

UK PICU Staffing Study

**The impact of changing workforce patterns in UK paediatric intensive care services
on staff practice and patient outcomes
NEWSLETTER 1 (August 2005)**

A project funded by the NHS R&D Service Delivery and Organisation programme, allied to PICANet. The Paediatric Intensive Care Audit Network (PICANet) is a national audit (coordinated by the Universities of Leeds, Leicester and Sheffield) which collects data on all children admitted to paediatric intensive care units (PICUs) in England, Wales and Scotland:

Background

Current NHS policy recognises that staff who deliver care are central to quality. It aims to improve patient care by tackling recruitment, retention and training for doctors and nurses, and designing new ways of working. To date however there is little good evidence about how best to develop new staffing patterns, the impact of nurse staffing changes on direct patient care in hospital, or if more nurses in extended roles in care teams result in similar or improved patient outcomes and satisfaction.

What is the main question?

This study aims to determine the impact of changing workforce patterns and skillmix on staff practice and patient outcomes in Paediatric Intensive Care Units in the UK.

Key objectives are to:

1. Identify new workforce models arising from role re-design for nurses
2. In a stratified random sample of units, (by higher vs lower new extended nursing roles) compare:
 - a) unit characteristics and human resources management strategy
 - b) the impact of new or changing workforce models on staff including:
 - skillmix and task substitution
 - staff well-being
 - staffing costs
3. Compare
 - total staff and staff groups' direct care time between units with higher and lower levels of nurses in extended roles

- the impact of total direct care time and different staff groups' direct care time on process and outcomes:
 - a) unplanned re-admission, critical incident reports, and length of stay, & healthcare-associated infections
 - b) children and parents' perceived satisfaction with care

Outcome measures are:

- risk-adjusted outcomes of length of stay, unplanned re-admission, critical incidents, and healthcare-associated infections
 - children and parents' experience of care
- And staff wellbeing and staffing costs.

Where and when is the study taking place?

This is a new study starting in the autumn of this year. The first phase aims to get a full picture of contemporary staffing and roles in PICUs.

The second phase - starting in mid-2006 - will assess staff activity and relate that to routinely collected PICANet clinical data outcomes. This is the planned prospective part of the study. Twelve units will be specifically invited to participate in this second phase, and we have some funding to help support the units taking part.

What are we doing now?

This is an important UK-wide study that will explore how best to manage human resources, support staff development in new ways of working, and compare staff wellbeing and costs. We are currently letting people know about the study and seeking support and endorsement from PICU staff and patient groups.