Experiences of radiographers advancing into reporting CT Colonography

ABSTRACT
This project is being undertaken for an academic qualification (MSc) at the University of the West of England.

CT Colonography (CTC), an imaging procedure of the large bowel, is increasingly being performed in the United States of America instead of the Barium Enema (BAE). More recently, CTC has been increasingly implemented nationally within the United Kingdom (UK). Radiographers are widely involved in performing and reporting BAE investigations in the UK. If CTC supersedes BAE gastrointestinal (GI) radiographer skills will be lost unless an alternative role is identified

Radiographers including reporting GI radiographers, already trained to perform and interpret a range of GI tract examinations, could utilise their skills and train to interpret CTC.

There is no set training path in CTC for radiographers to follow. Currently, there are no known protocols for radiographers or core competencies for reporting in CTC. Lack of protocols emerged when I was asked, as part of a Trust service development, to train in CTC. Also discussions with Skills for Health found that this is not an isolated issue and that more radiographers are being asked to report on CTC without any specific guidance to follow.

This study is necessary to identify current national practice. By exploring and understanding the lived-experiences of CTC reporting radiographers I hope to identify and establish any consensus on activities which could be included into a national guidance framework.

Aims and objectives;
- To explore how radiographers are advancing into reporting CT colonography
- To explore the experiences these radiographers have had along their journey and how they perceive these experiences
- To hopefully establish a consensus on activities that may be included into a national guidance framework.

Methodology
Naturalism focuses on subjective experiences and the perception of peoples lived experiences (Gerrish 2006) using qualitative studies to explore the subject in depth within its context. Themes emerge from textual data to generate theories about, and gain a greater understanding of that phenomenon. A qualitative study has therefore been chosen as being appropriate for this study, as this will allow in-depth exploration of experiences that CTC reporting radiographers have had whilst training to report on CTC examinations. As this study seeks to explore and understand the lived-experiences, beliefs and perceptions of these radiographers, a phenomenological design is being used.

Phenomenological designs can use focus groups and interviews to gain the relevant data. Interviews have been chosen for this study opposed to focus groups. Recruits are probably going to be widespread geographically, meaning that focus groups are likely to be unrealistic in terms of getting everyone together at an agreed place and time. The interviews will be semi-structured to provide flexibility in design yet provide for complex interactions due to the requirements of observation as well as listening during the course of the interview. Due to the nature semi-structured interviews, I will be able to ask additional questions (including probing questions) to gain further insight or clarification, whilst following up on ideas and issues not previously considered.
Because I do not know who or where these potential participants are, I will first undertake a postal fact-finding survey of radiology managers within acute NHS Trusts. Once I have located and chosen the participants, I will (after gaining approval from their R&D departments) arrange and visit their places of work to interview them.

Participants will be contacted, by their preferred method as indicated by them on the “fact-finding survey”, to arrange a mutually convenient appointment for the interview. They will be asked to arrange a suitable venue in their workplace for the interview to take place, available for up to two hours, and where interruptions are unlikely for the duration of the interview. Participants will be contacted again prior to the interview to confirm the date, time and venue.

At the time of the interview, prior to its commencement, there will be a discussion about the research with a chance for the participant to ask questions. The participant will be asked to provide consent by signing a consent form before the interview starts. The interview will last up to one hour and with their consent, the interview will be audio taped. This recording will allow for the words to be transcribed accurately. Field notes will be taken which will describe and account for expressions/gesticulations and what was visualised by the researcher. On conclusion of the interview, participants will be thanked for their contributions. There will also be a chance for participants to air any further questions that may have arisen.

Following transcription of the audio-tape, a copy of the transcription and interview findings will be sent to participants for validation that it reflects what they said and meant at the interview. Following authentication by the participant, the tape will be destroyed. Participants may be contacted again for a follow up interview to clarify any points raised during the study. This may be by telephone. When the research findings are presented, direct quotes may be used which will be anonymised.

**Broad timetable**

A Gantt chart has been designed to help this process.

Three months have been allocated for recruitment of participants (to include the fact-finding survey with which potential participants will be identified and arrangements to be made for interviews). It is envisaged that the interviews will commence after the winter festivities, as it is unlikely that anyone will be available based on my own experience of workload and other commitments leading up to this period.

The first two interviews will be transcribed as soon as possible after the interview concludes to allow for additional questions of themes that were unexpected to be included in further interview schedules at an early stage.

It is hoped that all interviews will have been concluded by the eighth month of the project. Transcription of each interview will occur as soon as possible after the conclusion of the interview. Interpreting and analysis will be ongoing throughout the interview period and continuing into the 10th month.

Report writing will be an ongoing process with the final report being prepared in the 11th month.

**Evaluation strategy**

Qualitative research using phenomenological designs, incorporating interviews requires that themes emerge from the data, textual data in this case. These themes will be used to generate theories about, and gain a greater understanding of the experiences my participants will have had.

Data analysis will begin following the first and second interview transcriptions to look for emerging themes that had not been considered and which may be considered in the ensuing interviews. Descriptive data will be used to look for patterns and explanations of events encountered.
Stages of thematic analysis adopted in this study will include;

- Transcribing interviews and sorting field notes - to ensure accuracy in reflecting what was said and done (and therefore the authenticity and credibility of the data), this will be done as soon as possible after the interview.

- Organising and ordering the data - by logging such data types as dates, names, times, where and when on note cards to make them more easily retrievable. Computer software will be used to act as a back-up should the cards be lost.

- Immersing oneself in the data repeatedly (by repeatedly listening to recordings and reading collected material), becoming familiar with it.

- Coding and categorising data - helping locate data sets more readily during analysis. When categorising data must be kept in context and not misinterpreted by my own pre-conceptions. I will use Nvivo2, computer-assisted qualitative analysis software (CAQDAS), to make coding of textual data easier.

- Developing themes, recognising recurring patterns in the words and interpretations awarded to them

- Interpretation to give meaning to the words and actions of the participant

- Describing phenomena/ report writing to give the interpretation to others

**Dissemination strategy**
- It is hoped that a presentation could be given at a national conference
- It is also hoped that the results may be published
- Other

Research participants will be sent a copy of the executive summary.