Paediatric Intensive Care Audit Network

Lay Report

Paediatric Intensive Care (PIC) in the United Kingdom and Ireland – the picture for 2015

There were 19,965 admissions of children aged under 16 to a Paediatric Intensive Care Unit (PICU) in 2015. This is almost the same as the last two years.

In the UK, for every 1,000 children under one year of age, eleven needed admission to PICU.

Older children were much less likely to need PICU, with less than 1 per 1,000 children over 5 years of age needing PICU each year.

For children under one year of age who were admitted to PICU, 59% were boys and 41% were girls.

Staffing

10 of the 34 PICUs met the current nurse staffing standards in 2015. This has increased from the 5 units reported in 2014.

PICUs sometimes have to employ agency or bank nursing staff. On a midweek night and a weekend in November, in London, 18% of NHS nursing staff on duty were employed from agency or from the nurse bank. This has reduced from 27% in 2014.

Your Experience Counts

The Empowerment of Parents in the Intensive Care (EMPATHIC 30) questionnaire, which collects information about the experiences of parents and carers during the admission of their child to paediatric intensive care, was distributed to many parents of children as they were being discharged from PICU.

In 2015 the vast majority of parents were very happy with the care in PICU and they rated the performance of doctors and nurses very highly. Doctors’ performance was rated as 9 or 10 by 90% of those completing the questionnaire and nurses’ performance was rated as 9 or 10 by 95% of parents.
Activity in Paediatric Intensive Care

**Discharge outcome**

96% of children admitted to PICU care **survive to discharge**

**Readmission**

Almost 2% of children discharged from PICU require **readmission within 48 hours**

The number of days a PICU bed is occupied has increased by 3% over the last 3 years. Beds were occupied for 132,018 days in 2015. Most bed days (55%) were used by children under the age of 1 year. Over the last 3 years around 20% of children stayed on the same PICU for seven or more days and around 10% of the children admitted to PICU received over half (58%) of the bed days.

29% of the children attending PICU during 2015 had a respiratory illness as their main reason for admission.

65% of the children admitted to PICU received **invasive ventilation** to help with breathing during their stay.

In 2015 PICANet started to collect data about children receiving **high flow oxygen therapy**. 13% of the children treated in PICU received a total of 8,232 days of high flow oxygen therapy.

**How long does it take to get to PICU?**

Some children require transfer from their local hospital to another hospital with a PICU.

In 2015, the specialist paediatric intensive care transports teams completed 6,375 journeys. 88% of these journeys were for emergency admissions.

Some children have to travel a long way to get to a PICU and from the time the paediatric intensive care specialist transport teams confirm that a child needs to be transported to PICU there is a PICS standard measuring how frequently the team arrive at the child’s bedside within 3 hours.

In 78% of transport events the transport team arrived at the bedside within three hours in 2015.
There are 34 PICUs in the UK and Republic of Ireland who report to PICANet. The largest unit had 1,340 admissions while 12 units had fewer than 500 admissions in 2015.

PICANet reports on the “risk adjusted” mortality of each PICU. This takes into account how sick the children are at the time of admission to paediatric intensive care. PICANet has found that there is no statistical reason to be concerned about the performance of any of the PICUs reporting to PICANet in 2015.

Initial review of the figures suggested possible concern about the mortality rate in one PICU. However, following an extensive internal and external investigation, the quality of care provided on the PICU in question was not found to be at fault.
What is PICANet?

The Paediatric Intensive Care Audit Network (PICANet), which is run jointly by the Universities of Leicester and Leeds, collects information about all children admitted to the paediatric (children’s) intensive care service in the United Kingdom and Ireland.

PICANet collects exactly the same information on all children cared for in paediatric intensive care units and by the specialist paediatric intensive care transport services. This information is used to help find the best ways to treat and care for very sick children and to plan and provide future paediatric intensive care services.

Additional information about PICANet and the 2016 Annual Report is available at www.picanet.org.uk

**Recommendations**

- Commissioners should ensure that sufficient resources are allocated to cover the increasing activity and workload in PICU
- Alternative settings for the provision of care for children with long term needs i.e. ventilation should be investigated
- Commissioners should work closely with PICUs to ensure adequate staffing levels as recommended in the UK Paediatric Intensive Care Standards for the Care of Critically Ill Children (see below)
- Nurse Managers should ensure that the reduction in the use of agency and bank nurses is maintained and continues to improve
- PICANet needs to work with national and international partners to investigate new ways of measuring quality of care in PICUs as the patients treated in PICU today have more long-term and complex illnesses

**Complete and accurate information** is vital for PICANet to help doctors, nurses and commissioners to improve paediatric intensive care services

This lay report was written in November 2016 by the PICANet team and Shelley Marsh, Lay Representative, PICANet PIC Families Group.