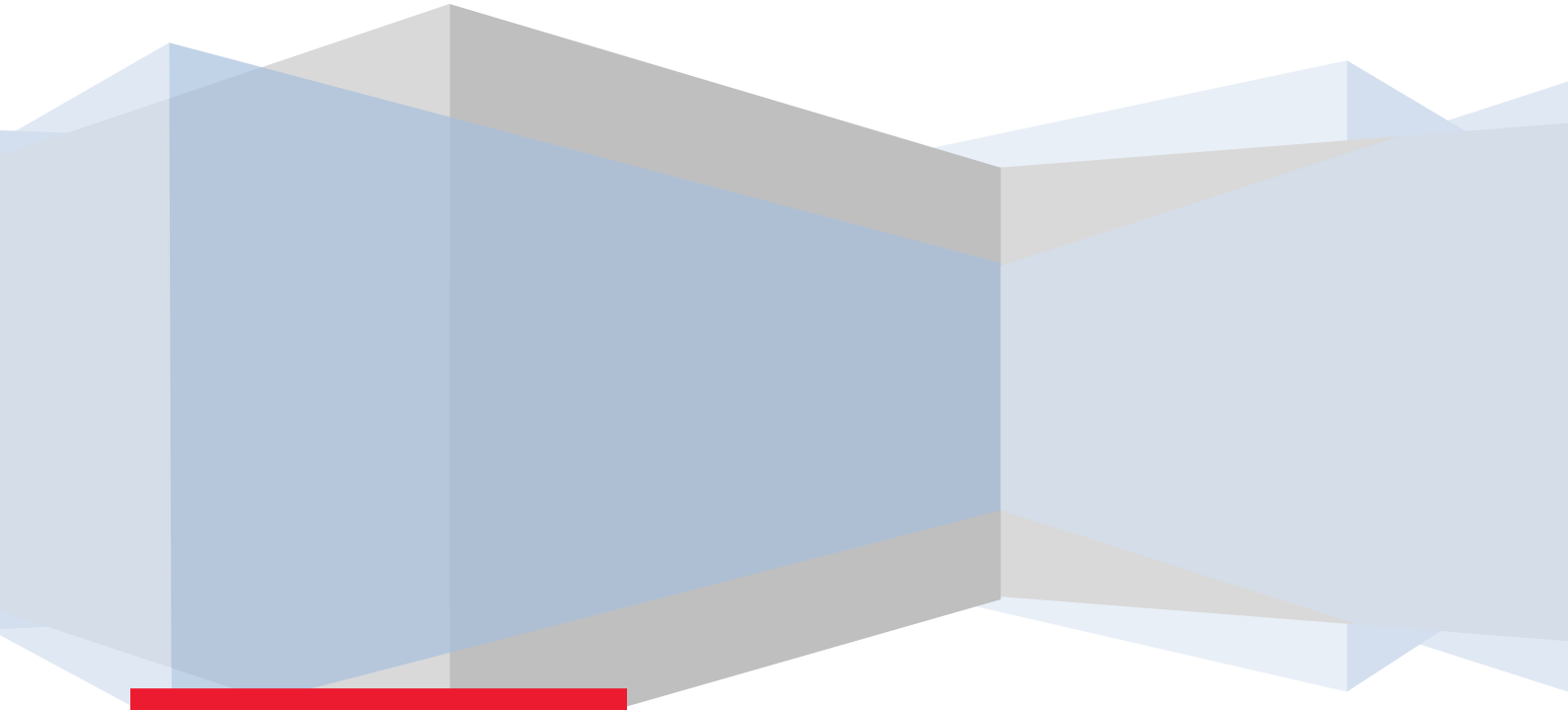
PICANet Admission Dataset Definitions Manual

Version 6.0 January 2025



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Contents

Admission dataset

PATIENT DETAILS

Family name

Description The last or family name or surname given to the child as it would appear on the child's birth certificate or other appropriate document

Reason Family name provides an additional identifier that can aid patient tracking throughout the hospital and PICANet Web.

Can help identify individuals who may have had multiple referrals, transport and/or admission events to one or more PICUs

Format Free text (e.g. Brown)

If no family name available record as UNKNOWN and indicate why not available in the comments section

First name

Description The first name given to the child as it would appear on the child's birth certificate or other appropriate document

Reason First name provides an additional identifier that can aid patient tracking throughout the hospital and PICANet Web

Can help identify individuals who may have had multiple referrals, transport and/or admission events to one or more PICUs

Format Free text (e.g. John)

If no first name available record as UNKNOWN and indicate why not available in the comments section

Address

Description The normal place of residence for the child

Reason Address provides an additional identifier that can aid patient tracking throughout the paediatric intensive care service and PICANet Web

Can help identify individuals who may have had multiple referrals, transport and/or admission events to one or more PICUs

A full residential address is required to enable geographic and demographic information to be linked to the patient for effective audit and assessment of health services delivery

A full residential address will allow validation of postcode

Format 5 free text fields, e.g. ADDRESS1: 83 Green Street

ADDRESS2: Brownley

ADDRESS3: Sheffield

ADDRESS4: South Yorkshire

ADDRESS5:

At least part of the address should be entered in ADDRESS1. If no information is available, please state UNKNOWN and indicate reason in the comments section

Note that not all fields need to be completed for short addresses, and very long addresses may require sub-districts and town to be combined

A list of postcodes for overseas countries is available on request from PICANet

Postcode

Description The postcode for the child's normal place of residence

Reason Postcode provides an additional identifier that can aid patient tracking throughout the paediatric intensive care service and PICANet Web

Can help identify individuals who may have had multiple referrals, transport and/or admission events to one or more PICUs

Postcode provides a means of linkage to geographic and demographic information for effective audit and assessment of health services delivery

Format Text (e.g. S10 8NN)

Foreign postcodes will be accepted by PICANet Web

If postcode is unobtainable, record as UNOBTAINABLE

A list of postcodes for overseas countries is available on request from PICANet

Ethnic category

Description Identifies the child's ethnic origin according to standard NHS ethnic categories and codes and Ethnic Category 2021 categories

Reason Required for epidemiological analysis and assessment of health services delivery

Potentially of value in clinical audit and research in conjunction with other clinical data

Format Refer to the listed ethnic categories and use free text to record the child's ethnic category. Then select the appropriate ethnic category from the drop down list on the PICANet Web record e.g. White British

- White - English, Welsh, Scottish, Northern Irish or British
- White - Irish
- White - Gypsy or Irish Traveller
- White - Roma
- Any other White background (specify)
- Mixed - White and Black Caribbean
- Mixed - White and Black African
- Mixed - White and Asian
- Any other mixed or multiple ethnic background (specify)
- Asian - Indian
- Asian - Pakistani
- Asian - Bangladeshi
- Any other Asian or Asian British Background (specify)
- Black - Caribbean
- Black - African
- Any other Black, Black British or Caribbean background (specify)
- Chinese
- Arab
- Any other ethnic group (specify)
- Unknown or Not stated (declined)

Other ethnic category

Description The child's exact ethnic origin (if known), if not specified in the table containing standard NHS ethnic categories and codes and the three additional ethnic categories from the Ethnic Category 2021

If codes including 'other' e.g. 'Mixed other' are chosen for Ethnic category, 'Other' ethnic category will give a further option to specify the child's exact ethnic origin

Reason Required for epidemiological analysis and assessment of health services delivery

Of value in clinical audit in conjunction with other clinical data

Format Free text (e.g. Mediterranean)

In this case Mixed other may have been recorded for Ethnic category, but the notes may have specifically stated that the child was Mediterranean

NHS, CHI or H&C number

Description Unique identifying number enabling tracing of a patient through the NHS system in the United Kingdom. For English and Welsh patients the NHS number, for Scottish patients the CHI number and for Northern Ireland the H&C number is used as a unique numeric identifier

Reason NHS, CHI or H&C number gives a unique, identifiable variable that will allow other identifiable data items to be removed from the database

Can help identify individuals who may have had multiple referrals, transport and/or admission events to one or more PICUs

Format Free text (e.g.1463788990)

Validation check that NHS, CHI or H&C number is a valid number

NHS, CHI or H&C number eligibility

Description The patient is not eligible for NHS, CHI or H&C number, he or she is an overseas national who is not ordinarily a resident in the UK and therefore does not have an allocated NHS, CHI or H&C number

Reason To enable effective audit of availability of NHS, CHI or H&C number and assessment of health services delivery

Format Tick box if patient is not eligible for an NHS, CHI or H&C number

Case note number

Description Unique identifying number for an individual's hospital records at the treating unit.

Allocated on first admission to hospital

Reason Case note number provides a unique identifier that can aid patient tracking throughout the hospital

Format Free text (e.g. AB145C)

Date of birth

Description The child's date of birth as recorded on the child's birth certificate or other appropriate document

Reason Date of birth and Date of admission are used to calculate age at admission to this paediatric intensive care service

Date of birth provides an additional identifier that can aid patient tracking throughout the paediatric intensive care service, hospital and PICANet Web

Can help identify individuals who may have had multiple referrals and/or admissions to one or more PICUs

Format Date; dd/mm/yyyy

Date of birth should be on or prior to the date of admission

If the child's date of birth is unobtainable, but the child is still on your unit, use your judgement to estimate year of birth and record as 1 January of estimated year (e.g. 01/01/YYYY). Then tick 'Estimated' in the section 'Indicate if date of birth is' Estimated/Anonymised/Unknown section below

If information is being extracted from notes and the child's date of birth is not recorded, or recorded as unavailable, leave the field blank and in the 'Indicate if date of birth is' field below tick 'Unknown'

If it is necessary for Date of birth to be partly anonymised, enter the correct month and year and record 01 for the day (e.g. 01/MM/YYYY) then tick 'Anonymised' below

Validation check: if patient is aged 18 years or older at admission

Indicate if date of birth is not estimated, estimated or anonymised

Description Specifies whether the date of birth is estimated, anonymised or unknown (and cannot be estimated)

Reason Date of birth and Date of admission to your unit are used to calculate age at admission to this paediatric intensive care service

Format Choose from one of the following:

- Not estimated
- Estimated
- Anonymised
- DOB not known

Sex

Description Identifies the genotypical sex of the child at admission to this paediatric intensive care service

Reason Sex is important for reporting demographic statistics for admissions to your unit or transport service. Sex provides an additional identifier that can aid patient tracking throughout the paediatric intensive care service and PICANet Web

Format Choose from one of the following:

- Male
- Female
- Ambiguous

Gestational age at delivery

Description Gestational age at delivery in completed weeks if aged less than 2 years at admission to your unit

If gestational age is reported as term record 40 weeks

Reason For young infants, there is evidence that gestational age can act as an important prognostic factor. Also assists with data matching

Format Enter between 20-44 weeks

Enter 99 if unknown

Validation check: if range outside 24 to 42.

Birth order (all admissions)

Description Identifies the order in which the child was delivered if a multiple birth

Reason In the case of multiple births, delivery order provides an additional identifier that can aid patient matching

Format Enter 1 for singleton or first born, 2 for second born and so on. Enter 9 if unknown

Multiplicity

Description Identifies whether the child was a singleton, twin, triplet, etc. If medical notes are available and there is no mention of multiple birth, assume the child is a singleton

Reason Multiple birth information provides an additional identifier that can aid patient matching

Format Enter 1 for singleton, 2 for twins, 3 for triplets and so on

Enter 9 if unknown

ADMISSION DETAILS

Date and time of admission to unit

Description The actual date and time that the child was physically admitted to a bed or cot within your unit

This is **not** the date and time of first contact as this may be in another department or hospital

This may be the time first charted if not documented as earlier in the admission case notes.

PICANet recognise that there are multiple sources of admission times (electronic patient Records, admission book, electronic monitoring systems) For the purpose of PICANet data Collection please try and use only one for consistency.

24 hour period, starting from 00:00hrs. 23:59 is the end of one day and 00:00 is the start of the next day

Reason Date and time of admission to your unit is used to calculate total length of stay on your unit

Format Date: dd/mm/yyyy

Time: (24 hour clock); hh:mm

Admission number

Description Unique identifier assigned to each consecutive admission to your unit

As recorded in your unit admission book or clinical information system

Admission to your unit is defined as the physical admission and recording of that admission to a bed or cot in your unit

Reason Admission number provides a unique identifier for each admission to each unit participating in PICANet and thus allows identification of one set of admission data from another

Format Free text (e.g. 01/389)

Type of admission to unit

Description Identifies type of admission to your unit

A planned admission following surgery is an admission that your unit is aware of before the surgery begins, or one that could have been delayed for more than 24 hours without risk (e.g. spinal surgery)

An unplanned admission following surgery is an admission that your unit was not aware of before surgery began (e.g. bleeding tonsillectomy)

Surgery is defined as undergoing all or part of a procedure or anaesthesia for a procedure in an operating theatre or anaesthetic room. Please note: do not include patients admitted from the operating theatre where surgery is not the main reason for admission (e.g. a patient with a head injury who is admitted from theatre after insertion of an ICP monitor; in this patient the main reason for admission is head injury and thus the admission type would be unplanned - other)

A **planned - other** admission is any other planned admission that is not an emergency (e.g. liver biopsy)

An **unplanned – other** admission is an admission that your unit was not expecting and is therefore an emergency admission to your unit (e.g. status epilepticus)

Reason Planned admissions are weighted in PIM. Required for epidemiological analysis and assessment of health services provision

Format Choose from one of the following:

- Planned - (following surgery)
- Unplanned - (following surgery)
- Planned - (other)
- Unplanned - (other)

Previous Critical Care admission

Description Specifies whether the child has had a previous admission to a critical care environment such as, PICU, NICU, ICU (Adult) or a Level 2 unit (HDU) before admission to your unit, during the current hospital stay.

The PICU/NICU/ICU (Adult)/Level 2 unit (HDU) can be in the same hospital as the one housing your unit, or another hospital, as long as the admission was during the current hospital stay.

If the child has been previously admitted to more than one PICU/NICU/ICU (Adult)/Level 2 unit (HDU) during the current hospital stay, record the location of the most recent admission.

Current hospital stay is defined as the period from admission to hospital until the time the child is discharged home or dies.

Reason Important for assessing re-admission rates

Important for allowing the accurate matching of children from one admission to another

Format Choose from one of the following:

- PICU
- NICU
- ICU (adult)
- Level 2 unit (HDU)
- None
- Unknown

Source of admission

Description The location from where the child was directly admitted to your unit

Same hospital is defined as the same hospital housing your intensive care unit

Other hospital is another hospital which does not house your unit

Clinic is defined as an outpatient clinic

Home is defined as the normal place of residence for the child

Reason Important for allowing the accurate matching of children from one admission to another including retrieval / transfer from another PICU in the original admitting hospital

Acts as a filter field for further data entry

Format Choose from one of the following:

- Same hospital
- Other hospital
- Clinic
- Home

Care area admitted from

Description The care area that the child came from immediately before admission to your unit

X-ray, endoscopy, CT scanner or similar area identifies that the child came from an area where diagnostic procedures may have been carried out

Recovery only means the child was cared for in the recovery area prior to admission to your unit

PICU/NICU/ICU (adult) means the child received care within one or more of these areas prior to admission to your unit

Level 2 unit (HDU) means the child received care in a high dependency area prior to admission to your unit

Ward means the child was admitted directly from a ward to your unit

Theatre and recovery means the child has undergone all or part of a surgical procedure or has received an anaesthetic for a procedure within the theatre and recovery area. Includes a child admitted directly to your unit following an interventional cardiology procedure in the catheter laboratory

Emergency Department (A&E) means the child was admitted to your unit directly from an Emergency Department

Other intermediate care area is an area where the level of care is greater than that of the normal wards, but not a PICU/NICU/ ICU (adult) or Level 2 unit (HDU)

Reason Required for epidemiological analysis and assessment of health services provision

Format Choose from one of the following:

- X-ray, endoscopy, CT scanner or similar
- Recovery only
- PICU/NICU/ICU (adult)
- Level 2 unit (HDU)
- Ward
- Theatre and recovery
- Emergency Department (A&E)
- Other intermediate care area (not PICU/NICU/ICU (adult) or Level 2 unit (HDU)). *Please specify*

Retrieval/ transfer

Description Specifies whether the child was transferred to your unit from the original admitting hospital by a transport team

If your own PIC team go to a ward within your own hospital to help the ward staff to stabilise and then transfer a critically ill child into your own unit, this does not count as a retrieval/transfer

A retrieval/transfer is any child admitted to your unit from outside of your hospital regardless of who brought the child to your unit

Reason Required for epidemiological analysis and assessment of health services provision

Format Choose from one of the following:

- Yes
- No

Type of transport team

Description Specifies the type of transport team and identifies whether the team is a specialist PIC team or not

PICU identifies that a specialised PICU team transferred the child

Specialist paediatric transport service (SPTS) identifies that a transport team from a specialist paediatric transport service (SPTS) transferred the child (previously known as 'Centralised transport team (PIC)').

Transport team from neonates identifies that a specialist neonatal transport team transferred the child

Other specialist team identifies that another specialist team (not a SPTS or neonatal transport team), transported the child to your unit. E.g., a trauma transport team transferring the child

Non-specialist team identifies that a non-specialist team transported the child to your unit

Unknown

Reason Required for epidemiological analysis and assessment of health services provision

Format Choose from one of the following:

- PICU
- Specialist paediatric transport service (SPTS)
- Transport team from neonates
- Other specialist team
- Non-specialist team
- Unknown

Transport team

Description The unique name of the specialist paediatric transport service (SPTS) , PICU own team, other specialist team or non-specialist team (DGH) undertaking this episode of transport

Reason Required to assist with matching transport events and for epidemiological analysis

Format Free text

Record the full name or recognised abbreviation of the transport team i.e. CATS or KIDS in the text box

At data entry to PICANet Web select the organisation type - PICU, CTS or DGH from the organisation coder

Search for the name of the organisation, if this is not available in the given list, but known select 'Other organisation' and enter the name in the 'Other' box, using free text

If the name of the organisation is not known select 'Unknown organisation'

Collection unit

Description Identifies the unique name of the hospital or the place such as an airport, where the patient is located at the time of collection by the transport team

Reason Required for effective audit and assessment of geographical distribution of referring population to individual units/transport services. To enable effective audit and assessment of health services delivery

Format Name of hospital and specialist unit or the DGH

Select the name of the PICU or DGH from the organisation coder

If the name is not available in the given list, but known select 'Other organisation' and enter the name in the 'Other' box, using free text

If the name of the organisation is not known select 'Unknown organisation'

PIM

Severity of illness on admission is an important explanatory variable when examining differences in outcomes both between units and within a particular unit over time. A unit that admits more severely ill children is likely to have worse outcomes than one that admits children who are less ill, regardless of the quality of the care provided. It is important therefore that data on severity of illness is collected as part of this project. For Level 3 care, there is a validated severity of illness score (the PIM Score) that has been used by PICANet for many years.

For Level 3 units PIM applies to observations recorded between the first face-to-face contact with ICU doctor (or a doctor or nurse practitioner from the transport team) ***until one hour after admission****. Always use the first recorded measurement during this time period.*

The first time period may occur in another area within your own hospital or during transport, examples of which are given below:

For example, the ICU doctor is asked by the outreach team to review a patient on the ward.

You should use the PIM values from the face-to-face review providing the following criteria have been met:

- There was **a decision to admit to PICU/PCCU following the face-to-face review.** This includes a care episode that starts where the patient was reviewed (even if there is a delay in the physical admission to PICU) on the ward/HDU and continues until the child is admitted to PICU The PIM data should be taken from the time where it can be assumed that the PICU/PCCU team have 'taken over care'.
- The outreach team are equivocal as being PICU/PCCU staff i.e., they are on a PICU rota – working as a PICU SHO/ registrar/nurse practitioner or equivalent

Do not include the PIM values from face-to-face review if:

- The face-to-face review decision is that the child 'may' need PICU but the decision at the face-to-face review is to undertake 'x' interventions prior to another review. If the child is later admitted the observations that determined this decision should be used.
- The outreach team conducting the face-to-face review are not equivalent to the PICU/PCCU team i.e. not on a PICU rota or not a PICU SHO/ registrar/nurse practitioner or equivalent

If the PIM values from the face-to-face review do not meet the criteria, then the first observations following admission should be used. This also applies to children reviewed the Emergency Department by the ICU doctor.

In Transport:

A SPTS transport team retrieve a child to a PICU.

The SPTS doctor and team recorded the child's PIM values within the first hour of their arrival at the referring hospital. These SPTS recordings are the PIM values that the receiving hospital should record on PICANet after the child's admission.

Do not include if the SPTS team take the child to theatre where the child is later collected by the PICU team as the first contact in PICU care no longer applies in this transition of care.

Elective admission?

Description Identifies whether the child is an elective admission to the paediatric intensive care service

Include admission (planned or foreseeable) after elective surgery or admission for an elective procedure (e.g. insertion of a central catheter), or elective monitoring, or review of home ventilation. Unexpected admissions (i.e. not planned and that could not have been foreseen) after elective surgery are not classed as Elective

An admission to PICU is considered elective if it could be postponed for more than 6 hours without adverse effects

Note: this definition is taken from PIM and is more stringent than the PICANet definition of a planned admission, where an admission is regarded as planned if it could be delayed for more than 24 hours

Reason Elective admissions are weighted in PIM

Format

- Yes
- No

Main reason for PICU admission

Description Identifies whether the child has been admitted to the intensive care service with any of the following as the main reason for admission to your unit:

Asthma

Bronchiolitis – include children who present either with respiratory distress or central apnoea where the clinical diagnosis is bronchiolitis

Croup

Obstructive sleep apnoea – record if main reason for admission is obstructive sleep apnoea. If the patient has been admitted following adenoidectomy and/or tonsillectomy, record the type of admission as planned/unplanned following surgery and also complete the operation and procedure code for adenoidectomy and/or tonsillectomy in the diagnoses and procedures section.

Recovery from surgery or a procedure - (include a radiological procedure or cardiac catheter). Do not include patients admitted from the operating theatre where recovery from surgery is not the main reason for admission to the paediatric intensive care service e.g. a patient with a head injury who goes to theatre for insertion of an ICP monitor; in this patient the main reason for admission is the head injury.

Yes – recovery from a **bypass cardiac procedure** or surgery

Yes – recovery from a **non-bypass cardiac procedure** or surgery

Yes – recovery from an **elective liver transplant** for acute or chronic liver failure.

Yes – recovery from **other procedure** or surgery

Diabetic ketoacidosis

Seizure disorder - Include a patient who requires admission primarily due to status epilepticus, epilepsy, febrile convulsion, or other epileptic syndrome; where admission is required either to control seizures or to recover from the effects of seizures or treatment.

Other (none of the above) - Identifies that none of the above apply to the patient on admission to paediatric critical care.

Reason These diagnoses are weighted in PIM if they are the main reason for this admission.

Format

Choose from the following:

- Asthma
- Bronchiolitis
- Croup
- Obstructive sleep apnoea
- Recovery from surgery ……
- Diabetic ketoacidosis
- Seizure disorder
- Other (none of the above)

……..If recovery from surgery
is the main reason for PICU admission,
select one from the following:

- Bypass cardiac procedure
- Non-bypass cardiac procedure
- Elective liver transplant
- Other procedure

Is evidence available to assess past medical history?

Description Identifies whether or not evidence was available at the time of the admission event to assess past medical history

Evidence may be obtained from in or out-patient hospital notes, GP notes, or information from the child (if able), the child's family or any other responsible adult. This can also include clerking information, verbal handovers, telephone handovers or email documentation.

Reason Important data to confirm whether evidence is available to assess medical history. Acts as a filter for further data entry

Format Choose from one of the following:

- Yes
- No

Cardiac arrest before ICU admission

Description Identifies whether the child has had a cardiac arrest before admission to the paediatric intensive care service, including the specialised paediatric intensive care transport service

Include both in-hospital and out-of-hospital arrests

Requires either documented absent pulse or the requirement for external cardiac compression

Do not include past history of cardiac arrest.

Reason Cardiac arrest preceding admission to the paediatric intensive care service is weighted in PIM

Format Tick if child has a cardiac arrest preceding admission to the paediatric intensive care service

Cardiac arrest OUT of hospital

Description Identifies whether the child has a cardiac arrest before this admission to hospital.

Only relates to out-of-hospital cardiac arrests

Requires documented absent pulse or the requirement for external cardiac massage (do not include past history of cardiac arrest)

Reason Cardiac arrest preceding admission to hospital is required for analysis and research

Format Tick if child has cardiac arrest out of hospital prior to this hospital admission

Cardiomyopathy or myocarditis

Description Cardiomyopathy or myocarditis refers to a documented diagnosis of cardiomyopathy or myocarditis relevant to the period one month before or at first contact with the paediatric intensive care service

First contact with the specialist paediatric intensive care doctor refers to face to face contact and may occur at admission to your unit or prior to admission (e.g. on a ward in your hospital or in another hospital, when the decision to start intensive care is made)

If cardiomyopathy or myocarditis only develop subsequently following admission to your unit and are not present at first contact then do **not** record

Impaired cardiac function associated with sepsis or surgery should **NOT** be recorded as cardiomyopathy

Descriptions of poor ventricular function alone, whether based upon haemodynamic or invasive pressure measurement or during real time imaging are **NOT** sufficient evidence of cardiomyopathy

Echocardiographic appearances of endocardial fibroelastosis in addition to evidence of poor ventricular function (echocardiographic or otherwise) are sufficient evidence of cardiomyopathy

Reason Cardiomyopathy and myocarditis are weighted in PIM

Format Tick if true

Severe combined immune deficiency (SCIDS)

Description Identifies whether the child has a diagnosis of severe combined immune deficiency syndrome (SCIDS) documented in the case notes prior to or at first contact with the paediatric intensive care service.

Patients who have SCIDS and who have had a successful bone marrow transplant following which they have been discharged home, are still regarded as having SCIDS

Reason Severe combined immune deficiency syndrome is weighted in PIM

Format Tick if true

Hypoplastic left heart syndrome

Description Identifies whether the child has hypoplastic left heart syndrome documented in the case notes prior to or at first contact with the paediatric intensive care service

Include patients of any age but only those cases where a Norwood procedure or equivalent is or was required in the neonatal period to sustain life

Patients who have previously survived to discharge home after surgical repair of hypoplastic left heart syndrome are still included

Patients with similar diagnosis who are not documented as having hypoplastic left heart syndrome are excluded e.g. critical aortic stenosis, mitral atresia, Schones complex and coarctation

Hypoplastic left ventricle is not synonymous with hypoplastic left heart syndrome unless there is also documented ventriculo-arterial concordance

Reason Hypoplastic left heart syndrome is weighted in PIM

Format Tick if true

Leukaemia or lymphoma after completion of first induction

Description Include only cases where admission is related to leukaemia or lymphoma or the therapy for these

Identifies whether the child has leukaemia or lymphoma for which first induction has been received and completed irrespective of current presumed state of immunity or remission; prior to or at first contact with the paediatric intensive care service

Reason Leukaemia or lymphoma after completion of 1st induction is weighted in PIM

Format Tick if true

Liver failure main reason for ICU admission

Description Identifies whether the child has acute or chronic liver failure as the main reason for this admission to the paediatric intensive care service

Include patients admitted for recovery following liver transplantation for acute or chronic liver failure

Include patients where the primary reason for admission is liver failure (of the graft)

Reason Liver failure as the main reason for admission to the paediatric intensive care service is weighted in PIM.

Format Tick if true.

Acute Necrotising Enterocolitis (NEC) main reason for ICU admission

Description Acute necrotising enterocolitis (NEC) refers to a documented diagnosis of an acute episode of NEC prior to or at first contact with the paediatric intensive care service

If NEC only develops subsequently following admission to your unit and is not present at first contact then do not record

Reason NEC at first contact with the paediatric intensive care service is weighted in PIM3

Format Tick if true

Spontaneous cerebral haemorrhage

Description Identifies whether the child has a spontaneous cerebral haemorrhage (e.g. from an aneurysm or AV malformation) documented in the case notes prior to or at first contact with the paediatric intensive care service

Cerebral haemorrhage should be the cause of or be associated with the intensive care admission, which would normally mean it had occurred within 48 hours prior to the intensive care admission

Do not include traumatic cerebral haemorrhage or intracranial haemorrhage that is not intracerebral (e.g. subdural haemorrhage)

Reason Spontaneous cerebral haemorrhage from an aneurysm or AV malformation is weighted in PIM

Format Tick if true

Neurodegenerative disorder

Description Identifies whether the child has a neurodegenerative disorder documented in the case notes prior to or at admission to the paediatric intensive care service

A neurodegenerative disorder is a disease that leads to a progressive deterioration of neurological function with loss of speech, vision, hearing or locomotion. It is often associated with seizures, feeding difficulties and impairment of intellect. Requires a progressive loss of milestones or a diagnosis where this will inevitably occur

A static disability should **NOT** be recorded as a neurodegenerative disorder (even if it is severe)

Reason A neurodegenerative disorder is weighted in PIM

Format Tick if true

Human Immunodeficiency Virus (HIV)

Description Identifies whether the child is HIV antigen positive as documented in the case notes prior to or at admission to the paediatric intensive care service

Reason The presence of HIV infection is weighted in PIM

Format Tick if true

Bone marrow transplant recipient

Description Identifies whether the child has received a bone marrow transplant during this hospital admission

Reason Bone marrow transplantation during current hospital admission is weighted in PIM3

Format Tick if true

Other (none of the above)

Description Identifies that none of the above apply to the patient on admission to paediatric critical care.

Reason To differentiate between none of the above being applicable and missing data.

Format Tick if true

Systolic blood pressure

Description The first systolic blood pressure measured and recorded within the period following first face to face (not telephone) contact between the patient and a specialist paediatric intensive care doctor/advanced nurse practitioner to one hour after admission to your unit

First contact may occur in your own hospital (on your ICU, emergency department or ward) or in another hospital on retrieval

Data that are available to the specialist paediatric intensive care doctor/advanced nurse practitioner at first contact and that are current at that time are acceptable. In cases of doubt record the first value of each variable measured after the time of first contact

Systolic blood pressure values are included irrespective of the measurement method used or the site

Record 0 if the patient is in cardiac arrest. (Only when the BP is truly unrecordable e.g. cardiac arrest should a value of 0 be collected)

Record 30 if the patient is shocked and the blood pressure is so low it is unrecordable

Reason Systolic blood pressure at first contact with the paediatric intensive care service is weighted in PIM

Format Numerical value (e.g. 130)

Units: mmHg. 20 – 180; validation check if range exceeds 200

SpO_2 – Oxygen Saturation % (via pulse oximetry)

Description The patient's oxygen saturation (SpO_2), expressed as a percentage

Record the first SpO_2 (pulse oximetry) that has a corresponding FiO_2 measured and recorded following first face to face contact between the patient and a specialist paediatric intensive care doctor/advanced nurse practitioner until one hour after admission to your unit

First contact with a specialist paediatric intensive care doctor/advanced nurse practitioner refers to first face-to-face (not telephone) contact in your own hospital (on your ICU, emergency department or ward) or another hospital/unit on retrieval

If there is more than one SpO_2 recorded within the specified time period, use the first available SpO_2 that has a corresponding measured and recorded FiO2, even if recorded later than an SpO_2 with no corresponding FiO2

Reason To allow calculation of SpO2/FiO2 ratio

Format Numerical value e.g. 096

Acceptable range 0-100; validation check if range exceeds 50-100

FiO_2 (at the time SpO_2 measured)

Description The patient's fraction of inspired oxygen (FiO2), expressed as a fraction

The FiO2 at the time of the first SpO2 measured and recorded following face to face contact between the patient and a specialist paediatric intensive care doctor/advanced nurse practitioner until one hour after admission to your unit

First contact with a specialist paediatric intensive care doctor/advanced nurse practitioner refers to first face-to-face (not telephone) contact in your own hospital (on your ICU, emergency department or ward) or another hospital/unit on retrieval

Record the fraction of inspired oxygen being delivered via endotracheal tube (ETT), non-invasive ventilation (NIV), HHHFT or headbox at the same time that the first SpO2 is measured. This means the FiO2 and SpO2 recorded must relate to the same time

If SpO2 is unknown or missing [999], then FiO2 will also be unknown or missing: record 999

If room air only record 0.21 (21%)

Reason To allow calculation of SpO2/FiO2 ratio

Format Numerical value e.g. 0.40

Units: Fraction (decimal) 0.1-1.00; validation - expecting a value between 0.21 and 1.0

Blood gas measured?

Description Confirmation that results from a blood gas taken and analysed within the period following first face to face contact between the patient and a specialist paediatric intensive care doctor to one hour after admission to your unit are available

First contact with a specialist paediatric intensive care doctor/advanced nurse practitioner refers to first face-to-face (not telephone) contact in your own hospital (on your ICU, emergency department or ward) or another hospital/unit on retrieval

Data that are available to the specialist paediatric intensive care doctor/advanced nurse practitioner at first contact that are current at that time are acceptable. In cases of doubt record the earliest measurement that was current at time of first contact

The blood gas taken and analysed may be arterial, capillary or venous

Reason Acts as a filter for further data entry. Blood gas results are weighted in PIM

Format Choose from one of the following:

- Yes
- No
- Unknown

Arterial PaO_2: Oxygen pressure (kPa)

Description The **first** arterial PaO2 measured and recorded within the period following first contact between the patient and a specialist paediatric intensive care doctor to one hour after admission to your unit

First contact with a specialist paediatric intensive care doctor refers to first face-to-face (not telephone) contact in your own hospital (on your ICU, emergency department or ward) or another hospital/unit on retrieval

Data that are available to the specialist paediatric intensive care doctor at first contact that are current at that time are acceptable

In cases of doubt record the earliest measurement that was current at time of first contact

Only arterial blood gas measurements are acceptable

Reason Arterial PaO2 (and associated FiO2) at first contact with a specialist paediatric intensive care doctor is weighted in PIM

Format Numerical value (e.g. 9)

Units: kPa.3-60; validation check if range falls outside 1-70

Arterial PaO_2: Oxygen pressure (mmHg)

Description The **first** arterial PaO2 measured and recorded within the period following first contact between the patient and a specialist paediatric intensive care doctor to one hour after admission to your unit

First contact with a specialist paediatric intensive care doctor refers to first face-to-face (not telephone) contact in your own hospital (on your ICU, emergency department or ward) or another hospital/unit on retrieval

Data that are available to the specialist paediatric intensive care doctor at first contact that are current at that time are acceptable. In cases of doubt record the earliest measurement that was current at time of first contact

Only arterial blood gas measurements are acceptable

Reason Arterial PaO2 (and associated FiO2) at first contact with a specialist paediatric intensive care doctor is weighted in PIM

Format Numerical value (e.g. 67.5)

Units: mmHg. 22 – 450; validation check if range falls outside 7.5 – 525

FiO2 (at the time Arterial PaO_2 measured)

Description Record the FiO_2 being given at the same time that the **first** arterial PaO2 is measured and recorded following first contact between the patient and a specialist paediatric intensive care doctor

First contact with a specialist paediatric intensive care doctor refers to first face-to-face (not telephone) contact in your own hospital (on your ICU, emergency department or ward) or another hospital/unit on retrieval

Data that are available to the specialist paediatric intensive care doctor at first contact that are current at that time are acceptable. In cases of doubt record the earliest measurement that was current at time of first contact

Only record in association with arterial blood gas measurements

Record 0.21 if patient in air

Record 999 if FiO2 is missing

Reason Arterial PaO2 and associated FiO2 at first contact with a specialist paediatric intensive care doctor are weighted in PIM if oxygen is delivered via an ET tube or a head box

Format Numerical value (e.g. 0.4) Units: Fraction (decimal)

Intubation

Description Record whether or not the child was intubated at the time of the **first** arterial PaO_2 and associated FiO_2 (measured and recorded) following first contact between the patient and a specialist paediatric intensive care doctor

First contact with a specialist paediatric intensive care doctor refers to first face-to-face (not telephone) contact in your own hospital (on your ICU, emergency department or ward) or another hospital/unit on retrieval

Intubated is defined as an endotracheal tube, laryngeal mask or tracheostomy in situ

Reason PaO2 and associated FiO2 at first contact with a specialist paediatric intensive care doctor are weighted in PIM

Format Choose from one of the following:

- Yes
- No

Base excess

Description The **first** base excess value measured and recorded from the arterial, capillary or venous blood gas within the period following first contact between the patient and a specialist paediatric intensive care doctor to one hour after admission to your unit

First contact with a specialist paediatric intensive care doctor refers to first face-to-face (not telephone) contact in your own hospital (on your ICU, emergency department or ward) or another hospital/unit on retrieval

Data that are available to the specialist paediatric intensive care doctor at first contact that are current at that time are acceptable. In cases of doubt record the earliest measurement that was current at time of first contact

Manually calculated in vitro or in vivo base excess values are **not** accepted

Specify source of result: arterial, capillary **or** venous blood gas measurement

Reason Base excess at first contact with a specialist paediatric intensive care doctor is weighted in PIM

Format Numerical value (e.g. 6.0)

Units: mmol per litre

Expected range -30 to +20 mmol per litre

Validation check if range outside -40 to +30

Select from one of the following:

- Arterial
- Capillary
- Venous

Lactate

Description The **first** blood lactate value measured and recorded from the arterial, capillary or venous blood gas within the period following first contact between the patient and a specialist paediatric intensive care doctor to one hour after admission to your unit

First contact with a specialist paediatric intensive care doctor refers to first face-to-face (not telephone) contact in your own hospital (on your ICU, emergency department or ward) or another hospital/unit on retrieval

Data that are available to the specialist paediatric intensive care doctor at first contact that are current at that time are acceptable. In cases of doubt record the earliest measurement that was current at time of first contact

Specify source of result: arterial, capillary **or** venous blood gas measurement

Reason Blood lactate at first contact may predict outcome and be valuable alongside PIM

Format Numerical value, to 1 decimal place (e.g. 3.1)

Units: mmol per litre

Expected range 0.2 – 15.0: mmol per litre

Validation check if range outside 0.2 to 15.0

Select from one of the following:

- Arterial
- Capillary
- Venous

Mechanical ventilation

Description Specifies whether mechanical ventilation was administered at any time within the period following first face to face contact between the patient and a specialist paediatric intensive care doctor to one hour after admission to your unit

First contact with a specialist paediatric intensive care doctor refers to first face-to-face contact in your own hospital (on your ICU, emergency department or ward), or another hospital/unit on retrieval

Ventilation is defined as where all or some of the breaths; or a portion of the breaths (pressure support) are delivered by a mechanical device. Ventilation can simply be defined as a treatment where some or all of the energy required to increase lung volume during inspiration is supplied by a mechanical device

Mechanical ventilation refers to both invasive (ETT or tracheostomy), and non-invasive (nasopharyngeal airway, mask or nasal prongs). High frequency, jet ventilators, negative pressure ventilators, BiPAP and CPAP are all considered as mechanical ventilation. ECMO and IVOX are not considered as mechanical ventilation, however most patients on ECMO and IVOX are usually also being ventilated

DO NOT include use of a device to deliver high flow nasal cannula therapy (HFNCT) or heated humidified high flow therapy (HHHFT)

Reason Mechanical ventilation during the first hour of first face to face contact with the paediatric intensive care service is weighted in PIM

Format Choose from one of the following:

- Yes
- No
- Unknown

CPAP

Description Identifies whether the child receives CPAP at any time within the period following first face to face contact between the patient and a specialist paediatric intensive care doctor to one hour after admission to your unit

First contact with a specialist paediatric intensive care doctor refers to first face-to-face contact in your own hospital (on your ICU, emergency department or ward), or another hospital/unit on retrieval

CPAP may be given via an endotracheal tube, tracheostomy, facial CPAP mask or nasal CPAP mask / prongs

DO NOT include use of a device to deliver high flow nasal cannula therapy (HFNCT) or heated humidified high flow therapy (HHHFT)

Reason CPAP given during the first hour of first face to face contact with the paediatric intensive care service is weighted in PIM

Format Choose from one of the following:

- Yes
- No
- Unknown

Pupil reaction

Description

The first observed pupil reaction measured and recorded within the period from the time of first face-to-face contact with your unit doctor to one hour after admission to your unit

First contact with your unit doctor refers to first face-to-face contact and may occur at admission to your unit or prior to admission (e.g. within your hospital on a ward or in another hospital on retrieval)

Data that are available to your unit doctor at first contact that are current at that time are acceptable. In cases of doubt record the earliest measurement that was current at time of first contact

Only record as BOTH fixed and dilated if both pupils are greater than 3mm and both are fixed

Pupil reactions are used as an index of brain function. Do not record a pupil reaction as being fixed if it is due to toxins, drugs, local injury to the eye or chronically altered from a previous disease

Pupil reaction must be assessed by exposure to strong direct light

Do not record as 'Unknown' unless there is a clinical reason such as 'eyes fused due to extreme prematurity'

Do not record as 'Unknown' if in the absence of exposure to bright light the child is assessed as being: Alert; Responsive to voice; and/or Responds to pain. In this case the pupil reaction should be recorded as 'Other reaction'.

If a child has one fixed and one dilated pupil then this should be recorded as 'other' unless proven otherwise i.e. both become fixed and dilated.

Reason

Pupillary reactions are used as an index of brain function. Reaction to bright light at first contact with your unit doctor is weighted in PIM

Format

Choose from one of the following:

- Both fixed and dilated
- Other reaction
- Unknown

Additional information

Palliative Care

PICANet are collecting data surrounding palliative care and in particular the timeline about when a child was placed on a palliative care pathway. In order to achieve this PICANet will be collecting this information at both admission and discharge.

This palliative care definition is specifically for the purposes of PICANet distinguishing between outcomes in children admitted to PICU where PIMs scores do not adequately reflect the mortality risk associated with their complex co-morbidities.

Palliative Care Definition

PICANet recognise that there may be some concern surrounding the definition of what constitutes palliative care or a palliative care pathway and have defined this as:

The conscious decision to allow death to occur by withholding or withdrawing some or many life-sustaining therapeutic interventions in the case of serious illness with no prospect of recovery. To include circumstances where the PICU team continue to provide interventions to promote comfort and minimise distressing symptoms, but are no longer providing active interventional treatment.

In contrast to adults receiving palliative care, children with life limiting conditions may receive a **combination of active treatment with palliative management**. In this instance palliative care may occur from the point of diagnosis or recognition, and embraces physical, emotional, social and spiritual elements through to death and beyond. The primary focus is on **enhancing quality of life** for the child while providing support for their family.

Palliative Care Categories

To aid with the decision of whether a child is receiving palliative care/on a palliative care pathway on both admission and discharge, PICANet have included categories of palliative care.

Circumstances where a child and their family may require palliative care involvement can be divided into 4 distinct categories,

- **Category 1:** Life-threatening conditions for which curative treatment may be feasible but can fail. Access to palliative care services may be necessary when treatment fails or during an acute crisis, irrespective of the duration of threat to life. On reaching long-term remission or following successful curative treatment there is no longer a need for palliative care services. ***Examples: Relapse of cancer with no further treatment options, irreversible organ failures of heart, liver, kidney.***
- **Category 2:** Conditions where premature death is inevitable. There may be long periods of intensive treatment aimed at prolonging life and allowing participation in normal activities. ***Examples: Genetic/ neurometabolic disorders without specific treatment and shortened life expectancy.***
- **Category 3:** Progressive conditions without curative treatment options. Treatment is exclusively palliative and may commonly extend over many years. ***Examples: inherited metabolic disorders with no known curative or control options.***
- **Category 4:** Irreversible but non-progressive conditions causing severe disability, leading to susceptibility to health complications and likelihood of premature death. Examples: Severe cerebral palsy, multiple disabilities such as following brain or spinal cord injury, complex health care needs and a high risk of an unpredictable life-threatening event or episode.

Was the child admitted on a palliative care pathway or receiving palliative care at the time of admission?

Description — Specifies whether the child was admitted on a palliative care pathway or was receiving palliative care at the time of admission to the PICU (scenarios below)

Reason — Required for epidemiological analysis, assessment of health services delivery, measurement of therapeutic interventions, and assessment of mortality risk

Format

- Yes
- No
- Unknown

The following scenarios may aid in any decision making:

Scenario 1- When the child is admitted to the PICU environment with an established palliative pathway in place.

EG. This may occur in the event that an oncology patient has an acute infection that is recoverable

Data collected- Palliative care on admission – YES

Data collected- Palliative care on/at discharge - YES

Scenario 2 - When the child is admitted to the PICU environment for active management and / or treatment of a condition/ illness that progresses to futility. Thus, requiring the child to be commenced on a palliative care pathway.

Data collected- Palliative care on admission - NO

Data collected- Palliative care on/at discharge - YES

Scenario 3 - When the child is admitted to the PICU environment with an established end of life pathway in place that is discontinued due to a change in underlying diagnosis or emergence of a novel treatment to manage a previously incurable/ unrecoverable condition.

Data collected- Palliative care on admission - YES

Data collected- Palliative care on/at discharge - NO

Scenario 4 - When the child is admitted to the PICU environment for recovery from a procedure or escalation to NIV while also having an established end of life pathway in place.

E.g. the child is not for escalation of care to include PICU admission for **invasive ventilation** but is admitted for escalation to **NIV** to support the child while recuperating from a reversible respiratory tract infection.

E.g. the child is not for escalation of care to include PICU admission for **inotropic support** but is admitted for escalation to **CVC insertion** required to administer drugs to support the child while recovering from an acute infection.

Data collected- Palliative care on admission - YES

Data collected- Palliative care on/at discharge - YES

Was the patient on home oxygen or long-term ventilation immediately prior to this admission?

Description: Specifies whether the child was on home oxygen or long-term ventilation immediately prior to this admission to your unit

Reason: Required for epidemiological analysis, assessment of health services delivery and measurement of main therapeutic interventions.

Format

- Yes
- No
- Unknown

Type of home oxygen/long-term ventilation immediately prior to this admission

Description: If yes selected:

Specifies they type of on home oxygen or long-term ventilation the child was on immediately prior to this admission to your unit. Record highest level of intervention.

Reason: Required for epidemiological analysis, assessment of health services delivery and measurement of main therapeutic interventions.

Format

- BIPAP via tracheostomy
- CPAP via tracheostomy
- BIPAP via Facemask (oral or nasal)
- CPAP via Facemask (oral or nasal)
- NCPAP
- HHHFT
- Home Oxygen
- Other (specify)
- Unknown

If ‘Other (specify) selected please use free text description to identify other type of home oxygen or long-term ventilation.

Is the child on a clinical trial?

Description Specifies whether the child is part of a clinical trial

Reason Prior inclusion on a clinical trial may influence subsequent outcome

Format Choose from one of the following:

- Yes
- No
- Unknown

Name of trial

Description The name of the clinical trial in which the child is participating

Reason Prior inclusion on a clinical trial may influence subsequent outcome

Format Free text name of clinical trial.

HEALTHCARE ASSOCIATED INFECTIONS (HCAI)

Number of episodes of PICU-acquired central line associated bloodstream infection (CLABSI)

Description

Document the number of episodes of PICU-acquired central line associated blood stream infection (CLABSI) ensuring that the child meets all four of the criteria of A, B, C and D:

A: Criteria for blood stream infection as defined by PICU HCAI group*

AND

B: The presence of at least one central venous catheter (CVC) at the time of the positive blood culture or a CVC that was removed within 48 hours before the positive blood culture

AND

C: The signs and symptoms and the positive laboratory result, including the pathogen cultured from the blood, are not primarily related to infection at another site

AND

D: The child has been admitted to PICU for >48 hours (i.e. not admitted to PICU for or with a CLABSI), or is within 48 hours of a PICU discharge at the time of blood culture sampling

*See the *HCAI expanded dataset definitions and FAQ* document for the full BSI criteria, definitions and frequently asked questions in relation to CLABSI.

Reason

For the purposes of clinical audit, epidemiological analysis and assessment of health services delivery

Format

Numerical value (e.g. 3)
Expecting a value between 0 and 9
If unknown enter 999

Number of episodes of PICU-acquired catheter associated urinary tract infection (CAUTI)

Description

Document the number of episodes of PICU-acquired catheter associated urinary tract infections (CAUTI), ensuring that the child meets all three of the criteria for A, B and C:

A: An indwelling urethral or suprapubic catheter that has been in situ for at least 48 hours or where the urine sample has been obtained within 48 hours of removal of the catheter

AND

B: UTI criteria: meets either one of the two below:

1. A child of any age with a positive urine culture with >10^3 colony forming units/mL with no more than two species of microorganisms AND at least 1 of the following signs or symptoms:
    - Fever > 38°C
    - Suprapubic tenderness
    - Costovertebral angle pain
    - Costovertebral angle tenderness

OR

2. A patient <1 year with a positive urine culture with >10^3 colony forming units/mL with no more than two species of microorganisms AND at least 1 of the following signs or symptoms:
    - Fever >38° C or hypothermia <36° C
    - Apnoea
    - Bradycardia
    - Lethargy
    - Vomiting

AND

C: The child has been admitted to PICU for >48 hours (i.e. not admitted to PICU for or with a CAUTI) or is within 48 hours of a PICU discharge at the time of urine culture

See the *HCAI expanded dataset definitions and FAQ* document for frequently asked questions in relation to CAUTI.

Reason

For clinical audit, epidemiological analysis and assessment of health service delivery

Format

Numerical value (e.g. 3)
Expecting a value between 0 and 9
If unknown enter 999

GROWTH MEASUREMENTS

Height

Description Height of child in centimetres

Reason Included at the request of those wishing to conduct studies which involve this parameter.

Format Numerical value to 1 decimal place (e.g. 74.9)

Units: cm; validation check if range outside 46 to 180.

Weight

Description Weight of child in kilograms measured at or as soon as possible after admission to the unit

If weight is not measured at the specified time; a weight recorded on another ward or department immediately prior to transfer to your unit, or a recent weight provided by a parent or carer may be recorded.

Reason To enable the audit of the weight of children admitted to intensive care and epidemiological analysis

Format Numerical value to 3 decimal places (e.g. 7.940)

Units: kg; validation check if range <1.000 to >80.000kg

DIAGNOSES AND PROCEDURES

Primary diagnosis for this admission

Description The primary diagnosis for this admission of the child to your unit as assessed and recorded in the child's notes

The primary diagnosis may only be confirmed during the child's stay on your unit. It may not be obvious at admission. For example, a child might be admitted with apnoeas, the diagnosis for this admission is later confirmed as Bronchiolitis. In this case Bronchiolitis should be recorded as the Primary diagnosis for this admission

Where there are multiple diagnoses, select just one as a primary diagnosis and code the others as 'Other reasons for admission to your unit'

Do not code the primary diagnosis for this admission to your unit as a **procedure** or a **cause.** Code the underlying condition that required that procedure

PICANet recommend that this is retrospectively completed or signed off at discharge.

Reason Required for clinical audit, and epidemiological analysis

Format Free text description of primary diagnosis for admission given in clinical notes and / or discharge documentation

Other reasons for this admission

Description Other reasons for the admission of the child to your unit as assessed and recorded at admission. Other reasons for admission may include additional diagnoses or procedures that may or may not necessitate intensive care

Reason Required for clinical audit, epidemiological analysis and assessment of health services delivery

Format Free text description of other reasons for admission given in clinical notes and / or discharge documentation

Operations and procedures performed during and prior to this admission

Description Any operations and / or procedures performed during this admission to PIC or during the current hospital spell and relating to this admission to PIC

Where type of admission to the unit is Planned – following surgery or Unplanned – following surgery at least one operation or procedure is required for this admission event

Reason Required for clinical audit, epidemiological analysis and assessment of health services delivery

Format Free text description of other reasons for admission given in clinical notes and / or discharge documentation

Co-morbidity

Description Co-morbidity recorded on admission of the child to your unit

Identifies other problems the child had prior to admission to your unit, which may not be related to the reason for this admission. Co-morbidity relates to any underlying condition recorded in the notes e.g. Trisomy 21

Reason Required for clinical audit, epidemiological analysis and assessment of health services delivery

Format Free text description of other reasons for admission given in clinical notes and / or discharge documentation

Was a tracheostomy performed during this admission?

Description Specifies whether the child had a tracheostomy performed during this admission to your unit

Reason Required for measurement of main therapeutic interventions and analysis

Format Choose from one of the following:

- Yes
- No
- Unknown

DAILY INTERVENTIONS

For each calendar day a child is admitted to critical care unit information on the interventions required by that child are completed. These interventions include all those collected as part of the Paediatric Critical Care Minimum Dataset (PCCMDS) plus additional interventions of interest for clinical audit and health service delivery reasons. An item should be recorded in the PCCMDS (daily interventions) when the critical care activity applies for a period of greater than 4 hours, except in cases such as cardiopulmonary resuscitation, unplanned extubation or upper airway obstruction where it is otherwise specified.

Admission Date

Description The actual date that the child was physically admitted to a bed or cot within your unit

Reason Date of admission to your unit is used to identify the date on which the recording of the daily interventions commences

24 hour period, starting from 00hr00mins, 23.59 is the end of one day and 00.00 is the start of the next day

Format Date: dd/mm/yyyy

Basic

No defined critical care activity

Description True if there was no defined critical care activity received that day

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 99)

Format Insert an X if true

Continuous ECG monitoring

Description True if continuous ECG monitoring was received that day

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 50)

Format Insert an X if true

Continuous pulse oximetry

Description True if continuous pulse oximetry was received that day

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 73)

Format Insert an X if true

Airway and ventilatory

Invasive ventilation via endotracheal tube

Description True if invasive ventilation via endotracheal tube was received that day

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 51)

Format Insert an X if true

Invasive ventilation via tracheostomy tube

Description True if invasive ventilation via tracheostomy tube was received that day

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 52)

Format Insert an X if true

Non-invasive ventilatory support

Description True if non-invasive ventilatory support was received that day.

Do NOT include use of a device to deliver heated humified high flow therapy

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 53)

Format Insert an X if true

Advanced ventilatory support (jet ventilation)

Description True if advanced ventilatory support (jet ventilation) was received that day

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 56)

Format Insert an X if true

Advanced ventilatory support (oscillatory ventilation)

Description True if advanced ventilatory support (oscillatory ventilation) was received that day

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 56)

Format Insert an X if true

Nasopharyngeal airway

Description True if a nasopharyngeal airway was in place that day

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 55)

Format Insert an X if true

Tracheostomy cared for by nursing staff

Description True if a tracheostomy was cared for by nursing staff that day; including responsibility for and supervision of an external carer (e.g. parent)

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 13)

Format Insert an X if true

Supplemental oxygen therapy (irrespective of ventilatory state)

Description True if supplemental oxygen therapy (irrespective of ventilatory state) was received that day

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 09)

Format Insert an X if true

Heated Humidified High Flow Therapy (HHHFT)

Description If heated humidified high flow therapy (HHHFT) was received that day, to include devices such as Airvo, Optiflow, Vapotherm and high flow settings on a ventilator.

Reason To enable the audit of delivery of this therapy (Activity code 88)

Format Insert an X if true

Upper airway obstruction requiring nebulised adrenaline (epinephrine)

Description True if there was an upper airway obstruction requiring nebulised adrenalin / epinephrine that day

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 57)

Format Insert an X if true

Apnoea requiring intervention (>3 in 24 hours or requiring bag and mask ventilation)

Description True if there was an apnoea >3 in 24 hours or requiring bag and mask ventilation that day

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 58)

Format Insert an X if true

Acute severe asthma requiring intravenous bronchodilator therapy or continuous nebuliser

Description True if there was acute severe asthma requiring intravenous bronchodilator therapy or continuous nebuliser that day

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 59)

Format Insert an X if true

Unplanned extubation

Description True if there was dislodgement of the ETT from the trachea, without the intention to extubate immediately and without the presence of airway competent clinical staff in the bed space, appropriately prepared for the procedure

Record the number of unplanned extubations that day

Reason To audit PICS Standard and CRG reporting requirements (Activity code 90)

Format Numerical values (e.g. 01) if true

Validation check if number greater than 5

Cardiovascular

Arterial line monitoring

Description True if arterial line monitoring was received that day.

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 60)

Format Insert an X if true

External pacing

Description True if external cardiac pacing, via an external box (pacing wires, external pads or oesophageal pacing) was received that day.

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 61)

Format Insert an X if true

Central venous catheter in situ

Description True if a central venous catheter is in situ that day, regardless of the number of lumens and the nature of the CVC.

This includes any venous vascular catheter that ends close to or in the great vessels (femoral, subclavian, jugular etc.), chest or within abdominal cavity. This includes peripherally inserted central catheters. CVCs may be short or long term. Common names are PICC, CVC, Portacath, Hickman, Broviac, Leaderflex, UVC etc.

Reason Required for clinical audit, epidemiological analysis, and assessment of health services delivery.

Format Insert an X if true

Central venous pressure monitoring

Description True if central venous pressure monitoring was received that day

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 62)

Format Insert an X if true

Continuous infusion of inotrope, vasodilator or prostaglandin

Description True if there was a continuous infusion of inotrope, vasodilator or prostaglandin that day

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 06)

Format Insert an X if true

Bolus IV fluids (>80 ml/kg/day) in addition to maintenance IV fluids

Description True if there were bolus IV fluids (>80 ml/kg/day) in addition to maintenance IV fluids that day

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 63)

Format Insert an X if true

Cardio-pulmonary resuscitation

Description True if cardio-pulmonary resuscitation was received that day

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 64)

Format Insert an X if true

Extracorporeal membrane oxygenation (ECMO)

Description True if extracorporeal membrane oxygenation (ECMO) was received that day. Include use of an interventional lung assist device (iLA)

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 65)

Format Insert an X if true

Ventricular assist device (VAD)

Description True if a ventricular assist device (VAD) was in place that day

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 65)

Format Insert an X if true

Aortic balloon pump

Description True if an aortic balloon pump was in place that day

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 65)

Format Insert an X if true

Arrhythmia requiring intravenous anti-arrhythmic therapy

Description True if an intravenous anti-arrhythmic drug is administered to a patient with a cardiac arrhythmia at any point in that calendar day.

Examples would include, but not be confined to, adenosine, amiodarone, propranolol, flecanide, isoprenaline.

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 94)

Format Insert an X if true

Renal

Urine catheter in situ

Description True if urinary catheter is in situ that day. This relates to any urethral or suprapubic catheter that is inserted into the bladder, connected to a closed drainage system, and left in-situ.

This category does NOT include intermittent catheterisation or non-invasive drainage systems such as condom catheter.

Reason Required for clinical audit, epidemiological analysis, and assessment of health services delivery.

Format Insert an X if true.

Peritoneal dialysis

Description True if peritoneal dialysis was received that day

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 05)

Format Insert an X if true

Haemofiltration

Description True if haemofiltration was received that day

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 16)

Format Insert an X if true

Haemodialysis

Description True if haemodialysis was received that day

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 66)

Format Insert an X if true

Plasma filtration

Description True if plasma filtration was received that day

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 67)

Format Insert an X if true

Plasma exchange

Description True if plasma exchange was received that day.

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 67)

Format Insert an X if true

Neurological

ICP-intracranial pressure monitoring

Description True if intracranial pressure monitoring (ICP) was received that day

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 68)

Format Insert an X if true

Intraventricular catheter or external ventricular drain

Description True if an intraventricular catheter or external ventricular drain was in place that day

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 69)

Format Insert an X if true

Status epilepticus requiring treatment with continuous infusion of anti-epileptic drugs

Description True if a patient has status epilepticus at any point in that calendar day AND is receiving a continuous intravenous infusion of an anti-epileptic drug for a period of at least 4 hours in that calendar day

Examples would include, but not be confined to, midazolam (or another benzodiazepine), thiopentone, propofol

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 97)

Format Insert an X if true

Reduced consciousness level (GCS ≤ 12 AND hourly (or more frequent) GCS monitoring

Description True if a patient has a recorded Glasgow Coma Scale (GCS) score of 12 or below at any point in that calendar day AND is having hourly (or more frequent) assessment and recording of GCS

Note that the patient must be having GCS monitoring for a period of at least 4 hours in that calendar day. AVPU assessment should not be considered as equivalent to GCS

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 95)

Format Insert an X if true

Delirium screening result

Description Identifies whether the child has any positive threshold score on a validated screening tool for delirium within each 24-hour period.

Delirium screening is conducted at least once per 12-hour nursing shift. If the screen is positive on any occasion, enter 'positive'.

Positive threshold scores are as follows:

1. Cornell Assessment of Pediatric Delirium (CAPD)
   a. **positive if the score is 9 or above**

2. Sophia Observation withdrawal Score-Paediatric Delirium (SOS-PD)
   a. **positive if the score is 4 or above**
   b. **or 4 AND child is hallucinating**
   c. **OR a parent or carer states behaviour is different to usual or is unrecognisable**

3. Pediatric Confusion Assessment Method for the Intensive Care Unit (pCAM-ICU)
   a. **positive if features 1 (change or fluctuation in mental status), 2 (inattention), and 3 (altered level of consciousness) are present**

4. PreSchool Confusion Assessment Method for the Intensive Care Unit (psCAM-ICU)
   a. **positive if features 1 (change or fluctuation in mental status), 2 (inattention), and 3 (altered level of consciousness) are present**
   b. **Or positive if features 1 (change or fluctuation in mental status), 2 (inattention), and 4 (disorganised brain) are present**

Negative: identifies that the child did not screen positive on the validated delirium screening tool used in the unit (i.e. did not reach the threshold indicating delirium)

Unable to assess: identifies that the child was exempt from delirium screening due to any of the following reasons:

- being unarousable [comatose]
- deeply sedated
- receiving continuous neuromuscular blocking agents
- is a pre-term baby <37 weeks gestation
- admitted within four hours of admission prior to midnight or discharged within four hours from midnight

Did not assess: identifies that the child was not exempt from delirium screening but was not assessed for any other reason than those specified in 'Unable to assess'.

Reason Required to record prevalence and burden of delirium occurrence for epidemiological analysis

Format Choose from one of the following:

- Positive
- Negative
- Unable to access
- Did not assess

Analgesia/sedation

Epidural catheter in situ

Description True if epidural catheter is in situ for the purpose of delivery of epidural analgesia at any point in that calendar day

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 85)

Format Insert an X if true

Continuous intravenous infusion of a sedative agent

Description True if a patient is receiving a continuous intravenous infusion of a sedative agent for at least 4 hours in that calendar day

Examples would include, but not be confined to, midazolam (or another benzodiazepine), clonidine, thiopentone, propofol, morphine, fentanyl, remifentanil and oxycodone

Do not tick if the continuous use of agents such as morphine or dexmedetomidine are used as an analgesic agent rather than sedation e.g. low doses in awake children to tolerate procedures such as drain removal.

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 96)

Format Insert an X if true

Metabolic

Diabetic ketoacidosis (DKA) requiring continuous infusion of insulin

Description True if diabetic ketoacidosis (DKA) requiring continuous infusion of insulin was received that day

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 70)

Format Insert an X if true

Other

Exchange transfusion

Description True if exchange transfusion was received that day

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 04)

Format Insert an X if true

Intravenous thrombolysis

Description True if intravenous thrombolysis was received that day

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 71)

Format Insert an X if true

Extracorporeal liver support using molecular absorbent recirculating system (MARS)

Description True if extracorporeal liver support using molecular absorbent recirculating system (MARS) was received that day

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 72)

Format Insert an X if true

Patient nursed in single occupancy cubicle

Description True if patient was nursed in a single occupancy cubicle that day.

Specify the reason for isolation in the text box provided

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code 74)

Format Insert an X if true and state reason for isolation in text box below

High cost drugs

Medical gases band 1 - nitric oxide

Description True if nitric oxide was administered that day

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code X84.1)

Format Insert an X if true

Surfactant

Description True if surfactant was administered that day

Reason Part of the Paediatric Critical Care Minimum Dataset (Activity Code X84.2)

Format Insert an X if true

Reason for isolation

Description If patient nursed in single occupancy cubicle, state reason for isolation

Reason Part of the Paediatric Critical Care Minimum Dataset

Format Free text

At data entry to PICANet Web, choose from one of the list provided or select 'Other reason'.

If not known select 'Unknown'.

DISCHARGE INFORMATION

Status at discharge from your unit

Description Identifies the status (alive or dead) of the child on discharge from your unit. Dead includes admissions transferred out of your unit to become heart beating organ donors.

Reason Identified as one of the principal outcomes of paediatric intensive care.

Format Choose from one of the following:

- Alive
- Dead

Date and time when ready for discharge

Description

Identifies the actual date and time that the clinicians agreed that child was ready for discharge to an appropriate location as opposed to the actual time and date of the physical discharge.

The acuity of the patient will vary depending on discharge location (e.g. if patient required surgery/specialist care prior to discharge back to tertiary NICU or another PICU patient may still be ventilated).

For example;

Scenario 1 - A child was deemed ready for discharge at 08:00 on a Tuesday, however due to a bed shortage they were unable to be physically discharged until 10:00 the next morning (Wednesday). The date and time they were fit for discharge was 08:00 on the Tuesday.

Scenario 2 - A child was considered ready for discharge at 14:00 on a Monday. However, they deteriorated unexpectedly that evening prior to discharge. The child stabilised and was then considered fit for discharge again at 10:00 on the Wednesday, they were physically discharged from the unit and 11:00 on the Thursday. The date and time they were fit for discharge was 10:00 on the Wednesday.

Scenario 3 – Patient was transferred from local PICU to an ECMO centre and received ECMO. Following decannulation, the ECMO team/clinicians agreed the child was ready for discharge from the ECMO centre to an appropriate destination on Friday at 10:00. Transport was planned and the patient was transferred back to local PICU by SPTS on Saturday at 12:00, but were still ventilated. The date and time they were fit for discharge was 10:00 on the Friday.

Reason

Date of admission to your unit, Time of admission to your unit, Date of discharge from your unit and Time of discharge from your unit is used to calculate total length of stay on your unit

Accurate recording of timings relating to discharge will allow analysis of ECMO service and delivery e.g. Capacity across the country or year

Format

Date: dd/mm/yyyy

Time : 24 (hour clock) ; hh:mm

Date and time of discharge

Description Identifies the date and time the child was physically discharged from your unit.

Discharge from your unit is defined as the physical discharge and recording of that discharge from a bed or cot in your unit. Discharge does not include temporary transfer from your unit (e.g. surgery) in the expectation of a return to your unit

Reason Date of admission to your unit, Time of admission to your unit, Date of discharge from your unit and Time of discharge from your unit is used to calculate total length of stay on your unit

Format Date: dd/mm/yyyy

Time: (24 hour clock); hh:mm

Was the child discharged to a palliative care pathway/receiving palliative care at the time of discharge

Description Specifies whether the child was discharged to a palliative care pathway/ receiving palliative care prior to, or at discharge from PICU (scenarios below)

Reason Required for epidemiological analysis, assessment of health services delivery, measurement of therapeutic interventions, and assessment of mortality risk

Format

- Yes
- No
- Unknown

The following scenarios may aid in any decision making:

Scenario 1- When the child is admitted to the PICU environment with an established palliative pathway in place.

E.g. This may occur in the event that an oncology patient has an acute infection that is recoverable

Data collected- Palliative care on admission – YES

Data collected- Palliative care on/at discharge - YES

Scenario 2- When the child is admitted to the PICU environment for active management and / or treatment of a condition/ illness that progresses to futility. Thus, requiring the child to be commenced on a palliative care pathway.

Data collected- Palliative care on admission - NO

Data collected- Palliative care on/at discharge - YES

Scenario 3- When the child is admitted to the PICU environment with an established end of life pathway in place that is discontinued due to a change in underlying diagnosis or emergence of a novel treatment to manage a previously incurable/ unrecoverable condition.

Data collected- Palliative care on admission - YES

Data collected- Palliative care on/at discharge - NO

Scenario 4- When the child is admitted to the PICU environment for recovery from a procedure or escalation to NIV while also having an established end of life pathway in place.

E.g. the child is not for escalation of care to include PICU admission for **invasive ventilation** but is admitted for escalation to **NIV** to support the child while recuperating from a reversible respiratory tract infection.

E.g. the child is not for escalation of care to include PICU admission for **inotropic support** but is admitted for escalation to **CVC insertion** required to administer drugs to support the child while recovering from an acute infection.

Data collected- Palliative care on admission - YES

Data collected- Palliative care on/at discharge - YES

Date and time of death

Description Identifies the date and time of death if this occurs whilst the child is resident on your unit. Includes admissions who died whilst physically outside your unit but before being discharged from your unit (e.g. in theatre)

For admissions declared brainstem dead/ death by neurological criteria, the date of death is the date on which the first test indicates brainstem death (even though death is not pronounced until the second test has been completed)

Please note that it is possible in special circumstances for a patient to have a date/time of death prior to the data and time of admission

Reason Date of death and Time of death are identified as one of the principal outcomes of paediatric intensive care. Required for epidemiological analysis and assessment of health services delivery

Format Date: dd/mm/yyyy

Time: (24 hour clock); hh:mm

Mode of Death

Description Specifies the mode of death for the deceased patient

Treatment withdrawn: death follows the withdrawal of ongoing organ support
For example – an infant admitted with Group B septicaemia is extremely unstable, head CT scan shows complete loss of grey-white differentiation; as the infant deteriorates further decisions are made to stop treatment and extubate

Treatment limitation: death follows a decision to limit on-going organ support and may include a limitation of on-going organ support and/or a decision that the patient is not for active resuscitation
For example – a child with an underlying congenital condition, which includes immune deficiency is admitted with pneumonia requiring inotropic support but continues to deteriorate. The family agree their child should not be resuscitated; the child arrests and dies

Death by neurological criteria: death is confirmed using brain stem death criteria/testing
For example: a child with a severe head injury is admitted following a road traffic collision. The child develops fixed dilated pupils and brain stem testing confirms death

Failed cardiopulmonary resuscitation: death immediately follows an unsuccessful attempt at cardiopulmonary resuscitation
For example: a child with a known renal condition on long-term dialysis develops sepsis and deteriorates despite maximum inotropic support. Cardiac arrest occurs but is unsuccessful

Reason Required for epidemiological analysis and assessment of health services delivery

Format Choose from one of the following:

- Treatment withdrawn
- Treatment limitation
- Death by neurological criteria
- Failed CPR

Transplant Donor?

Description Identifies whether the deceased patient was a transplant donor, and whether solid organs and/or tissues were removed for transplantation to the body of the recipient

- **Organs:** may include heart, pancreas, liver, kidneys, lungs or intestines
- **Tissues:** may include skin, tendons, bone, heart valves and cornea

Reason Enables review of variance in donor rates. Required for clinical audit, epidemiological analysis and assessment of health services delivery. Acts as a filter for further data entry

Format Choose from one of the following:

- No
- Yes – solid organs only
- Yes – tissues only
- Yes – both solid organs and tissues

If alive at discharge

Was the child discharged on home oxygen or long-term ventilation?

Description Specifies whether the child was on home oxygen or long-term ventilation at the point of discharge from your unit

Reason Required for epidemiological analysis, assessment of health services delivery and measurement of main therapeutic interventions.

Format

- Yes
- No
- Unknown

Type of home oxygen/long-term ventilation at discharge

Description If yes selected:

Specifies they type of on home oxygen or long-term ventilation the child was on at the point of discharge from your unit. Record highest level of intervention.

Reason Required for epidemiological analysis, assessment of health services delivery and measurement of main therapeutic interventions.

Format

- BIPAP via tracheostomy
- CPAP via tracheostomy
- BIPAP via Facemask (oral or nasal)
- CPAP via Facemask (oral or nasal)
- NCPAP
- HHHFT
- Home Oxygen
- Other (specify)
- Unknown

If 'Other (specify) selected please use free text description to identify other type of home oxygen or long-term ventilation.

Destination following discharge from your unit

Description Identifies the destination the child was directly discharged to from your unit

Reason Required for epidemiological analysis and assessment of health services delivery

Format Choose from one of the following:

- Normal residence
- Hospice
- Same hospital
- Other hospital
- Unknown

If same hospital or other hospital, choose from one of the following:

- PICU
- NICU
- ICU (adult)
- HDU)
- SCBU
- Ward
- Other
- Unknown

STATUS AT 30 DAYS POST-DISCHARGE FROM YOUR UNIT

Status

Description Identifies the status (alive or dead) of the child on 30 days post discharge from your unit

Format Choose from one of the following:

- Alive
- Dead
- Unknown

Date of death post-discharge from your unit

Description Identifies the date of death if this occurs post-discharge from your unit and is identified at 30 day follow-up

Reason Date of death and Time of death are identified as one of the principal outcomes of paediatric intensive care. Required for epidemiological analysis and assessment of health services delivery

Format Date; dd/mm/yyyy

COMMENTS

Description Any additional information considered relevant to the admission

Text entered in this field may provide extra information about data entered elsewhere in a specific field in the dataset or may provide extra information on the admission, which is not collected as part of the dataset

No identifiers (patient, nurse, doctor, ICU, hospital) should be included in text data entered into this field

As there is limited space in this field all text data should be kept to a minimum and be as concise as possible. Text data must not contain any punctuation except a period (full stop) at the end of each data point

Reason No dataset specification covers all eventualities: to deal with this a text field has been included for comments/additional information

Format Free text

FORM COMPLETED BY

Description Name of person completing the form

Reason For local use only to assist with following up queries relating to completion of this form