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The main aim of this study is to provide evidence of the nature and implementation of diagnostic radiographer extended scope or advanced practice roles throughout Scotland. In particular, it is anticipated that the development of a 'whole Scotland' perspective will assist in the identification and dismantling of pinch points and barriers to the development of diagnostic imaging services for the benefit of patients.

Methodology
As little is known of the numbers of diagnostic radiographers working at extended scope or advanced practice level in Scotland, an exploratory study was carried out in two distinct stages i) a quantitative a questionnaire study and ii) a qualitative telephone interview. Lead radiographers from every hospital in Scotland with an imaging department and the Strategic Radiology Manager from the 14 Health Boards were sent a job specific questionnaire and invited to take part in telephone interview stage of the study.

Amendments to original proposal
• As from the 28th February co applicant Jonathan McConnell no longer is employed within Robert Gordon University. In his new post of Consultant Radiographer with responsibilities for developing radiographer reporting in Greater Glasgow he will be continuing as an active member of the research team.

Work to date
• Although the use of a previously developed questionnaire as used by Price et al 2008 was secured. On close examination the majority of sections were suitable to be used but a number were not suitable for use in Scotland. Further questions were developed for inclusion in the job specific questionnaires for the Strategic Managers in the 14 Health Boards in Scotland and Lead Radiographers in over 100 Hospitals. In particular the questions were developed in such a way as to differentiate data collection related to extended and advanced practice in both urban and rural settings.

• The questionnaires are available in both paper and electronic form.

• Both questionnaires were piloted with the relevant work groups in England and minor amendments were made.

• Database was developed of all hospitals in Scotland with imaging facilities this included rural and urban hospital.

• Database of strategic managers from each of 14 Health Board areas were established. This proved to be problematic as a number of posts were under review and the people within them were being reallocated.

• Ethics: Contact was made with NHS REC enquiring if ethical approval was required prior to commencement of the study. The study was deemed by them to be Service evaluation and as such did not require their ethical approval. As this was a Scotland wide study however, we were advised that each Board would need to be informed of the impending study. After much searching as to how this could be achieved information relating to the study was distributed via the Scottish Liaison Coordinators Group to all clinical Governance Leads in all the Boards. The study was submitted and approved by the Robert Gordon University Ethical Committee.

• Research assistant was employed from April 2013

Data collection:
Lead radiographer:
Phase 1: Questionnaire survey
The data collection is now completed. Data has been entered into SPSS and data analysis is on going.

A response rate is currently 47% (52/112) after 2 reminders.

Phase 2: Semi structures telephone interview
The schedule for the semi-structured telephone has been developed from the text from the open ended questions in the questionnaire. A framework was developed to identify any recurring themes. Participants (n=10) have been contacted for the telephone interviews and appointments are currently being arranged. These will take place over the next few weeks at dates and times convenient to the participants.

Strategic managers
As responses from the lead radiographers did not cover all the Health Board areas the strategic managers questionnaire was adapted to include information related to i) numbers of staff ii) grades of staff and iii) duties carried out. This was in addition to the original questions which related to current and future service delivery of imaging in their respective Health Board areas.

Phase 1: Questionnaire study
The questionnaire has been distributed to the imaging strategic manager in each of the 14 Health Board Areas. A response of almost 36% (5/14) have been returned completed on the initial distribution. Reminders have been sent out.

SPSS database has been developed to carry out the analysis of the quantitative data.

Phase 2: Telephone interview
After the returns from the reminder process we should be in the position to contact the participants for the telephone interview. A framework will be developed in the same method as the lead radiographers for the schedule for the semi-structured telephone interviews.

Ongoing
- Data input (strategic manager questionnaire)
- Data analysis for both lead radiographers and strategic managers is ongoing
- Interviews (August to September 2013)

Future
- Qualitative analysis for both lead radiographers and strategic managers
- Final report will be submitted to the College of Radiographers and feedback provided to participating hospitals where this has been requested. At present the November deadline for completion is considered achievable, however at the time of writing, some delays have been experienced, primarily related to following up on the questionnaire response rates.
- Prepare a paper for publication in Radiography to present the results of the study.
- Abstracts will be prepared for both UKRC and the Scottish Council Study day to disseminate the findings.
- Distribute the finding to interested groups around Scotland at both National and local level.