

**Preliminary clinical evaluation (PCE): Perceptions and barriers to implementation**

DOONA, Daniel, WRIGHT, Chris and HARCUS, James

Available from Sheffield Hallam University Research Archive (SHURA) at:

<http://shura.shu.ac.uk/12862/>

---

This document is the author deposited version. You are advised to consult the publisher's version if you wish to cite from it.

**Published version**

DOONA, Daniel, WRIGHT, Chris and HARCUS, James (2016). Preliminary clinical evaluation (PCE): Perceptions and barriers to implementation. In: United Kingdom Radiological Congress (UKRC)2016, Liverpool, June 6-8 2016.

---

**Copyright and re-use policy**

See <http://shura.shu.ac.uk/information.html>

Daniel Doona BSc(Hons), Dr Chris Wright PhD, MSc, HDCR, CertEd & James Harcus BHSc(Hons), MSc, PgCert

Daniel Doona is a diagnostic radiographer at Sheffield Teaching Hospitals (daniel.doona@sth.nhs.uk)

James Harcus is a senior lecturer at Sheffield Hallam University, England (j.harcus@shu.ac.uk)

Dr Chris Wright is senior lecturer at Sheffield Hallam University, England

### INTRODUCTION

The College of Radiographers (CoR) 2013 policy and practice guidance perceives the ability to write Preliminary Clinical Evaluations (PCE) as a core competency for radiographers<sup>1</sup>. Since this declaration the widespread implementation has been ineffective.

A robust evidence base exists that demonstrates that radiographers can accurately report plain film radiographs and when radiographers are involved in PCEs overall error rates are reduced<sup>2</sup>. This raises the question as to why PCEs have not become more widely integrated into clinical practice<sup>3</sup>. The aim of this research was to investigate radiographer's current perception of the scheme with the goal to understand the barriers to its implementation.

### DISCUSSION

The literature review and subsequent research study highlights that there is currently mixed opinions towards the implementation of PCE in clinical practice. The introduction of PCE appears to provoke anxiety amongst the profession, with the majority of respondents not wanting PCE implemented in clinical practice and few seeing the positive impact PCE can have on service delivery.

The research suggests that one of the main reasons for this perception is due to under confidence in comment writing ability. Engagement in image interpretation based CPD appears to overcome this barrier. All respondents will be engaging in CPD in some respect as it is an essential requirement for the role. However this research does demonstrate that respondents who had not engaged specifically in image interpretation based CPD activities were significantly more likely to feel under confident in the participation of a PCE system. As image interpretation is fundamental to the profession it suggests that this type of CPD activity should be more actively encouraged, with employers ensuring radiographers are provided with and utilise their protected study time in order to build on the skills learned at university and to ensure that image interpretation skill regression does not occur.

The negative common themes from the qualitative responses covered areas such as guidance, training and support and logistical reasons such as time and staffing problems, were consistent with the finding of other studies<sup>4</sup>. This demonstrates that more effort is required to show radiographers the positive contribution PCE can make to service delivery. Likewise the publication of clear guidance would help alleviate concerns around professional accountability. If efforts can be made to remove these barriers radiographer endorsement of the scheme may become more prevalent.

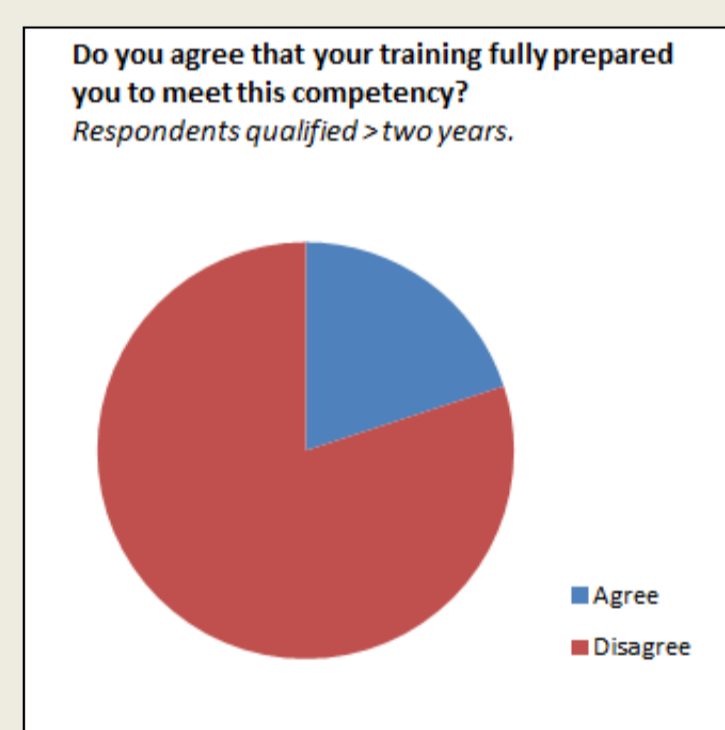
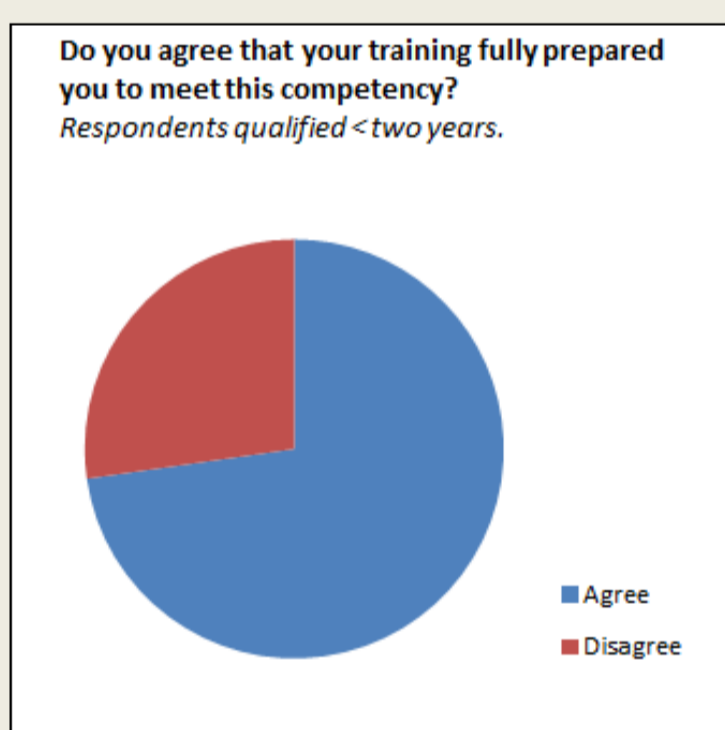
Encouraging results in relation to radiographer confidence in writing PCE was demonstrated in radiographers who had been qualified less than two years. Suggesting that recent educational responses to the CoR aspiration have been effective.

### METHODOLOGY

A mixed method online survey was designed utilising statements with a conventional five point Likert Scale of agreement and a combination of both open and closed questions. Appropriate consent was gained from participants and the university. The survey was distributed to a sample of qualified radiographers (n = 62) from two NHS trusts. Response rate was 90% (n = 56).

### RESULT

A significant proportion of respondents were aware of the CoR aspiration of making comment writing a core competency for radiographers, with 80.4% stating their awareness of this. Respondents were asked whether their training had prepared them for this competency. Only 30.4% either strongly agreed or agreed with this statement, a demographic analysis of responses found that respondents who had been qualified less than two years were in much higher agreement 72% versus only 20% of the remainder.



Respondents were asked if they had participated in image interpretation based CPD since qualifying, of which 80% stated they had. This appeared to have a positive impact on radiographer confidence in participating in a PCE system in clinical practice. 53.3% of respondents who had actively engaged in image interpretation based CPD rated themselves as either extremely confident or confident, compared to only 18.2% who had not engaged in this type of CPD.

A qualitative question was posed to understand the perception of PCE by radiographers. Respondents were asked how PCE would improve or not improve service delivery, responses included:

Positive	Negative
<ul style="list-style-type: none"> <li>• "Increased job satisfaction."</li> <li>• "Expand the role of the radiographer."</li> <li>• "Improved services for patients."</li> <li>• "Give the opportunity to use image interpretation skills in preparation for advanced practice such as reporting."</li> </ul>	<ul style="list-style-type: none"> <li>• "More training required."</li> <li>• "Insufficient post qualification training provided."</li> <li>• "A&amp;E is too busy already."</li> <li>• "Too busy imaging."</li> <li>• "Increased responsibility without a pay increase."</li> <li>• "Too worried about getting it wrong."</li> </ul>

Ultimately only 23% of respondents felt that PCE would improve service delivery, with common themes of accountability, lack of guidance, training issues and lack of confidence. When asked if PCE should be implemented in clinical practice, 70% answered "No".

### CONCLUSION

History has shown that extending the role of radiographers can improve service delivery, particularly in the field of image interpretation. Research shows that with an appropriate level of training radiographers can report plain radiographs to an exceptionally high standard<sup>5</sup>, outperforming other clinical professions<sup>6</sup>. However further work is required in order to realise the vision of introducing PCE as a core competency.

The research highlights that there is no clear consensus on the introduction on PCE in clinical practice. A significant proportion of radiographers do not feel confident in participating in the scheme, however the research demonstrates that this improves when engaging in image interpretation based CPD activities. Therefore participation in this should be more actively encouraged.

Further work is required to measure the image interpretation competence of new graduates but also more research is required to demonstrate the efficacy and positive contribution PCE can make in clinical practice. If robust research was produced highlighting clear benefits of PCE in a clinical setting it is likely that professional groups would be much more supportive of its implementation.

### REFERENCES

1. COLLEGE OF RADIOGRAPHERS. Medical image interpretation & clinical reporting by non-radiologists: the role of the radiographer. London: College of Radiographers; 2006.
2. BEARDMORE, Charlotte (2013). Preliminary clinical evaluation and clinical reporting by radiographers: Policy and practice guidance. [online]. Last accessed 27th May 2016 at: <http://www.sor.org/>
3. SNAITH B, HARDY M and LEWIS E F. (2014). Reducing image interpretation errors—Do communication strategies undermine this? *Radiography*, 20 (3), 230—234.
4. NEEP, Michael et al. (2014). Radiographer commenting on trauma radiographs: A survey of the benefits, barriers and enablers to participation in an Australian healthcare setting. *Journal of Medical Imaging and Radiation Oncology*, 58 (4), 431—438.
5. BREALEY S D et al. (2005). Accuracy of radiographer plan reporting in clinical practice: A meta-analysis. *Clinical Radiology*, 60 (2), 232—241.
6. BREALEY S D et al (2005). Radiographers and radiologist reporting plain radiograph requests from accident and emergency and general practice. *Clinical Radiology* 60 (6), 710.