Interim Report to College of Radiographers January 2007

Project title: X-raying children in Scotland: Identifying differences in practices between departments in general and teaching hospitals and those in dedicated children's hospitals.

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Introduction

Children are major users of healthcare. Many children referred from Accident and Emergency Departments, hospital clinics or general practitioners will have imaging procedures. As there are only three paediatric hospitals in Scotland, a high proportion of children will be x-rayed in adult hospitals. Very little is known about the provision of imaging services for children in adult hospitals. In this project, to be carried out jointly between NHS Grampian and The Robert Gordon University, we aim to increase knowledge of the provision of imaging services for children in Scotland.

The main aims of the study are to

- compare and contrast the provision for children having x-ray examinations in adult and children's hospitals
- make recommendations for the imaging of children.

Method

A questionnaire survey of all hospitals in Scotland with x-ray facilities will be carried out. This will include all general, children's and private hospitals.

Work to date

Research Assistant: From 1November 2006 a radiographer (HA), with previous experience of carrying out research within the Health Services Research Group, (also a co-applicant on the project), was recruited as the research assistant. She also works part-time as a radiographer in the Community, as well as a paediatric radiographer at Royal Aberdeen Children's Hospital.

Ethics: Advice from the Local Research Ethics Office was sought as to whether an ethical application was required for this project. A full submission was recommended, this was prepared and submitted to MREC, as data collection was to take place in multiple sites throughout Scotland. When the documents were considered by the full Local Research Ethics Committee they advised 'that the project was not one which required to be ethically reviewed under the terms of the Governance Arrangements for Research Ethics Committees in the UK'.

Questionnaires: Questionnaires have been developed for both general adult and children's hospitals. This contains a number of core questions (22 questions), but amendments and additional questions have been included for generals hospitals (24 questions). For example the questionnaire for general hospitals contains questions with tick box answers but includes free space to expand answer (n=13 questions), tick box only (n=10), and one open question for general comments on imaging children.

The main topics included in the questionnaires are all related to the imaging of children in their hospital, with relation to the working environment, staff and training, and procedures and policies. The questionnaire was distributed throughout the research team for comments.

A pre-paid envelope has been included for ease of returning. Questionnaires were given unique identifiers to ensure confidentiality but enable non-respondents to be followed up. In addition, working in conjunction with the University's Communication department the questionnaires have been converted to electronic versions, with access available to facilitate submission.

Pilot: The questionnaire was piloted in 8 English hospitals including 2 children's hospitals. Questionnaires were returned from all 6 general hospitals, and one children's hospital. Minor amendments were made.

Participants. A database of hospitals within Scotland with imaging departments has been developed. This includes all 15 Scottish Health Board areas, with hospitals within each area identified from the Scottish Health on the Web (SHOW) website. Those with no radiological facilities, as determined by direct contact with hospital staff, were excluded, together with small units. A total of 103 questionnaires were distributed to radiography managers or superintendents of general and private hospitals, as well as children's hospitals.

Work in progress

Data collection (on-going): The first date for returning questionnaires was 29 January 2007. To date 31 have been returned completed, with none being returned electronically. This total is an acceptable number from a first mailing.

Data analysis (on-going): Work continues on the development of specific SPSS-PC databases to facilitate data analysis of quantitative data, from all questionnaires.

Future plans:

- The week beginning 6 February reminders will be sent out to nonrespondents with a two week return date.
- Complete the development of SPSS-PC data bases (Feb 07).
- Complete quantitative data input, and carry out data analysis (Feb 07/ March 07).
- Responses to open ended questions will be analysed following familiarisation by identification of recurring themes, and their coding and clustering (March 07).
- Quantitative and qualitative data will be merged to answer the main questions of the study (March 07).
- Production of final report to College of Radiographers and provide feedback to participating hospitals. Disseminate findings (April 07).
- An abstract will be submitted to the European Society of Paediatric Radiology Conference to be held in Edinburgh, June 2008