting oedema

WOUND/NASAL PERFUS.

H	Healthy
G	Granulating
S	Sloughy
E	Exuding
I	Infected
N	Necrotic
S	Surgical
VWP	Visible, Warm, Pink

ACTIVITY

A	Appropriate
J	Jittery
I	Irritable
S	Seizures
L	Lethargic
U	Unresponsive

SEIZURES

A	Apnoea	F	Fisting
Fo	Focal	C	Cycling
G	Generalised	T	Tonic
S	Staring	C	Clonic
M	Mouthing	K	Kernicteric

SEIZURE Mx

S	Spontaneous recovery
ST	Stimulated
B	Bagged
L	Lorazepam
M	Midazolam
P	Phenobarbitone

GLUCOSE Mx

B	3ml/kg 10% dext.
C	Cocktail
IB	Insulin bolus
II	Insulin infusion
5% D	5% Dextrose

EYE/SKIN/ BUTTOCK CARE

A	Aqueous cream
V	Vaseline
B	Barrier cream
ZC	Zinc and castor oil
M	Mycostatin
VO	Vegetable oil
S	Saline
CH	Chloromycetin

POSITION

RL	Right lateral
LL	Left Lateral
P	Prone
S	Supine

PROBE

R	Right
L	Left
A	Arm
F	Foot
H	Hand
E	Ear

PHOTOTHERAPY

S	Single
D	Double
PB	Photo-blanket

PAIN Mx

S	Sucrose
NNS	Non Nutritive sucking
C	Containment
A	Analgesia

VISITORS

M	Mother
F	Father
G	Grandparents
S	Siblings
O	Other

COLOUR

P	Pink
PA	Pale
D	Dusky
R	Red
PC	Periph. Cyanosis
CC	Central Cyanosis
J	Jaundiced
M	Mottled

PERFUSION

W	Warm
P	Pink
H	Healthy
P	Pale
Ne	Necrosis
PA	Pressure area
CRT	Capillary Refill time
N	Normal ≤ 3 secs
Pr	Prolonged >3 secs

DISTRESS

N	Nil
SS	Substernal R.
SC	Subcostal R.
IC	Intercostal R.
TT	Tracheal tug
NF	Nasal flare
G	Grunting
M	Mild
MD	Moderate
S	Severe

O_2 METHOD

RA	Room air
OA	Oral airway
NP	Nasal prongs
HB	Head box
NC	Nasal catheter
nCPAP	Nasal continuous positive airways pressure

SECRETIONS

CR	Creamy
CL	Clear
W	White
Y	Yellow
G	Green
SC	Scanty
M	Moderate
L	Large
Lo	Loose
T	Thick

RESPIRATORY Mx

S	Spontaneous recovery
ST	Stimulated
B	Bagged
FiO_2 ↑	Oxygen increased
FiO_2 ↓	Oxygen decreased
FL ↑	Flow increased
C	Compressions

ABBREVIATIONS

BP	Blood pressure
FiO_2	Fraction of Inspired O_2
MAP	Mean Airway Pressure
Mx	Management
N	No
NPO	Nil per os
O_2	Oxygen
PRN	As required
PEEP	Positive End Expiratory Pressure
R.	Recession
SaO_2	Haemoglobin oxygen saturation
Y	Yes

SUCKING

NA	Not applicable
S	Strong
L	Latching
W	Weak
N	No effort
NNS	Non-nutritive Sucking

ABDOMEN

S	Soft
D	Distended
T	Tense
R	Red
SC	Scaphoid
BL	Visible bowel loops

SOUNDS

P	Present
D	Decreased
A	Absent

URINE

Y	Yellow
O	Orange
CL	Cloudy
P	Pink
R	Red

STOOLS

M	Meconium
SY	Soft yellow
G	Green
L	Loose
B	Bloody
C	Changing
O	Offensive
D	Diarrhoea

ASPIRATES

C	Clear
M	Milky
B	Blood stained
BS	Bile stained
R	Returned
D	Discarded

FEEDS

EBM	Expressed breast milk
PNAN	Prenan
PTB	Put to breast
NGT	Nasogastric tube
NJT	Nasojejunal tube
NPO	Nil per os
FM85	Breast milk fortifier

SITE

RA/H	Right arm/hand
LA/H	Left arm/hand
RL/F	Right leg/foot
LL/F	Left leg/foot
UAC	Umbilical arterial catheter
UVC	Umbilical venous catheter
S	Scalp
CVC	Central venous Catheter
A	Arterial
V	Venous
SL	Short line

IV CONDITION

H	Healthy
L	Leaking
P	Puffy
PH	Phlebitis
I	Infiltrated
B	Blocked
WPM	Warm, pink, mobile

FLUID

NNL	Neonatalyte
TPN	Total parenteral nutrition
RL	Ringers lactate
5% C	5% Dextrose cocktail
15% C	15% Dextrose cocktail
½ NaCl	0.45% Saline
SB	Sodium bicarbonate

ACTION

DS	Dressing soiled
DC	Dressing changed
LR	Line removed
LRE	Line resited
HS	Hub scrubbed

Name_____ IP No._____