

Impact of PICANet

National Paediatric Critical Care Audit



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

<p>NATIONAL How the project provides evidence of quality and outcomes of care nationally</p>	<p>Reducing healthcare associated infections (HCAI) is an important quality improvement metric for PICUs. Following a soft launch in 2023, the audit will begin HCAI data collection in 2024. This will support nationwide data capture, and benchmarking. This is welcomed by the clinical community and efforts to link this data with Infection in Critical Care Quality Improvement Programme (ICCQIP) is in progress.</p> <p>Delirium prevention is an important goal for PICUs. Working with the Paediatric Delirium Group UK & Ireland many PICUs are screening for delirium. PICANet have collaborated with the group to capture the delirium screening result every day. This will provide information required to establish the prevalence of delirium.</p> <p>Affiliated publication with the first ever estimates of the risk of unplanned PICU admission for babies born very preterm made possible by PICANet data.</p> <p>Introduced reporting on admissions to PICU by deprivation and ethnicity – determinants of health outcomes.</p>	<p>SYSTEM How the project supports policy development & system management</p>	<p>There are 534,858 [455,178 English NHS] PICU admission, referral and transport events reported in the PICANet database from participating organisations in the UK and ROI up to 30 November 2023.</p> <p>PICANet informs the development of the Paediatric Critical Care Society's (PCCS) Quality Standards (QS).</p> <p>PICANet Key Metrics are reported to the CQC annually to inform inspection planning.</p> <p>Two of the 2021 PCCS QS relate to the timely submission of admission, referral, and transport data to PICANet. They are L3-702 and T-701.</p> <p>In 2023, in collaboration with Extra Corporeal Membrane Oxygenation (ECMO) specialists, PICANet have launched the ECMO data collection. This collection will contribute to ensuring the adequacy and efficiency of ECMO service provision.</p> <p>PICANet's data collection has expanded to include the Level 2 PCC data collection. 20 designated Level 2 English NHS paediatric critical care (PCC) units are participating as of Nov 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).</p>
<p>LOCAL How the project stimulates quality improvement</p>	<p>All eligible PICUs in the UK and ROI and the Specialist Paediatric Critical Care Transport Services that transfer to them participate in the audit.</p> <p>PICANet have valued working relationships with PICU teams with quality of care at the forefront and through COVID, <i>"we grew stronger together all of us by being cohesive"</i>.</p> <p>Local data downloads and reporting provided by PICANet stimulate quality improvement discussions. Clinical teams can monitor PICU mortality rates in real-time. Quarterly status updates and resetting sequential probability ratio test (RSPRT plot guidance) assist teams in identifying and responding to potential issues with quality of care in a time-sensitive fashion.</p> <p>The audit provides a suite of Quality Improvement Resources for participating organisations.</p> <p>PICANet supports the PCC community in PICU audit and research. We assist with navigation of data downloads and applications for data.</p>	<p>PUBLIC How the project is used by the public and the demand for it</p>	<p>The parents of children who have been cared for in PICU that took part in our PPI workshops in Spring 2023 were strong advocates of their child's experience being used to improve care for future children.</p> <p>PICANet make reports and data publically available.</p> <p>The PICANet Data Dashboard is interactive and provides an overview of PICU activity and performance against PICANet's clinically agreed key metrics. The dashboard is a good place to start for anyone interested in paediatric critical care.</p> <p>The State of the Nation Report is useful for the public, patients and families to aid understanding of the audit outputs. An accompanying infographic increases the accessibility of the report's key messages.</p> <p>We spoke to children and young people in one of GenerationR Alliance's Young People's Advisory Groups and they support the use of the data collected for audit and research projects to expand knowledge of and improve care delivered in PICU.</p>