

reflected in personal objective settings aligned with departmental and individual visions. The management team will lead by example sharing their own objectives such as utilise workforce planning tools to support.

Disseminate: Ongoing work will be regularly disseminated with the staff group and wider team. This will further embed the culture change by raising awareness and reinforcing the overall strategic vision. Networking is an important aspect of successful dissemination. The management team will engage with Radiotherapy and AHP research streams.

Translate: Engagement of all staff will strengthen confidence level with research skills. Placing value on all projects regardless of size will allow a build up of skills sets. Sharing resultant changes in practice relating to patient care directly or indirectly demonstrates the impact of embedding a research culture strengthening the strategic vision.

1. Comer, C., Collings, R., McCracken, A., Payne, C., and Moore, A. (2022) *Allied health professionals perceptions of research in the United Kingdom national health service: a survey of research capacity and culture*. BMC Health Serv Res **22**, 1094. <https://doi.org/10.1186/s12913-022-08465-6>.
2. Harris, J., Cooke, J., and Grafton, K. (2019) *Shaping Better Practice Through Research: A Practitioner Framework*. CAPHR (Council for Allied Health Professions Research) and NIHR (National Institute for Health Research).
3. Health Education England. (2022). *Allied Health Professions Research and Innovation Strategy for England*. Available at: <https://www.hee.nhs.uk/our-work/allied-healthprofessions/enable-workforce/allied-health-professions-research-innovationstrategy-england>.

P125 To provide an overview into becoming a therapeutic radiographer in the speciality field of Gamma Knife Stereotactic Radiosurgery by delivering treatment with high intensity radiation sources to treat a variety of lesions within the brain. To aim is to provide an education poster to promote the career in this field

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The shortages of therapeutic radiographers have been noted as mentioned by the Society of Radiographers in their publish work on "Shortage of therapeutic radiographers will have 'critical effect' if decisive action is not taken to" mentioning the negative impact that shortage of qualified therapeutic radiographers could have in the delivery of treatment for cancer patients, how this issue has been going for years and how universities are finding it very difficult to recruit people in this profession or difficult to retain them(1). For the Stereotactic Radiosurgery Department this not only represent the impact in cancer patients but also in so many other areas that are supported by this treatment technology presenting a non-invasive alternative treatment for vascular lesions e.g. AVMs (Artero Venus Malformation), Functional lesions e.g. Trigeminal neuralgia, non-malignant tumours among others. The aim of this educational poster is to showcase what is Gamma Knife treatment and how therapeutic radiographers support it. For an easy comprehension it has been broken into the following sections: · How Gamma Knife and Stereotactic Radiosurgery works · Which conditions do we treat · An outlook into the Patient's Journey · How does the Multidisciplinary team looks · A day in the life of a therapeutic radiographer in Stereotactic Radiosurgery · Career progression and social media QR codes for people to follow us. It is aim for this poster to give us a platform by which we can create awareness of this career and to promote more therapeutic radiographers in this field.

- 1) Deeson, D. (2018). Shortage of therapeutic radiographers will have 'critical effect' if decisive action is not taken to. Title. Society of Radiography. <https://www.sor.org/news/import/shortage-of-therapeutic-radiographers->



RESEARCH / SHARING BEST PRACTICE POSTER PRESENTATIONS

P126 Using aria carepaths to enhance the clinical trial quality assurance process both pre-trial and on-trial

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Background: Trial Quality Assurance (QA) exists in two forms, Pre-trial and On-trial. Our existing ARIA carepaths/tasks and current process was not sufficient to cover the variety of trial QA requirements. We wanted to create and implement carepaths to ensure the QA process was functionally efficient for all staff groups involved in the patient journey.

Method: We proposed the adaptation of existing tasks and creation of new tasks along with their associated questionnaires and checklists to meet the requirements of our most complex trials, with the intention that unnecessary tasks would be removed if not needed. Two new carepaths, Pre-Trial QA and On-Trial QA were created.

Results: Previously a carepath for Pre-Trial QA had never existed. Creating a carepath has provided a familiar process which mirrors an actual patient and creates a task list more integrated into workload. The On-Trial QA carepath is now adapted to suit each individual patient and their specific journey. Previously we relied upon memory, personal motivation and email reminders to fulfil these requirements, now we have an integrated electronic carepath within ARIA that presents staff with QA related tasks and reduces email traffic.

Conclusion: The creation and implementation of the new carepaths has formed a structured and familiar process for the tracking and completion of pre-trial and on-trial QA. It has created a resource of information, reduced email communication and produced a more representative reflection of the clinical trial workload.

P127 Conducting qualitative research interviews online: Guidance on good practice

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Background: The utilisation of qualitative research in diagnostic imaging has previously been identified as an area for growth (1). The research has the potential to offer insights into imaging practice that traditional quantitative methods may not provide. Whilst different methods of data collection exist, the interview is regarded as an established method and this presentation will provide an account of the use of semi-structured interviews but were conducted online as opposed to the traditional "face to face" approach.

Purpose: The COVID pandemic had implications for the conduct of research in terms of avoiding the close proximity of participants unless essential (3). This, coupled with benefits of time management and a desire to ensure research is environmentally sustainable makes the conduct of research interviews using online platforms a more appealing proposition. The important ability to observe during the interview is, due to technological advances, now more possible. The presentation will provide a reflective account of conducting research interviews online and provide guidance on good practice for those contemplating data collection using a similar approach (3).

Summary of content: The presentation will consider different interfaces available for use, the need for audio and video recordings, transcription, benefits and limitations of the online approach plus good practice in ensuring rigour in the research (4,5). Significantly, the importance of reflexivity and taking the online nature of the interview into account when engaging in reflexivity as a researcher will be discussed (2).

1. Bolderston A (2014) Five Percent Is Not Enough! Why We Need More Qualitative Research in the Medical Radiation Sciences. *Journal of Medical Imaging and Radiation Sciences* 45 (3) 201-3 2. Braun V and Clarke V (2022) *Thematic Analysis: A practical guide*. London, Sage 3. Naylor S, Booth S, Harvey-Lloyd J and Strudwick R (2022) Reflecting on the Use of Virtual Focus Groups for Exploring the Experiences of Diagnostic Radiographers During the COVID-19 Pandemic. In *Doing Research Online*; London, Sage. 4. Noble H and Smith J (2015) Issues of validity and reliability in qualitative research. *Evidence Based Nursing* 18(2) 34-5 5. Murphy FJ and Yelder J (2010) Establishing rigour in qualitative radiography research. *Radiography* 16 (1) 62-7

P128 Breaking down barriers: Understanding positive deviance in the context of undergraduate radiography research culture

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Background: Positive deviance describes the behaviour of successful people in clinical situations (Baxter et al. 2016; Lawton et al. 2014). Diagnostic Radiography students in two higher education settings were asked what skills or attributes they felt were important in becoming a successful researcher in radiography.

Method: This qualitative study used a creative interviewing method to explore six students' perceptions of success in relation to research. They were asked about their understanding of the importance of research for radiography and to describe and draw what they felt were the ideal skills and attributes held by successful research radiographers and students, meaning those who they thought were overcoming barriers placed in their way, and how they felt they matched these ideals themselves.

Results: Data were analysed and presented using Co-Constructed Depiction method (McKnight 2022). Students mentioned skills such as organisation and keeping informed, and attributes such as a willingness to learn, being inquisitive, confident, and having a collaborative approach to research. Overall, they identified positive deviants in radiography research as being critical practitioners who are keen to implement knowledge into care.

Conclusion: What students believed would enable high achievement in their studies and as practitioners is informed by their beliefs in what an 'ideal research radiographer' might look like. By asking about how barriers are surmounted, rather than the nature of those barriers, it seems that some barriers are internal. With this knowledge, educators can encourage self belief and help students build their own skills and attributes to model positive deviants themselves.

1. Baxter, R., Taylor, N., Kellar, I. and Lawton, R. (2016). "What Methods Are Used to Apply Positive Deviance within Healthcare Organisations? A Systematic Review." *BMJ quality & safety* 25, no. 3: 190-201.

2. Lawton, R., Taylor, N., Clay-Williams, R. and Braithwaite, J. (2014). "Positive Deviance: A Different Approach to Achieving Patient Safety." *BMJ quality & safety* 23, no. 11: 880-883.

3. McKnight, K. L. (2022) Research pedagogy in a UK radiography education setting. *Radiography (Lond)*, 28(1), pp. 80-87.

P129 Supporting students who struggle to learn radiographic science through action research

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Background: Struggling to learn radiographic science is cited as a reason for attrition and poor performance on undergraduate radiography programmes (McAnulla et al, 2020), reflected in student performance in our institution in the 2020/21 academic session. Learner variability in aspects including prior education, academic motivation, physical and mental health, and neurotype contribute to variation in outcomes (Richardson et al, 2012, Pino and Mortari, 2018). Confident that engaged radiography undergraduates can master radiographic science, and challenged by the failure rate, the author set out to investigate.

Purpose: The presentation outlines the findings of the reconnaissance phase of Action Research addressing the question "How can I support students who struggle to learn radiographic science?" and reports planned actions arising from a qualitative investigation into student perceptions of learning. The findings are specific to the local context but might find resonance for other educators.

Summary of content: Reflexive thematic analysis of survey responses collected by interview and online questionnaire generated four main themes. (1) *There is a context* in which we design learning, (2) *There are things we can do to make learning more effective*, (3) *Developing metacognition and self-regulation is important*. (4) *Students can make decisions about how they learn*.

Consideration of this interpretation of the data led to planned actions (a) addressing learner variability and diversity by the application of Universal Design for Learning principles, (b) reflecting on feedback practices and (c) embedding the development of metacognition.

The researcher gained interpretivist skills and knowing reflexivity to take forward into evaluation of the action phase.

1. McAnulla, S. J., Ball, S. E. and Knapp, K. M. (2020) Understanding student radiographer attrition: Risk factors and strategies. *Radiography* 26(3), 198 - 204.

2. Office for Students (2018) Degree outcomes - overview, Differences in student outcomes. Available at: <https://www.officeforstudents.org.uk/data-and-analysis/differences-in-student-outcomes/degree-outcomes-overview/> (Accessed: 31 December 2021).

3. Pino, M. and Mortari, L. (2014) The inclusion of students with dyslexia in higher education: A systematic review using narrative synthesis. *Dyslexia* 20, 346 - 369

4. Richardson, M., Abraham, C. and Bond, R. (2012) Psychological correlates of university students' academic performance: A systematic review and meta-analysis. *Psychological Bulletin*, 138(2), 353 - 387

P131 Radiographer experience of establishing radiostereometric imaging for a research study involving novel ceramic hip resurfacing

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Background: Radiostereometric analysis (RSA) is a proven specialised radiological imaging method, assessing implant stability and predicting longer-term implant survival. RSA is particularly useful to evaluate new implant technologies before large numbers of patients receive the new technology, protecting patients from undue risk. RSA is a new imaging technique at this hospital site and this is where the first UK patient was imaged for the research study 'ReCerf'. This study aims to assess a subgroup of patients with RSA as part of a larger clinical investigation of the ReCerf hip resurfacing device (MatOrtho Ltd., UK).

Purpose: Radiographers worked in collaboration with an imaging training and analysis company (Downing Imaging Ltd.,UK) to devise a robust and repeatable imaging guide for RSA imaging. This required precise scientific testing involving several hours of cadaver and Sawbone (phantom) imaging to establish repeatability and assess guide limits for x-ray exposure for sufficient image quality. The first research patient was successfully imaged in December 2022. This RSA study design, set up alongside routine practice, allows a wider range of hospitals to safely engage with new technologies for the benefit of patients. This reduces barriers to innovation and collects clinical data to demonstrate the safety of a device during early years of use.

Summary of content The aim of this presentation is to provide an educational written and pictorial/photographic review on how the radiographic team have set up RSA imaging, utilising standard x-ray room and mobile imaging equipment at this hospital site.

1. Pijls, B.G., Nieuwenhuijse, M.J., Fiocco, M., Plevier, J.W., Middeldorp, S., Nelissen, R.G. and Valstar, E.R., 2012. Early proximal migration of cups is associated with late revision in THA: a systematic review and meta-analysis of 26 RSA studies and 49 survival studies. *Acta orthopaedica*, 83(6), pp.583-591. 2. Valstar, E.R., Gill, R., Ryd, L., Flivik, G., Börlin, N. and Kärrholm, J., 2005. Guidelines for standardization of radiostereometry (RSA) of implants. *Acta orthopaedica*, 76(4), pp.563-572. 3. ISO 16087:2013 Implants for surgery — Roentgen stereophotogrammetric analysis for the assessment of migration of orthopaedic implant



EDUCATION AND WORKFORCE POSTER PRESENTATIONS

P132 Advanced practice reporting radiographers and radiology trainees -- together everyone achieves more?

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Advanced practice reporting radiographers are a key part of reporting services and have long established input for radiographic staff for education on first line interpretation and improvement of imaging quality. Less well published however are the wider training benefits of reporting radiographers into the future reporting workforce, regarding radiologist trainees. This poster/presentation explores the impact reporting radiographers can make regarding trainee radiologist reporting training. In collaboration with consultant radiologist education leads a pilot to explore outcomes within a single health board area based in a pilot of reporting radiographers verifying and providing reporting feedback on reporting for first year radiology trainees. Learning outcomes to be discussed for the UKIO congress based on survey feedback from reporting radiographers, trainee radiologists and educational consultant radiologists. Summary of governance in place to support implement change. How did participants feel the pilot has affected training and were there any wider culture changes experienced. Wider benefits and how we measure these will also be discussed as well as looking critically at what input to training in the context of current staffing levels means to not only capacity but also training of radiographic staff. Future consideration of how we manage capacity and education/training input to ensure sustainable solutions. Feedback to build education to support the teams to develop for the future, are there any consideration we learned from reflection of our own team through educating medical rather than radiographic staff. Wider benefits and key areas of improvement which became apparent during the pilot.