



Neonatal Core Data Index

Data Item, Data Type, Explanation, Values and Origin

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Data items: 100

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REFERENCE DATASETS

BAPM	British Association of Perinatal Medicine
BNDS	Birth Notification Dataset
CAR	WM Congenital Anomalies Register
CDS	Commissioning Dataset
CEMACH	Confidential Enquiry into Maternal and Child Health
CMDS	Commissioning Minimum Dataset
CNST	Clinical Negligence Scheme for Trusts
ENN	EuroNeoNet
HCC	Healthcare Commission
HES	Hospital Episode Statistics
HOI	Health Outcome Indicators – Normal Pregnancy and Childbirth
MPAG	Maternity Professional Advisory Group – West Midlands
NCCMDS	Neonatal Critical Care Minimum Dataset
NNAP	National Neonatal Audit Project
NPAG	Neonatal Professional Advisory Group – West Midlands
NSC	National Screening Committee
ONS	Office for National Statistics
RCOG	Royal College of Obstetricians and Gynaecologists
RCPCH	Royal College of Paediatrics and Child Health
SS	SureStart

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Introduction

The neonatal core data index reflects the data items included in the MANNERS.NET (Neonatal) application, developed by the Perinatal Institute for the purpose of collecting and analysing information relating to care within the neonatal units of the West Midlands.

Each data item presented includes an explanation of what the data item is, along with the available input options.

The data items are categorised as either static, episodic or daily. This refers to the frequency of data input for each individual item. The explanations are as follows:

Static: items which only need to be entered once per baby, in the baby's lifetime
Episodic: items which only need to be entered once per episode of neonatal care
Daily: items which need to be recorded on a daily basis

The dataset incorporates the datasets of the National Neonatal Audit Programme (www.ncap.org.uk) and the Neonatal Critical Care Minimum Dataset (<http://www.connectingforhealth.nhs.uk/dscn/dscn2006/DSCN14-2006.pdf>)

A. Demographic Details

Data Item	Mother's NHS number
Data Type	Static
Explanation	Unique identifier and can be used for record linkage with maternal data
Input Options	Numerical format
Data Origin	BAPM, NNAP, NPAG

Data Item	Mother's date of birth
Data Type	Static
Explanation	To ascertain age at delivery
Input Options	DD/MM/YYYY
Data Origin	NPAG

Data Item	Postcode
Data Type	Static
Explanation	To derive geographical distribution of babies
Input Options	Alphanumeric format
Data Origin	BAPM, CAR, CDS, CEMACH, HES, MPAG, NPAG, SS

Data Item	Ethnic Origin
Data Type	Static
Explanation	The current ONS/Census groupings do not meet requirements for medical data. The GEO classification is now used across the West Midlands. However, the options do map to ONS requirements for NN4B submissions.
Input Options	<p>Classification by origin to support medical data</p> <p><i>Mutually exclusive</i></p> <p>Pick list within each group</p> <p>Africa</p> <ul style="list-style-type: none"> North Africa Sub-Sahara Other <p>Asia</p> <ul style="list-style-type: none"> India Pakistan Bangladesh China Far East Asia – Other South East Asia Other <p>Caribbean</p> <p>Europe</p> <ul style="list-style-type: none"> Britain Ireland Northern Europe Western Europe Eastern Europe Southern Europe Other <p>Middle East</p> <p>Other</p>
Data Origin	BNDS, CDS, HES, MPAG, NPAG

B. GP Details

Data Item	GP Code
Data Type	Static
Explanation	Unique GP identifier
Input Options	Linked to National GP database
Data Origin	BNDS, CDS, CEMACH, HES, MPAG, NPAG

Data Item	GP Practice Code
Data Type	Static
Explanation	Practice location identifier
Input Options	Linked to National GP database
Data Origin	BNDS, CEMACH, MPAG, NPAG

C. Antenatal Steroids

Data Item	Antenatal steroids
Data Type	Static
Explanation	All mothers in preterm labour should, if possible, receive a complete course of steroids. Antenatal steroids enhance foetal surfactant production and reduce neonatal morbidity and mortality in preterm babies
Input Options	<i>Mutually exclusive</i> None Incomplete Course Total number of doses Complete Course How many days prior to delivery Total number of doses Multiple Courses Total number of doses
Data Origin	BAPM, CEMACH, MPAG, NNAP, NPAG, RCOG

D. Delivery

Data Item	Baby's NHS number
Data Type	Static
Explanation	Unique identifier. Used for record linkage in babies receiving care in more than one unit and for subsequent outcome data
Input Options	3-3-4 numerical format
Data Origin	BAPM, BNDS, CDS, CEMACH, HES, MPAG, NNAP, NPAG

Data Item	Booked place for delivery
Data Type	Static
Explanation	The first intended place of delivery by the healthcare professional in consultation with the mother
Input Options	<i>Mutually exclusive</i> Hospital in region (list of hospitals) Hospital outside region (specify) Home Private hospital Private birth centre Unbooked
Data Origin	BAPM, NNAP, NPAG

Data Item	Where delivered
Data Type	Static
Explanation	Important factor associated with outcome Allows changes of intent re. place of delivery to be recorded
Input Options	<i>Mutually exclusive</i> NHS hospital (list of hospitals) Home BBA Private hospital
Data Origin	BAPM, BNDS, CDS, CEMACH, HES, MPAG, NPAG, SS

Data Item	Date of birth
Data Type	Static
Explanation	Allows calculation of postnatal age
Input Options	Automatically generated by application
Data Origin	BAPM, BNDS, CDS, CEMACH, HES, MPAG, NCCMDS, NNAP, NPAG

Data Item	Time of birth
Data Type	Static
Explanation	Required to derive patient age for analysis by age at admission or discharge
Input Options	HH:MM (24 hour clock)
Data Origin	BAPM, BNDS, CDS, CEMACH, HES, MPAG, NNAP, NPAG

Data Item	Gestation at delivery
Data Type	Static
Explanation	A determinant of outcome
Input Options	Numerical format, expressed in weeks and days
Data Origin	BAPM, BNDS, CDS, CEMACH, HES, HOI, MPAG, NCCMDS, NNAP, NPAG

Data Item	Mode of delivery
Data Type	Static
Explanation	Can be related to outcome
Input Options	<i>Mutually exclusive</i> Vaginal cephalic Vaginal breech Instrumental Caesarean section
Data Origin	BNDS, HES, MPAG, NPAG

Data Item	Sex
Data Type	Static
Explanation	Required to analyse outcome by sex
Input Options	<i>Mutually exclusive</i> Male Female Not specified Not known
Data Origin	BAPM, NPAG, NNAP

Data Item	Birthweight
Data Type	Static
Explanation	Indicator of pregnancy outcome
Input Options	Numerical format, expressed in grams
Data Origin	BAPM, BNDS, CDS, CEMACH, HES, HOI, MPAG, NNAP, NPAG

Data Item	Vitamin K
Data Type	Static
Explanation	Vitamin K administration prevents VKDB
Input Options	<i>Mutually exclusive</i> Given IV Given IM Given orally – no further doses needed Given orally – further doses needed Not given (specify reason)
Data Origin	DOH PL/CMO/98/3, DOH PL/CNO/98/4, MPAG, NPAG

Data Item

Data Type

Explanation

Input Options

Data Origin

Birth Order

Static

To analyse pregnancy outcome according to birth order and to identify the individual baby resulting from a multiple birth pregnancy

Numerical

BAPM, BNDS, CDS, CEMACH, HES, MPAG, NNAP, NPAG

Data Item

Data Type

Explanation

Input Options

Data Origin

Number born this pregnancy

Static

Includes total number of fetuses recorded at any time in the pregnancy or after delivery, excluding fetus papyraceous

Numerical

BAPM, NNAP, NPAG

Data Item

Data Type

Explanation

Input Options

Data Origin

Head Circumference

Static

Measured in centimetres (to nearest decimal place)

Numerical

NPAG

E. Resuscitation

Data Item	Professional leading resuscitation
Data Type	Static
Explanation	Staff trained in neonatal resuscitation favourably influence the management and outcome of an ill or preterm baby requiring resuscitation
Input Options	<i>Mutually exclusive</i> Midwife Neonatal nurse ANNP SHO Reg Consultant Other
Data Origin	CEMACH, MPAG, NPAG
Data Item	Type of resuscitation
Data Type	Static
Explanation	An indirect measure of the baby's condition at birth and response of professional present at birth
Input Options	<i>Mutually exclusive</i> Basic Advanced <i>Non-mutually exclusive</i> IPPV Cardiac Massage Drugs Given <i>Non-mutually exclusive</i> Adrenalin Bicarb Volume Glucose
Data Origin	CDS, HES, MPAG, NPAG
Data Item	Apgar score @ 1 min
Data Type	Static
Explanation	Low apgar score indicates need for resuscitation and is related to outcome
Input Options	Numerical format
Data Origin	HES, MPAG, NPAG
Data Item	Apgar score @ 5 mins
Data Type	Static
Explanation	Low apgar score indicates need for resuscitation and is related to outcome. Five minute score is an indication of response to and effectiveness of resuscitation
Input Options	Numerical format
Data Origin	HES, MPAG, NPAG

Data Item	Apgar score @ 10 mins
Data Type	Static
Explanation	Low apgar score indicates need for resuscitation and is related to outcome. Ten minute score is an indication of the need for resuscitation and of the response to resuscitation.
Input Options	Numerical format
Data Origin	MPAG, NPAG

F. Admission Details

Data Item	Date of admission
Data Type	Episodic
Explanation	Required to analyse patient age at admission and assists in record linkage in babies transferred between units
Input Options	DD/MM/YYYY
Data Origin	BAPM, HES, NCCMDS, NNAP, NPAG

Data Item	Time of admission
Data Type	Episodic
Explanation	Required to analyse patient age at admission and assists in record linkage in babies transferred between units
Input Options	HH:MM (24 hour clock)
Data Origin	BAPM, HES, NCCMDS, NNAP, NPAG

Data Item	Source of admission
Data Type	Episodic
Explanation	Allows analysis of transfer of babies
Input Options	<i>Mutually exclusive</i> Delivery Suite Theatre Other ward this hospital Other hospital (list of hospitals) Responsibility for transfer Ex-utero transfer by their staff Ex-utero retrieval by our staff Other (specify)
Data Origin	BAPM, NNAP, NPAG

Data Item	First temperature on admission
Data Type	Episodic
Explanation	In the preterm baby, low temperature on admission is associated with increase in mortality and morbidity
Input Options	Numerical format, expressed in degrees Celsius
Data Origin	BAPM, NNAP, NPAG

Data Item	First documented consultation with parent/carer
Data Type	Episodic
Explanation	Early communication with parents/carers is an important part of good neonatal care. Documentation of the information given about the baby is good practice
Input Options	<i>Non-mutually exclusive</i> Time of first documented consultation Designation of staff Neonatal Consultant Registrar ANNP
Data Origin	NNAP, NPAG

G. Levels Of Care

Data Item

Data Type

Explanation

Input Options

Data Origin

Days of Intensive Care

Daily

Total number of days of intensive care, as defined in BAPM standards document. Any period of intensive care in 24 hours constitutes a day. The 24 hour period runs from midnight to midnight, however, units may use any other 24 hour period, e.g. 9am to 9am, as long as this remains consistent.

Automatically generated by application, derived from associated daily data item

BAPM

Data Item

Data Type

Explanation

Input Options

Data Origin

Days of High Dependency

Daily

Total number of days of high dependency care, as defined in BAPM standards document. Any period of high dependency care in 24 hours constitutes a day. The 24 hour period runs from midnight to midnight, however, units may use any other 24 hour period, e.g. 9am to 9am, as long as this remains consistent.

Automatically generated by application, derived from associated daily data item

BAPM

Data Item

Data Type

Explanation

Input Options

Data Origin

Special Care

Daily

Recorded if baby meets requirements on that day for special care

Automatically generated by application, derived from associated daily data item

BAPM

Data Item

Data Type

Explanation

Input Options

Data Origin

Normal Care

Daily

Recorded if baby meets requirements on that day for normal care

Automatically generated by application, derived from associated daily data item

BAPM

H. Respiration

Data Item

Data Type

Explanation

Input Options

Data Origin

Chest Drainage

Daily

Chest drain in place at any time during a 24 hour period and a measure of the unit's activity.

Daily input

BAPM, NCCMDS, NPAG

Data Item

Data Type

Explanation

Input Options

Data Origin

NCPAP

Daily

A measure of the use of NCPAP during a 24 hour period and of the unit's activity

Daily input

BAPM, NCCMDS, NPAG

Data Item

Data Type

Explanation

Input Options

Data Origin

Oxygen Therapy

Daily

Continuous oxygen given any time during a 24 hour period and a measure of the unit's activity

Daily input

NCCMDS

Data Item

Data Type

Explanation

Input Options

Data Origin

Pneumothorax

Daily

Pneumothorax is associated with significant morbidity and is associated with some treatments

Non-mutually exclusive

Spontaneous

If no, whilst receiving CPAP?

Occurred during transfer from another hospital (pick list)

NCCMDS

Data Item

Data Type

Explanation

Input Options

Data Origin

Severe Apnoea

Daily

Needing frequent intervention i.e. over 5 stimulations in 8 hours, or resuscitation with IPPV 2 or more times in a calendar day.

Daily input

NCCMDS

Data Item

Data Type

Explanation

Input Options

Data Origin

Steroids for CLD

Daily

Postnatal systemic steroids for the treatment of chronic lung disease are associated with significant adverse neuro-developmental outcome.

This is not to include systemic steroids administered to treat upper airway oedema, or include inhaled steroids

Daily Input

NPAG

Data Item	Tracheostomy
Data Type	Daily
Explanation	Record of care of tracheostomy and measure of unit's activity
Input Options	<i>Mutually exclusive</i> Care undertaken by nursing staff Care undertaken by external carer (parents)
Data Origin	NCCMDS
Data Item	Ventilated by ETT
Data Type	Daily
Explanation	Allows calculation of a unit's experience of ventilation and allows comparison of duration of ventilation with differing practices
Input Options	Time of intubation
Data Origin	BAPM, NCCMDS, NPAG
Data Item	Mode of Ventilation
Data Type	Daily
Explanation	The mode of ventilation used
Input Options	IPPV HFOV Nitric Oxide
Data Origin	NPAG
Data Item	Surfactant administration
Data Type	Daily
Explanation	Record of whether surfactant was given at any time. Also includes surfactant given at delivery.
Input Options	<i>Non-mutually exclusive</i> Time of dose Type of surfactant Survanta Curosurf Other
Data Origin	BAPM, NNAP, NPAG

I. Neurological

Data Item	Convulsions
Data Type	Daily
Explanation	Clinical seizures noted during a 24 hour period
Input Options	Daily input
Data Origin	NCCMDS
Data Item	Cranial Ultrasound Scan
Data Type	Daily
Explanation	Persistent echodensity and cystic periventricular leukomalacia are associated with adverse neurodevelopmental outcome
Input Options	<i>Non-mutually exclusive</i> Haemorrhages Normal Localised IVH IVH with ventricular dilatation Other (details) Parenchymal Lesions Intraparenchymal echo density Single large cyst Multiple cysts None Ventricular Size Normal Ventriculomegaly > 97 th centile Arrested ventriculomegaly > 97 th centile Ventriculomegaly shunted
Data Origin	BAPM
Data Item	Encephalopathy
Data Type	Daily
Explanation	Moderate and severe encephalopathy are associated with significant adverse outcome
Input Options	<i>Mutually exclusive</i> Mild - grade 1 Moderate - grade 2 Severe - grade 3
Data Origin	BAPM
Data Item	Neonatal Abstinence Syndrome
Data Type	Daily
Explanation	Required treatment for neonatal abstinence syndrome during this 24 hour period
Input Options	Daily input
Data Origin	BAPM, NCCMDS, NPAG

J. CVS

Data Item	Date of blood pressure
Data Type	Daily
Explanation	Preterm babies should have blood pressure monitored. This is a measure of process and will be used to compare practices across units
Input Options	DD/MM/YYYY
Data Origin	NNAP, NPAG
Data Item	Time of blood pressure
Data Type	Daily
Explanation	Preterm babies should have blood pressure monitored. This is a measure of process and will be used to compare practices across units
Input Options	HH:MM
Data Origin	NNAP, NPAG
Data Item	Hypotension
Data Type	Daily
Explanation	Preterm babies should have blood pressure monitored. This is a measure of process and will be used to compare practices across units
Input Options	<i>Mutually exclusive</i> No Yes
Data Origin	NNAP, NPAG
Data Item	Patent Ductus Arteriosus (PDA)
Data Type	Daily
Explanation	A measure of PDA requiring surgery. Has resource implications for neonatal transport services. This does not allow recording of data on the incidence of significant PDA or the outcome of treatment of PDA
Input Options	<i>Mutually exclusive</i> Clinical criteria Echo criteria Both
Data Origin	BAPM, NPAG
Data Item	PDA Indomethacin
Data Type	Daily
Explanation	A measure of the number of PDAs requiring indomethacin
Input Options	<i>Mutually exclusive</i> Treatment Prophylaxis
Data Origin	BAPM, NPAG

K. Sepsis

Data Item

Data Type

Explanation

Input Options

Data Origin

Barrier Nursed

Daily

Record of patient being barrier nursed (i.e. for contagious diseases)

Daily input

NCCMDS

Data Item

Data Type

Explanation

Input Options

Data Origin

Necrotising Enterocolitis

Daily

Medical treatment for NEC undertaken during this 24 hour period

Daily input

BAPM, NPAG

Data Item

Data Type

Explanation

Input Options

Data Origin

Stage of Necrotising Enterocolitis

Daily

Stages as defined in Bell's staging criteria for Necrotising Enterocolitis

Mutually exclusive

Stage 1 (suspect)

Stage 2 (Confirmed)

Stage 3 (advanced)

NPAG

Data Item

Data Type

Explanation

Input Options

Data Origin

Treatment for Necrotising Enterocolitis

Daily

Treatment for NEC (eg no enteral feeding and antibiotics) undertaken during this 24 hour period

Daily Input

BAPM, NPAG

Data Item

Data Type

Explanation

Input Options

Data Origin

Infection

Daily

Record of bacteraemia infections

Mutually exclusive

Pathogen (list of pathogens)

Probably contaminant

Culture Negative Sepsis

NPAG

Data Item

Data Type

Explanation

Input Options

Data Origin

Meningitis

Daily

Record of meningitis

Mutually exclusive

Pathogen (list of pathogens)

Probably contaminant

Culture Negative Sepsis

NPAG

L. Screening

Data Item	Hearing Screening Undertaken
Data Type	Episodic
Explanation	Facilitates audit of practice and adherence to guidelines
Input Options	<i>Mutually exclusive</i> Follow up required None required
Data Origin	BAPM, MPAG, NPAG, NSC

Data Item	Neonatal Bloodspot Test
Data Type	Episodic
Explanation	Enables calculation of age at test and audit of practice
Input Options	DD/MM/YYYY
Data Origin	MPAG, NPAG, NSC

Data Item	ROP
Data Type	Episodic
Explanation	Record of screening undertaken
Input Options	<i>Mutually exclusive</i> Discharged before screening (to be arranged) Not screened (did not meet criteria) Screened (met criteria) No ROP Stage 1 Stage 2 Stage 3 Stage 4 Stage 5
Data Origin	BAPM, NNAP

M. Anomalies

Data Item	Congenital Anomaly
Data Type	Episodic
Explanation	To measure incidence of congenital anomaly in babies admitted to neonatal unit
Input Options	<i>Mutually exclusive</i> Suspected (list of anomalies) Known (list of anomalies)
Data Origin	BAPM, CAR, MPAG, N- PAG

N. Medication

Data Item

Data Type

Explanation

Input Options

Immunisation

Episodic

Record of immunisations given to patient

Non-mutually exclusive

BCG

Dip/Tet/Pert

Hib

Hep B

Men C

Polio

Pneumococcal

Palivizumab

Data Origin

NPAG

Data Item

Data Type

Explanation

Input Options

IV Medications

Daily

Record of IV medications administered to patient

Non-mutually exclusive

Inotropes

Pulmonary Vasodilator

Prostaglandin

IV Steroids

Volume

Other IV medications

Data Origin

NCCMDS

Data Item

Data Type

Explanation

Input Options

High Cost Drugs

Daily

To record the use of high cost drugs and to supplement HRG

Non-mutually exclusive

Amphotericin Liposomal

Alteplase

Epoetin Beta

Epoprostenol

Flucytosine

Octreotide

Sandoglobulin

Sildenafil

Sodium Phenylbutyrate

Vigam

Data Origin

NCCMDS

O. Monitoring

Data Item

Data Type

Explanation

Input Options

Data Origin

Continuous monitoring

Daily

Requiring continuous monitoring (by mechanical monitoring equipment) of respiration or heart rate, or by transcutaneous transducers, or by saturation monitors.

Daily input

NCCMDS

Data Item

Data Type

Explanation

Input Options

Data Origin

Regular Observations

Daily

Recorded observations for temperature, heart rate, respiratory rate, blood pressure or scoring for neonatal abstinence syndrome. Recorded observations must be at a minimum frequency of 4 hourly.

Daily input

NCCMDS

Data Item

Data Type

Explanation

Input Options

Data Origin

Special Monitoring

Daily

Receiving special monitoring of blood glucose or serum bilirubin measurement at a minimum frequency of more than one calendar day

Daily input

NCCMDS

P. Feeding

Data Item

Data Type

Explanation

Input Options

Data Origin

Glucose and Electrolytes

Daily

Record of glucose and electrolytes on a given day

Daily input

NCCMDS

Data Item

Data Type

Explanation

Input Options

Data Origin

Tube Fed

Daily

Record of patient being tube fed on a given day

Daily input

NCCMDS

Q. Clinical Procedures

Data Item	Exchange Transfusion
Data Type	Daily
Explanation	Record of transfusions undertaken
Input Options	<i>Mutually exclusive</i> Partial Complete
Data Origin	BAPM, NCCMDS
Data Item	Haemofiltration
Data Type	Daily
Explanation	Record of transfusions undertaken
Input Options	<i>Mutually exclusive</i> Yes No
Data Origin	NCCMDS
Data Item	Indwelling Catheters
Data Type	Daily
Explanation	Record of type of catheter required by patient
Input Options	<i>Non-mutually exclusive</i> Umbilical Arterial Catheter Umbilical Venous Catheter Peripheral Arterial Line Percutaneous Central Venous Line
Data Origin	BAPM, NCCMDS
Data Item	Peritoneal Dialysis
Data Type	Daily
Explanation	Record of patient receiving peritoneal dialysis
Input Options	Daily input
Data Origin	BAPM, NCCMDS
Data Item	Phototherapy
Data Type	Daily
Explanation	Record of patient undergoing phototherapy
Input Options	Daily input
Data Origin	NCCMDS

Data Item

Data Type
 Explanation
 Input Options

Surgery

Daily
 Record of surgery performed
Mutually exclusive
 PDA Ligation
 Unit of surgery (list of hospitals)
 NEC
 Unit of surgery (list of hospitals)
 Laser Surgery for ROP
 Unit of surgery (list of hospitals)
 Other (please specify)
 Unit of surgery (list of hospitals)
 Data Origin
 BAPM, NCCMDS

Data Item

Data Type
 Explanation
 Input Options
 Data Origin

Total Parenteral Nutrition

Daily
 Record of patient receiving Parenteral Nutrition (amino acids +/- lipids)
 Daily input
 BAPM, NCCMDS

Data Item

Data Type
 Explanation
 Input Options
 Data Origin

Weight

Daily
 Record of patient's weight on a given day
 Weight in grams
 BAPM, NCCMDS

R. Discharge

Data Item	Carer resident
Data Type	Daily
Explanation	An external carer (for example, a parent) resident with the baby which reduces care required by nursing staff.
Input Options	Daily input
Data Origin	NCCMDS

Data Item	Date care episode completed
Data Type	Episodic
Explanation	Required to analyse patient age at discharge and assists in record linkage in babies transferred between units
Input Options	DD/MM/YYYY
Data Origin	NCCMDS, NNAP

Data Item	Time care episode completed
Data Type	Episodic
Explanation	Required to analyse patient age at discharge and assists in record linkage in babies transferred between units
Input Options	HH:MM
Data Origin	BAPM, HES, NCCMDS, NPAG , NNAP

Data Item	Destination
Data Type	Episodic
Explanation	Allows record linkage and analysis of movement of babies within hospital and within region or network.
Input Options	Transferred (see R1) Discharged (see R2) Died (see R3)
Data Origin	BAPM, HES, NNAP, NPAG

R1. If option for destination is transferred

Data Item	Reason for transfer
Data Type	Episodic
Explanation	Required to determine whether transfer was done for clinical reasons or because of a lack of resources (cots, staff etc.) at caring unit. Non-clinical is to be picked if because of resources
Input Options	<p><i>Mutually exclusive</i></p> <p>Clinical</p> <ul style="list-style-type: none"> Special care Neonatal Intensive Care ECMO Nitric oxide HFOV Surgery Scan (e.g. cardiac) Specialist medical care (e.g. respiratory) <p>Non clinical</p>
Data Origin	NCCMDS, NNAP
Data Item	Method of feeding
Data Type	Episodic
Explanation	Record of method of feeding at time of transfer
Input Options	<p><i>Mutually exclusive</i></p> <p>Breast</p> <p>Bottle</p> <ul style="list-style-type: none"> Breast milk Artificial milk Mixed Other (please specify) <p>Breast and bottle</p> <ul style="list-style-type: none"> Breast milk Artificial milk Mixed Other (please specify) <p>Nasogastric Tube</p> <ul style="list-style-type: none"> Breast milk Artificial milk Mixed Other (please specify) <p>Cup</p> <ul style="list-style-type: none"> Breast milk Artificial milk Mixed Other (please specify) <p>Other (please specify)</p>
Data Origin	NPAG

Data Item	Date of last mother's breast milk feed
Data Type	Episodic
Explanation	This was the last date on which any of the mother's breast milk was given, whether or not other milk was being given. If the baby is discharged taking at least some of its mother's breast milk then the date entered is the same as the discharge date. Milk can be given by any methods (breast, nasogastric tube, syringe, cup etc). If no mother's breast milk was ever given during the admission, this field is left blank. This does not include banked breast milk.
Input Options	DD/MM/YYYY
Data Origin	NNAP

Data Item	Drugs on discharge
Data Type	Episodic
Explanation	Record of drugs patient is on when transferred
Input Options	No Yes <i>Non-mutually exclusive</i> Multivitamins Iron Folic acid Other (please specify)
Data Origin	NPAG

Data Item	Transport Team
Data Type	Episodic
Explanation	Identifies core members and is a measure of the dependency of the baby at that time
Input Options	<i>Mutually exclusive</i> Trained nurse only Medical/ANNP and nurse
Data Origin	NPAG

Data Item	Transfer destination
Data Type	Episodic
Explanation	Record of where patient is transferred to
Input Options	List of destinations
Data Origin	NNAP, NPAG

R2. If option for destination is discharged

Data Item	Reason for discharge
Data Type	Episodic
Explanation	Record of why patient has been discharged
Input Options	Ready Other (please specify)
Data Origin	NCCMDS
Data Item	Discharge destination
Data Type	Episodic
Explanation	Record of where patient had been discharged to
Input Options	Home Other ward (this hospital)
Data Origin	BAPM, NNAP
Data Item	Head circumference
Data Type	Episodic
Explanation	The final reliable head circumference of the baby obtained prior to discharge from the unit (record in centimetres to one decimal place), ideally obtained less than 24 hours prior to discharge
Input Options	Numerical
Data Origin	BAPM, NPAG
Data Item	Method of feeding
Data Type	Episodic
Explanation	Record of method of feeding at time of discharge
Input Options	<i>Mutually exclusive</i> Breast Bottle Breast milk Artificial milk Mixed Other (please specify) Breast and bottle Breast milk Artificial milk Mixed Other (please specify) Nasogastric Tube Breast milk Artificial milk Mixed Other (please specify) Cup Breast milk Artificial milk Mixed Other (please specify) Other (please specify)
Data Origin	NPAG

Data Item	Date of last mother's breast milk feed
Data Type	Episodic
Explanation	This was the last date on which any of the mother's breast milk was given, whether or not other milk was being given. If the baby is discharged taking at least some of its mother's breast milk then the date entered is the same as the discharge date. Milk can be given by any methods (breast, nasogastric tube, syringe, cup etc). If no mother's breast milk was ever given during the admission, this field is left blank. This does not include banked breast milk
Input Options	DD/MM/YYYY
Data Origin	NNAP

Data Item	Drugs on discharge
Data Type	Episodic
Explanation	Record of drugs patient is on when discharged
Input Options	No Yes <i>Non-mutually exclusive</i> Multivitamins Iron Folic acid Other (please specify)
Data Origin	NPAG

Data Item	Home on oxygen
Data Type	Episodic
Explanation	Requiring intermittent or continuous supplementation with oxygen on the day of discharge
Input Options	Yes No
Data Origin	BAPM, NPAG

R3. If option for destination is when patient died

Data Item	Postmortem examination
Data Type	Static
Explanation	Used to determine postmortem rate and refusal rate
Input Options	<i>Mutually exclusive</i> Held/being arranged Requested but consent not given Parental consent but no autopsy performed Not requested Coroner's postmortem
Data Origin	BAPM, CEMACH, NPAG

Data Item	Causes of death
Data Type	Static
Explanation	List of causes of death
Input Options	<i>Mutually exclusive</i> Lethal Congenital Anomaly Extreme Prematurity IVH Acute Neonatal Encephalopathy Pulmonary Hypoplasia Septicaemia Necrotising Enterocolitis Respiratory Distress Syndrome Chronic Lung Disease Renal Disease Other (please specify)
Data Origin	CMACH, NPAG, ONS

Data Item	Unconfirmed death
Data Type	Static
Explanation	Death occurring at other ward or hospital
Input Options	Daily input
Data Origin	NPAG

Appendix A

Data items for National Neonatal Audit Project

www.ncap.org.uk

Static (once per baby)

- NHS Number – Baby
- NHS Number – Mother
- Number of fetuses
- Birth order
- Gestation at birth
- Date and time of birth
- Birthweight
- Sex
- Intended place of delivery
- Antenatal Steroids
- Date of surfactant administration
- Date and time of 1st blood pressure
- Date and time of 1st temperature measurement
- Result of 1st temperature
- Date and time of first consultation
- Date of 1st ROP screening

Episodic (once per stay)

- Provider code
- Date and time of admission
- Source of admission
- Reason for transfer
- Date and time of discharge
- Date of last mother's breast milk feed
- Discharge destination

Appendix B

Data items for Neonatal Critical Care Minimum Dataset

<http://www.connectingforhealth.nhs.uk/dscn/dscn2006/DSCN14-2006.pdf>

- Date of birth
- Date of discharge
- Method of discharge
- Critical care local identifier
- Date and time of start of episode of care (admission?)
- Date and time of discharge
- Where care was given
- Gestation at delivery
- Activity date
- Last recorded weight
- Activity codes
 - Respiratory support via a tracheal tube
 - nCPAP
 - Surgery
 - Exchange transfusion
 - Peritoneal Dialysis or Haemofiltration
 - Infusion of inotrope, pulmonary vasodilator or prostaglandin
 - Parenteral nutrition
 - Convulsions
 - Oxygen therapy
 - Neonatal abstinence syndrome
 - Care of an intra-arterial catheter or chest drain
 - Dilution exchange transfusion
 - Tracheostomy cared for by nursing staff
 - Tracheostomy cared for by external carer
 - Recurrent apnoea
 - Carer resident – caring for baby
 - Continuous monitoring
 - Intravenous glucose and electrolyte solution
 - Tube-fed
 - Barrier nursed
 - Phototherapy
 - Special monitoring
 - Observations at regular intervals
 - Intravenous medication
 - No defined activity
- High cost drugs