

For office use only

Grant ID: 110



College of Radiographers Industrial Partnership Research Grants

1. Principal Investigator	Lisa Field
2. Project Title	METeOR STUDY – Mapping the Evolution of Technique in Orthopaedic Radiography
3. Amount of Grant	£9,544.98
4. Did you spend the money as indicated in your proposal (if not why)?	
Yes	
5. Did you reach your intended project outcomes (if not why)?	
Yes, the primary research question was to gain in-depth understanding of drivers for change in radiographic techniques across the UK.	
6. What are your significant findings?	
<p>This study has demonstrated a lack of standardisation of radiographic projections undertaken and techniques adopted across the UK. The results suggest that the evidence base is neither established nor embedded and appears not to be the prime consideration when changes to policies are made.</p>	
7. Have you submitted the work for publication (if so where)?	
<p>Yes, the initial electronic survey results were presented at UKRC 2017 in a poster presentation. Title: Evolving technique in orthopaedic radiography – understanding variation and drivers for change</p> <p>The responsibility for dissemination of the different outcomes of the study, by anatomical region, have been shared amongst the research team with oversight by the PI. This has ensured all members have had the opportunity for personal development.</p> <p>The first article has been submitted for publication in Radiography: A UK survey of acquisition protocols for pelvis radiographs: technique variation and implications for treatment decisions Authors: B Snaith, L Field, E Lewis, K Flintham Further future submissions are planned to other peer review journals</p> <p>In addition to the outcomes directly attributable to the METeOR study the results have supported the initiation of a number of projects which will aim to validate and/or</p>	

develop evidence for a number of radiographic projections that were explored as part of this study.

8. Have you presented the work at a national/international event (if so where)?

Yes UKRC 2017.

9. Please provide an executive summary of your work (two sides of A4 maximum)

N.B. If you already have a draft or final version of the proposed publication can you please attach.

The principal aim of the study was to gain in-depth understanding of drivers for change in radiographic techniques across the UK.

This exploratory purposive pragmatic national study included both quantitative and qualitative methods of data collection. A literature review was identified the contemporary evidence and was used to develop an electronic survey and subsequent telephone interview topic guide. The examinations included in this study were non trauma orthopaedic examinations of the knee, foot, pelvis and lumbar spine.

This first phase of the study using an initial electronic survey which was sent to all NHS hospitals (174 trusts) in the UK to establish the extent of variation within radiographic technique. The second phase of the study was semi-structured telephone interview which were developed using the initial findings from the questionnaire. A number of nominated staff of differing grades and positions were asked to participate in the telephone interviews in order to assess technique variation on an individual level. The interviews explored the drivers for practice variation and involved key informants within radiology, drawn from a purposive sample of respondents. Qualitative thematic analysis and coding established themes and common terms used by the study participants.

In conclusion this study has demonstrated that there is national variation in radiographic technique of all 4 anatomical areas which potentially could have an impact on diagnosis of pathology and patient outcomes. An additional finding is a lack of professional ownership for radiographic techniques and application of evidence-based practice with research being sparse and, in some cases, completely absent. This study would suggest that some of the drivers for change in radiographic clinical practice are extrinsic to the radiography profession.