



National Paediatric Critical Care Audit

Understanding Practice in Clinical Audit and Registries (UPCARE):	National Paediatric Critical Care Audit
Programme name	
Workstream name (if applicable)	Not applicable
Contract status	Ongoing
Audit or non-audit	Audit
HQIP commissioned	Yes
HQIP AD	JC
HQIP PM	NP
Included in current NHS Quality Accounts	Yes
1.10 Geographical coverage - HQIP agreement	England
1.11 Geographical coverage - External agreement	Wales; Scotland; Northern Ireland; Republic of Ireland
1.3 Healthcare setting	NHS secondary care; Non-NHS funded healthcare; NHS-funded care delivered by independent provider
1.4 Inclusion and exclusion criteria	Data is submitted into the secure web-based application database called PICANet Web by Paediatric Intensive Care Units and Paediatric Intensive Care Transport Services for all children and young people accepted for referral, transported or admitted to designated paediatric intensive care units (PICUs) providing paediatric level 3 critical care (as defined by the Royal College of Paediatrics and Child Health).
1.5 Methods of data submission	Online e.g. webtool or portal; Extract from electronic patient system
1.7 Data flow diagram	The PICANet data flows for England, Wales and Scotland are available on the Policies page of the PICANet website: https://www.picanet.org.uk/wp-content/uploads/sites/25/2023/03/PICANet-Data-Flow_v9.0_England_Wales_Scotland.pdf
1.8 Data quality & analysis plan	The PICANet database has inbuilt data validations which reduce the burden of data checking for organisations, e.g. immediate highlighting of missing / inconsistent data.

The PICANet clinical validation team work with organisations to answer validation queries via 4-6 weekly validation reports for organisations flagging data quality issues.

Plus the following are in place:

- Data quality checks prior to analysis to identify duplicate records and inconsistencies.
- Validation of addresses and postcodes.
- Annual review of low matches on patient ID assignment.
- NHS number validation using the Modulus 11 algorithm.

1.9 Outlier policy

The *PICANet Outlier Policy* is published on the PICANet website: https://www.picanet.org.uk/wp-content/uploads/sites/25/2022/10/PICANet_Outlier_Policy_v2.1_2022-09-27.pdf

2.1 Outcome measures

The audit provides comparative performance data for Paediatric Intensive Care Units (PICUs) and Specialist Paediatric Critical Care Transport Services. Each hospital has its performance measured against: - Other units / transports teams across the UK and Republic of Ireland - Paediatric Critical Care Standards - NHS England Specialised Services Quality Dashboard targets Some summary data is presented at a National level.

The current outcome metrics are:

- In-PICU risk adjusted mortality

Evidence base: The risk adjustment model used to determine risk-adjusted mortality (Paediatric Index of Mortality version 3) has been externally validated (DOI: 10.1097/PCC.0b013e31829760cf).

Measures quality indicator PIC01 from the NHS England *Paediatric Intensive care (PICU) Quality Dashboard 2021/2022*.

- Emergency re-admissions within 48 hours

Evidence base: Clinical consensus within PICANet Clinical Advisory Group and Steering Group and designed to measure quality indicator PIC04 from the NHS England *Paediatric Intensive care (PICU) Quality Dashboard 2021/2022*.

2.2 Process measures

The current process metric is:

- Retrieval mobilisation times

Evidence base: Clinical consensus within PICANet Clinical Advisory Group and Steering Group and designed to measure quality indicator PIC14i from the NHS England *Paediatric Intensive care (PICU) Quality Dashboard 2021/2022* which recommends that, for emergency retrievals, the team departs the transport base within 30 minutes from the time the referral is accepted for retrieval.

2.4 Patient reported outcome measures	Patient reported outcome measures are not included in the audit.
2.5 Patient reported experience measures	Patient reported experience measures are not included in the audit.
2.6a Do measures align with any of the following sources of evidence (select all that apply)	Professional society
3.1 Results visualisation	Interactive online portal (run charts available); Annual report; Static data files
3.2 Levels of reporting	National; Trust or Health Board; Clinical commissioning group (CCG); Regional network; Hospital
3.3 Timeliness of results feedback	Within 24 hours; Within 3 months; Within 1 month; Within 1 year
Dataset #1 name	Core dataset (admission)
Dataset #1 type	Clinical audit - continuous
Dataset #1 items collected (n)	133
Dataset #1 items from existing national datasets (n)	0
Dataset #1 use of existing national datasets	Paediatric critical care minimum dataset (PCCMDS)
Dataset #1 specification	The PICANet Admission Dataset Definitions Manual is available on the PICANet website: https://www.picanet.org.uk/wp-content/uploads/sites/25/2023/04/PICANet-Web-Admission-Dataset-Manual-v5.7-2023-04.pdf
Dataset #2 name	Core dataset (referral)
Dataset #2 type	Clinical audit - continuous
Dataset #2 items collected (n)	17
Dataset #2 items from existing national datasets (n)	0
Dataset #2 use of existing national datasets	N/A

Dataset #2 specification	The PICANet Referral & Transport Dataset Definitions Manual is available on the PICANet website: https://www.picanet.org.uk/wp-content/uploads/sites/25/2020/11/PICANet-Web-Referral-Transport-Dataset-Manual-v2.2-FINAL_Nov-2020.pdf
Dataset #3 name	Core dataset (transport)
Dataset #3 type	Clinical audit - continuous
Dataset #3 items collected (n)	184
Dataset #3 items from existing national datasets (n)	0
Dataset #3 use of existing national datasets	N/A
Dataset #3 specification	The PICANet Referral & Transport Dataset Definitions Manual is available on the PICANet website: https://www.picanet.org.uk/wp-content/uploads/sites/25/2020/11/PICANet-Web-Referral-Transport-Dataset-Manual-v2.2-FINAL_Nov-2020.pdf
Dataset #4 name	Customised data collections (multiple custom collections accounted for, some collected on an opt in basis)
Dataset #4 type	Clinical audit - continuous
Dataset #4 items collected (n)	200
Dataset #4 items from existing national datasets (n)	0
Dataset #4 use of existing national datasets	Paediatric critical care minimum dataset (PCCMDS)
Dataset #4 specification	<p>Customised data collections collect additional data beyond the PICANet core dataset for the purposes of audit. Current customised collections are listed here with links to their data definitions manuals which are available on the PICANet website:</p> <ul style="list-style-type: none"> • COVID-19 customised data collection: https://www.picanet.org.uk/wp-content/uploads/sites/25/2022/02/PICANet-COVID-19-II-Dataset-Definitions-Manual-v2.0_11Feb2022.pdf <p>The following custom audits were collected at a PICU level opt in basis for admissions up to 30 April 2022 :</p> <ul style="list-style-type: none"> • Renal Dataset: https://www.picanet.org.uk/wp-content/uploads/sites/25/2018/05/PICANet-Renal-Dataset-Definitions-

[v2.0.pdf](#)

- Renal Daily Interventions: <https://www.picanet.org.uk/wp-content/uploads/sites/25/2018/06/PICANET-Renal-Daily-Data-Definitions-Manual-v2.0.pdf>

When was your Healthcare Improvement Plan (sometimes referred to as a Quality Improvement Plan) last reviewed? Please upload under 'Files' below using naming convention ('yyyymmdd_PROGRAMME-Workstream-HIplan').

Files 20230821_Metrics_NPCCA.xlsx
20220929_NPCCA PICANet-Workstream-HIplan.pdf

