**Differences in access to Emergency Paediatric Intensive Care and care during Transport (The DEPICT Study)**

**What is this research about?**

There are 28 paediatric intensive care units (PICU) in the UK. Therefore when a child is seriously unwell they may need to be transferred from their local hospital to a hospital with a PICU. The transport of a sick child will usually be undertaken by specialist teams who can provide intensive care on the move. These teams are known as paediatric intensive care retrieval teams (PICRT).

The organisation of PICRTs varies across the UK, particularly with regards to the composition of the team and the distance they need to travel to reach a child. Research is needed to investigate how these, and other factors, affect the outcomes and experiences of sick children and their families.

The DEPICT study has four distinct, inter-related, workstreams:

1. Quantitative study: to investigate if there are differences in outcome between different transport services
2. Qualitative study: to investigate the experience of parents and children (where practical) during the transfer
3. Health economics: to evaluate the costs and value for money of the ways that the PICRTs work
4. Mathematical modelling: to investigate the impact of alternative models of service

**How is PICANet involved?**

PICANet is involved in the quantitative analysis of the DEPICT study, which will be undertaken at the University of Leicester. Data collected by PICANet related to transport and admissions to PICUs will be linked with other data sources by NHS Digital.

Approval has been obtained from the Health Research Confidentiality Advisory Group under Section 251 (reference: 17/CAG/0129) and from the Research Ethics Committee (reference: 17/LO/1267). More information can be found on the [DEPICT website](https://depict-study.org.uk/).

**What will the DEPICT Study data contain?**

The DEPICT study dataset will comprise data from:

* The Paediatric Intensive Care Audit Network (PICANet)
* The Case Mix programme at ICNARC (intensive care national audit and research centre)
* Hospital Episodes Statistics
* Office of National Statistics mortality data

Data linkage will be conducted by NHS Digital and all data will be anonymised before transfer to the study team at the University of Leicester.

**Who funds this research and who works on it?**

The [DEPICT study](https://www.journalslibrary.nihr.ac.uk/programmes/hsdr/1513645/#/) is funded by the National Institute for Health Research (NIHR) Health Services and Delivery Research programme (project reference: 15/136/45). Professor Elizabeth Draper, co-principal investigator for PICANet) is leading the quantitative study at the University of Leicester. The Chief Investigator for DEPICT is Dr Padmanabhan Ramnarayan and the study statistician is Dr Sarah Seaton.