ANZICS

Centre for Outcome and Resource Evaluation

COMET

ANZPIC Registry

PAEDIATRIC Data Collection Form

Updated January 2026 (Version 3.0)

ICU No: (YYYYNNNNNN)
From COMET ICU admission screen

Affix Patient Label Here

PATIENT DETAILS

DOB: DD / MM / YYYY

Sex: ☐ Male ☐ Female ☐ Intersex / Indeterminate

Indigenous Status: ☐ No (0) ☐ Yes (1)

Indigenous Origin: (If Indigenous Status = Yes)

Australian Hospitals only
- ☐ Aboriginal but not Torres Strait Islander origin (1)
- ☐ Torres Strait Islander but not Aboriginal origin (2)
- ☐ Both Aboriginal and Torres Strait Islander origin (3)
- ☐ Not Stated/Unknown (4)

NZ Hospitals only
- ☐ Māori (5)

HOSPITAL ADMISSION DETAILS

Admission Date: DD / MM / YYYY

Admission Time: HH : MM

Admission Source:
- ☐ Home/Scene (1)
- ☐ Other Hospital – ED (2)
- ☐ Other Hospital – OT/Recovery (3)
- ☐ Other Hospital – ICU/NICU (4)
- ☐ Other Hospital – Ward (5)
- ☐ Inborn (6)

Retrieval: ☐ No (0) ☐ Yes (1)

(Transported by a specialist Paediatric ICU transport team, or equivalent)

Transferred From: _____

HOSPITAL DISCHARGE DETAILS

Discharge Date: DD / MM / YYYY

Discharge Time: HH : MM

Hospital Outcome:
- ☐ Still in Hospital (1)
- ☐ Died (2)
- ☐ Discharged Home (3)
- ☐ Transfer to Rehab Hospital (4)
- ☐ Transfer to Other Hospital – ICU/NICU (5)
- ☐ Transfer to Other Hospital – Ward (6)
- ☐ Transfer to hospice (7)

Transferred To: _____

ICU ADMISSION DETAILS

Admission Date: DD / MM / YYYY

Admission Time: HH : MM

Admission Source:
- ☐ OT/Recovery (1)
- ☐ Emergency Department (2)
- ☐ Ward (any other inpatient area) (3)
- ☐ Same Hospital - Other ICU/NICU (4)
- ☐ Direct ICU Admission (5)
- ☐ OT (direct adm from another ICU/NICU via OT) (6)

Care Unit Admitted to: _____

ICU Admission following MET/RRT/Emergency Response Call in ward/inpatient area: *ICU, intensivist-supervised HDU, OT/Recovery & ED are not considered ward/inpatient areas for the purpose of this coding*

☐ No (0) ☐ Yes (1)

Unplanned ICU Readmission During this Hospital Admission:

Unplanned Readmission <72 post ICU Discharge

☐ No (0) ☐ Yes (1)

ICU DISCHARGE DETAILS

Discharge Date: DD / MM / YYYY

Discharge Time: HH : MM

Discharge Decision Date: DD / MM / YYYY

Discharge Decision Time: HH : MM

ICU Outcome:
- ☐ Discharged to Ward/Home (1)
- ☐ Died in ICU (2)
- ☐ Transferred to other ICU (includes NICU) (3)
- ☐ Still in ICU (4)
- ☐ Died within 24 hours after being discharged from ICU to receive palliative care (5)

If transferred to another ICU (includes NICU), record the

ICU Transferred to: _____

PRINCIPAL ICU DIAGNOSIS

PDX

Code the diagnosis most directly responsible for the ICU admission

Notes: For patients admitted post-op., the Principal Diagnosis should be a "Post-Procedural Diagnosis", except if the patient would have been admitted to ICU anyway (e.g. intubated/ventilated head injury). If the patient has suffered a Cardiac Arrest, this code takes priority, even if admitted from OT.

Do not use an infection or mechanism of injury code for Principal Diagnosis (i.e. code PDX: Bronchiolitis, UDX: RSV)

UNDERLYING DIAGNOSIS

UDX

Code the underlying diagnosis contributing to the need for ICU admission

Example: Ex-prem with BPD and bronchiolitis = UDX: Prematurity.

Notes: If the PDX is post-procedural, the UDX will usually be the condition requiring the procedure. Often the PDX will be the same as the UDX (e.g. meningitis in a previously well child). In these cases, use the same code for both. A post-procedural code cannot be used for the UDX. If the PDX is an injury, the UDX should specify the injury mechanism. If the PDX is an injury, the UDX should specify the injury mechanism.

ASSOCIATED DIAGNOSES *(Please record all Associated Diagnoses on **Page 6**)*

Where non-specific "Other" diagnosis code (e.g. 450 Respiratory – Other) has been used as PDX/UDX/ADX, please record actual diagnosis/condition in box to right (text field).

Please specify if PDX/UDX/ADX Diagnosis – "Other":

PIM RISK DIAGNOSES

Very High Risk Diagnosis (0 – 8) PIM 3

- ☐ (0) None
- ☐ (1) Cardiac arrest preceding ICU admission [7]
- ☐ (2) Severe combined immune deficiency (SCID) [8]
- ☐ (3) Leukaemia or lymphoma after 1st induction [9]
- ☐ (4) Bone marrow transplant (BMT) recipient
- ☐ (5) Liver failure, acute or chronic, is the main reason for ICU admission [10]
- ☐ (7) SCID [8] *and* BMT recipient
- ☐ (8) Leukaemia or lymphoma after 1st induction [9] *and* BMT recipient

High Risk Diagnosis (0 – 6) PIM 3

- ☐ (0) None
- ☐ (1) Spontaneous cerebral haemorrhage (e.g. from aneurysm or AVM) [11]
- ☐ (2) Cardiomyopathy or myocarditis
- ☐ (3) Hypoplastic left heart syndrome [12]
- ☐ (4) Neurodegenerative disorder [13]
- ☐ (5) Septic shock [14]
- ☐ (6) Necrotising enterocolitis is the main reason for ICU admission [18]

Low Risk Diagnosis (0 – 6) PIM 3

- ☐ (0) None
- ☐ (1) Asthma is the main reason for ICU admission
- ☐ (2) Bronchiolitis is the main reason for admission [15]
- ☐ (3) Croup is the main reason for ICU admission
- ☐ (4) Obstructive sleep apnoea is the main reason for ICU admission [16]
- ☐ (5) Diabetic ketoacidosis is the main reason for ICU admission
- ☐ (6) Seizures is the main reason for ICU admission [17]

Weight (kg): _____

Gestation (completed weeks): _____ *For patients ≤ 1 year old (Range 20 – 43; 99 if gestational weeks unknown but the baby is term)*

Gestation (additional days): _____ *For patients < 28 days corrected age (Range 0 – 6; 9 if unknown)*

Cardiac Surgery: *Note: This does not include surgery performed just for cannulation or decannulation*

☐ None (0) ☐ Immediately prior to this admission (1) ☐ During this admission (2) ☐ Both 1 & 2 apply (3)

Inotropes: ☐ None (0) ☐ Started within 1st hour of admission (1) ☐ Started after 1st hour (2)

CHRONIC CONDITIONS *(Refer to Definitions)*

Pre-existing chronic conditions (record all which apply)

Neurologic or Neuromuscular	☐ No (0)	☐ Yes (1)
Respiratory	☐ No (0)	☐ Yes (1)
Gastrointestinal	☐ No (0)	☐ Yes (1)
Metabolic	☐ No (0)	☐ Yes (1)
Malignancy	☐ No (0)	☐ Yes (1)
Technology Dependency	☐ No (0)	☐ Yes (1)
Cardiovascular	☐ No (0)	☐ Yes (1)
Renal or Urologic	☐ No (0)	☐ Yes (1)
Haematologic or Immunologic	☐ No (0)	☐ Yes (1)
Other congenital/genetic defect	☐ No (0)	☐ Yes (1)
Premature/Neonatal	☐ No (0)	☐ Yes (1)
Transplantation	☐ No (0)	☐ Yes (1)
Mental Health / Behavioural	☐ No (0)	☐ Yes (1)

SPECIFIC THERAPIES *(Please complete this table at the time of ICU discharge)*

Indicate the therapies the patient received during this admission:

CVVH or CVVHD	☐ No (0)	☐ Yes (1)	**Inhaled Nitric Oxide**	☐ No (0) ☐ Yes (1)
Intermittent haemodialysis	☐ No (0)	☐ Yes (1)	**Tracheostomy**	☐ No (0) ☐ Yes (1)
Peritoneal dialysis	☐ No (0)	☐ Yes (1)	**ICP Monitoring**	☐ No (0) ☐ Yes (1)
Plasma Exchange	☐ No (0)	☐ Yes (1)	**HFO**	☐ No (0) ☐ Yes (1)

ECMO* ☐ None (0) ☐ Commenced prior to admission (1) ☐ Commenced during this admission (2)

VAD* ☐ None (0) ☐ Commenced prior to admission (1) ☐ Commenced during this admission (2)

 # For ECLS retrievals, code ECMO/VAD=1 if on ECLS at the time of 1st contact with the retrieval team, or =2 if not on ECLS at the time of 1st contact

Indication for ECLS (ECMO & VAD):

☐ None (0) ☐ Cardiac surgery (1) ☐ Cardiac support (not post cardiac surgery) (2) ☐ Cardiac arrest (3) ☐ Septic shock (4) ☐ Pneumonia (5) ☐ ARDS (not assoc. with pneumonia) (6) ☐ Neonatal respiratory failure (7) ☐ Other (8)

If ECLS for cardiac arrest, was ECMO for ECPR? → ☐ No (0) ☐ Yes (1)

If yes (ECPR), time from arrest to cannulation (minutes): _____

Enteral Nutrition Commencement date: DD / MM / YYYY

Enteral Nutrition Commencement time: HH : MM

PAEDIATRIC INDEX OF MORTALITY (PIM 3)

General Instructions: PIM3 is calculated from the information collected at the time a child is admitted to your ICU.

1. Record the observations at or about the time of first fact-to-face contact between the patient and a doctor from your intensive care unit (or a doctor from a specialist paediatric transport team), when management of the patient is taken over.
2. Use the first value of each variable measured within the period from the time of this first contact to one hour after arrival in your ICU. The first contact may be in your ICU, or your emergency department, or a ward in your own hospital, or in another hospital (e.g. on a retrieval).
3. If the information was **MISSING** or **NOT MEASURED**, leave the field empty in COMET.
4. Note that not all information collected below is used in the calculation of PIM3 but should be collected in the same time window to allow for possible inclusion in future versions of PIM.
5. See over page for field definitions.

Elective admission into ICU? [1]

☐ No (0) ☐ Yes (1)

Recovery from surgery or a procedure? [2]
is the main reason for ICU admission

☐ No (0) ☐ Yes (1)

Cardiac Bypass

☐ Admitted following cardiac bypass (1) ☐ No (0)
also code as recovery from surgery

☐ Bypass procedure during admission (2) ☐ Both 1 & 2 apply (3)

Mechanical ventilation* [3] *At any time during the first hour in ICU*
** Includes CPAP, BiPAP (but not HFNC)*

☐ No (0) ☐ Yes (1)

Admission SBP [4] *(mmHg). If there is both arterial & NIBP, use the arterial* _____

Lactate *(mmol/l)* _____

SpO_2 [5] *(%)* (pulse oximetry). Use first SpO2 with corresponding FiO2 within qualifying time period _____

FiO_2
At the time of SpO_2 if inspired oxygen can be measured accurately _____

Pupillary Responses to bright light [6]

☐ Both fixed and >3mm (1) ☐ All other responses (0) (including unknown)

PaO_2 *(mmHg) (Arterial only). Use first PaO2 with corresponding FiO2 within qualifying time period* _____

FiO_2 *At the time of PaO_2 if inspired oxygen can be measured accurately (e.g. via ETT, NIV, HFNC or headbox)* _____

Base Excess *(mmol/l) Arterial, capillary or venous* _____

Source of Base Excess measurement

☐ No BE (0) ☐ Arterial (1) ☐ Capillary (2) ☐ Venous (3)

Site of First Contact

☐ Your ICU (1) ☐ In your hospital, but outside ICU (2) ☐ Outside your hospital (3)

Comments: *reasons for admission, treatment, coding etc.*

DEATH *(Complete this table for all patients who die in ICU)*

Cause of Death: _____ (ANZPICR Diagnosis List)

Mode of Death: ☐ Brain death (1) ☐ Death with maximal support (2) ☐ Death with therapy limited but not withdrawn (3)
☐ Death with therapy withdrawn (not brain death) (4)

External cardiac massage performed as the terminal event ☐ No (0) ☐ Yes (1)

Limitation of therapy order in the notes → **If yes, Date of Order** DD / MM / YYYY

☐ No (0) ☐ Yes (1)

If more than one order, record date of first order.
If order preceded ICU admission, record ICU admission date

Organ Donation:

☐ Brain Death not present (DCD not requested) (1)
☐ Brain death, organ donor (2)
☐ Brain death, contradiction to organ donation (3)
☐ Brain Death, consent not requested (4)
☐ Brain death, consent requested and refused (5)
☐ Organ donor after cardiac death (DCD) (6)
☐ DCD requested and refused (7)
☐ DCD consented but did not donate (8)
☐ Brain death, consented but did not donate (9)

PIM3 DEFINITIONS

1. **Elective Admission:** The admission is classed as elective if (1) the patient was admitted after an elective procedure (where the ICU admission must have been planned, or, if inadvertently not planned, then could have been foreseen), or (2) for an elective procedure in PICU (e.g. insertion of a central line), or (3) elective monitoring, or (4) review of home ventilation. An admission or an operation is considered elective if it could have been postponed for more than six hours without adverse effect. Note that unexpected admissions (i.e. not planned and could not have been foreseen) after elective surgery are not considered Elective.
2. **Recovery from surgery or procedure:** Includes a radiology procedure or cardiac catheter. Do not include patients admitted from the operating theatre where recovery from surgery is not the main reason for ICU 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 ICU admission is the head injury). Helpful hint: Ask – would patient have been going to ICU anyway if they hadn't been to OT? If answer is NO, then Recovery would be YES.
3. **Mechanical ventilation:** Includes mask or nasal CPAP or BiPAP or negative pressure ventilation. Does **NOT** include HFNC for PIM2 and PIM3.
4. **SBP:** Record SBP as 0 if the patient is in cardiac arrest, record 30 if the patient is shocked and the blood pressure is so low that it cannot be measured If there is both an arterial and a non-invasive blood pressure (NIBP) recorded within the qualifying time period, use the arterial blood pressure, even if recorded later than the NIBP.
5. **SpO2:** If there is more than one SpO2 recorded within the qualifying time period, use the SpO2 that has a corresponding measured and recorded FiO2, even if recorded later than a SpO2 with no corresponding FiO2.
6. **Pupillary Responses:** Pupillary reactions to bright light are used as index of brain function. Do not record abnormal findings due to drugs, toxins or local eye injury.
7. **Cardiac Arrest:** Includes both in-hospital and out-of-hospital arrest. Requires either documented absent pulse or the requirement for external cardiac massage (do not include past history of cardiac arrest).
8. **Severe combined immune deficiency:** Requires the documented diagnosis of SCID.
9. **Leukaemia & lymphoma:** Include only cases where admission is related to leukaemia or lymphoma or the therapy for these conditions.
10. **Liver Failure:** Include patients where liver failure, acute or chronic, is the main reason for ICU admission. DO NOT Include patients admitted for recovery following liver transplantation for acute or chronic liver failure *(coding of liver transplant patients is different from PIM2)*
11. **Cerebral Haemorrhage:** Cerebral haemorrhage must be spontaneous (e.g. from aneurysm or AV malformation). Do not include traumatic cerebral haemorrhage or intracranial haemorrhage that is not intracerebral (e.g. subdural haemorrhage).
12. **Hypoplastic Left Heart Syndrome:** Include only cases where a Norwood procedure, or equivalent, is required in the neonatal period to sustain life. If patient has a subsequent heart transplant, then this diagnosis and high risk indicator no longer apply.
13. **Neurodegenerative Disorder:** Requires a history of progressive loss of milestones (even if no specific condition has been diagnosed), or a diagnosis where this will inevitably occur.
14. **Septic shock:** Meets Phoenix Criteria for Septic Shock: https://pmc.ncbi.nlm.nih.gov/articles/PMC10900966/. For details, please refer to page 64 of the ANZPICR Data Dictionary: ANZPICR Data definitions. Additional High Risk code collected by ANZPIC Registry only. Nb. If Septic Shock is present with another High Risk diagnosis, please record the other high risk code to enable the accurate calculation of PIM2 (where Septic Shock is not included as a high risk code).
15. **Bronchiolitis:** Include children who present either with respiratory distress or central apnoea where the clinical diagnosis is bronchiolitis.
16. **Obstructive Sleep Apnoea:** Include patients admitted following adenoidectomy and or tonsillectomy in whom OSA is the main or underlying reason for ICU admission (and code as recovery from surgery).
17. **Seizures:** Include patients who require 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.
18. **Necrotising enterocolitis:** Include patients where an acute episode of NEC is the main reason for admission**. DO NOT** include patients where the admission is for management of the sequelae such as strictures, revision of stomas, etc. Note: PIM3 High Risk code - not Very High Risk Code.

EPISODES OF INTERVENTION

General Instructions:
Please record episodes of interventions for each admission as detailed below. Note that this information is to be submitted to the Registry as a separate electronic file to other patient admission data.

1. Invasive ventilation (IV) is mechanical ventilation delivered via ETT or Tracheostomy.
2. Non-invasive ventilation (NIV) refers to CPAP, BiPAP or NPV delivered by Mask, Nasal Prong, or Cuirass
3. High Flow Nasal Cannulae (HFNC) – to be regarded as high-flow, threshold must be >1L/Kg/min or >30L/min.
4. Intubation refers to ETT or tracheostomy
5. A respiratory support episode (IV, NIV or HFNC) includes any breaks of <24hrs. Recommencing a mode of respiratory support after stopping for longer than 24 hours is regarded as a new episode.
6. If a respiratory support episode is a mixture of modalities (e.g. HFNC used during the day and CPAP/BiPAP at night, or a failed extubation where non-invasive ventilation has been used for a short length of time between intubations), then assign the episode to most invasive modality. Where respiratory support is a consecutive process involving the stepping down or up of modalities (e.g. weaning), these should be recorded as separate episodes.
7. ALL episodes of intubation and ECLS are to be recorded, irrespective of breaks of any length in time.
8. All episodes of intubation must have a code of 1 to 8 included to describe the extubation. If still intubated on ICU discharge (or death), then use code 8. If patient extubated electively as part of withdrawal of care, use code 1.

ICU Number	Episode Category	Episode START Date & Time	Episode STOP Date & Time	Extubation Description
	1=Invasive ventilation **2**=Non-invasive ventilation **3**=HFNC **4**=Intubation **5**=ECLS	DD/MM/YYYY hh:mm	DD/MM/YYYY hh:mm	**1**=Planned, successful **2**=As above, but with planned reintubation **3**=Planned, failed* (upper airway obstruction) **4**=Planned, failed* (resp failure/lung disease) **5**=Planned, failed* (other) **6**=Unplanned, (but) successful **7**=Unplanned, failed* **8**=No extubation **9**=(Default value) not an intubation episode **Requiring re-intubation within 24 hours of extubation*
As per 1st line				

ASSOCIATED DIAGNOSES

General Instructions:
Please record all relevant associated diagnoses as detailed below. Record one associated diagnosis per line, with an **unlimited number permitted per ICU admission**. Note that this information is to be submitted to the Registry as a separate electronic file to other patient admission and episodes of intervention data.

1. Associated diagnoses (ADX) include procedures, adverse events and morbidities of interest that are pre-existing or occurring on or during the ICU admission.
2. Please refer to the Diagnostic Codes Table when recording ADX.
3. Please ensure ADX category is reported as either 1 (pre-existing), 2 (acute) or 3 (ICU occurrence). Only use code 9 (not coded) if your unit cannot submit data in the new ADX file format. Do not use code 9 for unknown timing of diagnoses.
4. ADX Category 1: Pre-existing captures conditions present more than 30 days before ICU admission. An ADX Date & Time can be entered but is not mandatory.
5. ADX Category 2: Acute (on ICU admission) captures conditions present at the time of ICU admission. This diagnosis should have been made less than 30 days prior to ICU admission. Include conditions that are present at the time of admission, even if the condition is diagnosed after admission. An ADX Date & Time can be entered but is not mandatory.
6. ADX Category 3: ICU occurrence captures diagnoses or events that occur during the ICU admission. ADX Date & Time is mandatory for all post-procedural diagnoses occurring during ICU admission (i.e. codes between 1000 and 1999). ADX Date & Time can be entered but is not mandatory for all other diagnosis codes.
7. Mandatory Diagnoses to be reported if occurrence is during ICU admission ADX Category 3):
   - **Post-procedural** (1000 to 1999) – ADX Date & Time (of procedure completion or of return to ICU from theatre etc.) is mandatory
   - **Dysrhythmia requiring intervention** (271) – (excluding sinus bradycardia). Interventions include cooling <36.5°C, anti-arrhythmic drugs, cardioversion, temporary pacing
   - **Cardiac arrest in ICU** (852) – absent pulse or external cardiac massage for > 30 seconds
   - **Emergency chest opening** (1990) – opening of the chest where the sternum is not already open
   - **Chylothorax** (455) – as diagnosed by local guidelines
   - **Vascular thrombosis, other** (261) – requires treatment or is occlusive or symptomatic
   - **Vascular thrombosis, vascular access device related** (272) – requires treatment or is occlusive or symptomatic
   - **Brain infarction or stroke** (305)
   - **Intracranial haemorrhage, non-traumatic** (315) – excluding grade I or II intra-ventricular haemorrhage
   - **Necrotising enterocolitis** (611) – definite or advanced – Modified Bell's Stage II or worse
   - **Pressure injury** (128) – full thickness or tissue loss – National Pressure Ulcer Advisory Panel Stage 3 or worse
   - **Extravasation injury** (129) – full thickness skin loss or worse
   - **Post-operative bleeding** (1108) – requiring surgical intervention

ICU Number	Associated Diagnosis / Procedure / Event (ADX) Please refer to the Diagnostic Codes Table	Associated Diagnosis Category **1**=Pre-existing **2**=Acute (on ICU admission) **3**=ICU occurrence (during ICU admission) **9**= Not coded	Associated Diagnosis Date & Time (Only required for post-procedural codes during ICU admission) DD/MM/YYYY hh:mm
As per 1st line			