Impact of PICANet

PICANet

HQIP Healthcare Quality Improvement Partnership

Main Healthcare Improvement Goals 2022 - 2025

1. Improving prediction in risk of emergency readmissions to PICU within 48 hours accounting for case volume and occupancy levels in individual units
2. Reducing variation in specialised transport mobilisation times and access to PICU
3. Reducing rates and variation in unplanned extubations
4. Understanding and reducing variation of healthcare-associated infection in PICU
5. Understanding variation and predictors of time of discharge

NATIONAL
How the project provides evidence of quality and outcomes of care nationally

Customised data collections are carried out and revised to collect clinical data items specific to an area of care or in response to local or national policy requirements or emergencies.

PICANet's SARS-CoV-2 data from the **COVID-19** customised data collection was presented to the UK government's Scientific Advisory Group for Emergencies **(SAGE)** on 13 January 2022 as part of a wider discussion of children and the Omicron variant.

In a recent article, the UK Paediatric Critical Care Society Study Group have named PICANet as a unique enabler of **randomised clinical trials** in paediatric critical care. PICANet collaborate with CTUs to provide population estimates to determine trial feasibility and the robust routinely collected data can reduce the burden of trial-specific data collection for PICU staff.

A copy of the PICANet publication, In the eye of the storm: impact of COVID-19 pandemic on admission patterns to paediatric intensive care units in the UK and Eire, was also shared with SAGE.

SYSTEM
How the project supports policy development & system management

PICANet informs and contributes to the development of the Paediatric Critical Care Society's (PCCS) Quality Standards.

Two of the 2021 PCCS Quality Standards relate to the timely submission of admission, referral, and transport data to PICANet. They are L3-702 and T-701.

PICANet includes measures that are part of NHS England's Commissioning for Quality and Innovation (CQUIN) framework which supports quality improvement with a financial incentive.

PICANet Key Metrics are reported to CQC annually to inform inspection planning.

Over 500,789 [426,781 English NHS] admission, referral and transport events reported in the PICANet database up to 30 November 2022.

In 2022 PICANet completed a feasibility pilot for the collection of Level 2 paediatric critical care (PCC) services data. The data collection will be rolled out to all designated NHS Level 2 PCC units in England from Jan 2023. This data collection supports a key outcome of the PCC and Surgery in Children (SIC) Review (Nov 2019) and the PCC Getting It Right First Time (GIRFT) report (2022).

LOCAL
How the project stimulates quality improvement

31 PICUs [24 English NHS units] & **13** transport services [10 England and Wales NHS teams] able to access real-time local data downloads and reporting stimulating quality improvement discussions.

7 Level 2 English NHS paediatric critical care (PCC) units took part in the Level 2 PCC data collection pilot study.

New RSPRT Guidance for Units has been released to provide units with assistance with interpreting their plots. A case study from a unit that has dealt with an RSPRT outlier is included.

Clinical teams can monitor the PICU's mortality rates in real-time via the risk-adjusted standardised mortality ratio (SMR) included on useful resetting sequential probability ratio test (RSPRT) plots. PICANet provide training to support individual PICU mortality monitoring.

PICANet provide national comparator data to aid local units to assess their performance and benchmark themselves against other units. Trends can be monitored over time.

PUBLIC
How the project is used by the public and the demand for it

PICANet produces an annual State of the Nation report which is useful for the public, patients and families to aid understanding of the audit outputs.

PICANet's mortality outlier analysis included in annual reports reassures the public about the quality and performance of participating paediatric critical care units.

Infographics support the reports and are available on the website to increase the accessibility of the report's key messages.

PICANet produce reports relating to children with a confirmed COVID-19 diagnosis treated in a PICU, within the UK. They are available to the public on the PICANet website and demonstrate the impact on PICU activity.

PICANet respond to **enquiries** from patient and professional organisations in relation to the COVID-19 pandemic and PICU outcomes.

Every **week** a new request for access to PICANet data is submitted.

Impact examples from Dec 2021 to Nov 2022. Impact report produced Dec 2022.