

## *UK PICU Staffing Study*

The impact of changing workforce patterns in UK paediatric intensive care services  
on staff practice and patient outcomes

NEWSLETTER 3 (June 2006)

*Funded by the NHS R&D Service Delivery and Organisation programme. The staffing study is 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:*

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# 100% PICANet Response Rate to the Census, Thank you .....NEXT STEPS

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**All Paediatric Intensive Care Units in PICANet replied to the census. We thank everybody who contributed to give us a full picture of current staffing patterns and nursing skills in PIC.**

There are clear differences between units in the roles and skillmix of nurses and medical staffing in some PICUs. We collected information about extended nursing roles by looking at 24 specific clinical tasks undertaken by nurses in PICUs.

Whereas, nurses in all units were undertaking some tasks (such as processing blood samples or altering oxygen requirements within set limits) other tasks (eg haemodialysis) were hardly ever undertaken by nurses in PICUs. However, there were sets of extended tasks for respiratory support where there was clear variation between units. Using these data, we classified 7 units as having lower and 9 units with higher extended nursing roles.



From the two types of units we randomly selected 12 units and are currently writing to invite:

- **SIX units** with higher extended nursing roles
- **AND SIX units** with lower nursing extended role

..to take part in the next part of the study.

The aim of this study is to determine the impact of changing workforce patterns (or *who* cares for patients) on staff working and patient outcomes.

### **Outcome measures are:**

- risk-adjusted length of stay, unplanned re-admission; healthcare-associated infection;
- and children and parents' experience of care

### **Some frequently asked questions**

#### **How much data will be collected in the main study in 2007?**

- *from each child?*

PICANet will provide nearly all of the clinical data required. A new single-page form will collect information on probable ventilator associated pneumonia for each child age <1 year who was admitted and received respiratory support.

- *from each PICU?*

We are asking units to complete a twice-daily log of unit occupancy/casemix and staffing/skillmix provision to be returned to the study centre on a weekly basis. This simple log will not replace your own routine system, but act as a 'common

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currency' for all units in the study.

- *from each member of staff?*

We are asking staff to complete an anonymous postal questionnaire about wellbeing and work. This takes about 10 minutes to complete and is to be returned to the study centre.

- *from parents and children?*

36 parent interviews are planned by our study researcher, three in each of the 12 units. Following advice of PICU staff, parents of children approaching discharge will be invited to take part. Of the 36 interviews, we plan a subset of 10 with PICU client children aged >8 years to explore parent-child pair views.

### **And ...the main study in 2007**

#### **Who will collect the data?**

We have a small amount of funding to help support units in the 12-month phase in 2007. We are planning to train and support the PICANet link research nurse to complete data abstraction for a one-page form to identify incidence of probable ventilator associated pneumonia.

These staff will be invited to attend regional study days for training. We will facilitate their support by their senior medical and nursing colleagues and by the central study team, to ensure that the data are reliable and complete. The experience they gain may enhance their ability to contribute to their own units' research or audit in future

#### **Will other resources be offered?**

All forms are sent to the study centre by Freepost at no extra cost. Any photocopying costs will be met. Meals and travel expenses for local staff attending regional training days will also be reimbursed.

#### **What about other aspects of the unit?**

During the phase 2 pilot starting this year we will invite units to host site-visits for a researcher from the University of Leicester (Namita Srivastava). The purpose of the site visits is

- to interview nurse managers and clinical directors about staffing, staff development and recruitment.
- to shadow and observe nursing and care tasks to validate the simple twice daily staff/patient log for the main study.
- and check observation against end-of-shift activity diaries completed by nurses.

#### **Who will seek ethical approval?**

An application to COREC (Ref: 06/MRE04/50) has been submitted. Additionally, if your unit decides to participate in this study, we will submit the necessary documents to your Trust Research and Development departments to

obtain permission to undertake the study in your unit.

#### **What feedback will units be given?**

The main feedback will be summaries of the primary and secondary analyses of the study from the final report.

#### **How are you seeking consent?**

We will seek full informed consent for interviews with both staff and parents/children. We will seek informed consent when asking to shadow individual staff members. Postal questionnaires to all unit staff will be anonymous and consent implicit in response.

#### **Will the data be strictly confidential?**

Yes. All data will be held in absolute confidence. No patient, staff member or hospital will ever be identified.

This study will produce more reliable evidence about the impact of different workforce patterns on process and outcomes of care for patients and impact on staff practice. Copies of the study protocol are being made available to all PICANet Units. You may like to refer to the protocol for further details about the study.



If you have any further questions about the study, please don't hesitate to get in touch with us.

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