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P104 Creating a culture: Benchmarking research activity, capability and ambition of Allied Health Professionals

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Gloucestershire Hospitals NHS Foundation Trust

Background: Driving research has been identified by our Hospital Trust as a strategic priority. The aim of this project was to benchmark the current level of research awareness, capability and activity of Allied Health Professionals (AHPs) across the Trust.

Method: A cross-sectional self-administered questionnaire was developed based on the CAHPR framework (1) and distributed to AHPs across the trust. Results from Diagnostic and Therapeutic Radiographers were compared to results from all AHPs.

Results: 265 AHPs responded (50.3% response rate) including 35 Diagnostic Radiographers and 33 Therapeutic Radiographers. Most AHPs (>70%) do not have job plans that facilitate research activity. Fewer than 30% have personal objectives that relate to research and research career development was discussed in less than half of recent appraisals (all AHPS 33%, Therapy Radiographers 43%, Diagnostic Radiographers 10%). Over the last 12 months, 131(49.4%) of responding staff had engaged with some form of research activity and 71.1% of responders regarded themselves as being research aware and able to look for relevant research. The majority lacked confidence with critical appraisal skills. Research activity is not equally spread across professional groups. 60% of Diagnostic Radiographers could not see themselves becoming involved in research in the next 5 years compared to 12% of Therapy Radiographers and 23% of all AHPs.

Conclusion: The SCoR and HCPC require AHPs to engage with research and whilst pockets of research activity and capability exist across AHPs in the Trust, there is not an embedded research culture across the organisation. Work is being done to develop this.

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RADIOTHERAPY AND CLINICAL ONCOLOGY POSTER PRESENTATIONS

P105 Enhancing the safety of paperless radiotherapy

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Background: Patient set-up instructions for radiotherapy treatment are increasingly moving from paper to computer systems with displays inside the treatment room. A different patient could be selected on these systems than on the linear accelerator. If so, a patient could be set up for incorrectly for treatment. Two CQC IRMER reports (2018/19 and 2020/21) have highlighted this danger, which we addressed.

Method: A computer program was written to display a coloured box on the monitors of computers displaying set-up information (Aria) and breathing management information (Varian RPM). The box is green when the patient selected

matches the linac and red if not. The Aria database is used to identify which patient is selected on the linac, and the titles of windows on the secondary computer system are read to check the patient matches. Feedback was collected from radiographers.

Results: The system was found to be effective.

For Varian RPM, a combination of the patient's name plus the date of the planning CT scan had to be used instead of name plus patient ID.

A database problem meant that it was not possible to identify the patient being treated if they had been originally booked on a different linac. A successful work around extended the software by reading the HIPAA log file on the Aria server.

For the new set-up instructions, font size needed increasing and medical-grade mice with excessive lag needed replacement.

Conclusion: Safe and effective display of paperless (electronic) patient set-up information for radiotherapy is achievable.

P106 "Getting started with radiotherapy" - a collaborative approach between the radiotherapy department and the Maggie's Centre at the Royal Free Hospital to deliver essential information and support to new radiotherapy patients

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Royal Free London Foundation Trust

Prior to COVID19, patient education sessions had been held in the Radiotherapy department. In order to conform to COVID19 restrictions, these sessions were suspended, and information was instead delivered via individual telephone calls. Collaboration with the new Maggie's Centre offered a chance to re-invigorate these sessions in an online setting for prostate patients, enhancing the way in which we delivered information and supported patients and their families. As restrictions eased these sessions were introduced for breast patients in a face-to-face format. The success of these sessions prompted the department to extend this format to the prostate radiotherapy sessions.

Since the information sessions have been set up, 74 prostate (13 months) and 29 breast (3 months) patients have attended. Of the feedback received, 100% of patients rated their overall experience as "Good" or "Very Good", 92% rated their welcome as "Very Good" and 100% said they felt questions were answered in a way they could understand. Comments included "The staff are welcoming, kind and knowledgeable;" "The care and dedication that you give is a big help to any patients;" and "Nothing could have made it better." The roll out of the "Getting Started with Radiotherapy" sessions has led to a significant improvement in the quality of information and holistic support given to patients, as well as making the radiotherapy department workflow more efficient.

Going forwards, we aim to integrate radiotherapy staff into other sessions existing in the Maggie's Centre and investigate offering information sessions to additional patient cohorts.

P107 Building a Radiographer-led RECIST measurement service

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The Royal Marsden NHS Foundation Trust

Background: The assessment of the number and size of tumours as per RECIST 1.1 criteria (and similar) is integral to the evaluation of cancer therapies, contributing significantly to end points in clinical trials (1). In response to the national and local shortage of Radiologists (2), a Radiographer-led RECIST measurement service has been developed.

Purpose: Currently over 70 RECIST type assessments are performed by Radiographers on our site each month. The service is supported by a weekly meeting, co-chaired by Radiographers, which also brings together radiologists and the clinical trials team (oncologists, nurses, and trial coordinators). Whilst the primary motivation was to fulfil an area of unmet need, the role has been well received by all stakeholders with a number of positive effects. Inter-disciplinary communication, documentation and radiographer morale has improved. Ambitions to expand the service include Radiographer target lesion selection and training in the use of other response criteria.

Summary: This poster will provide a brief overview of a traditional RECIST measurement service and will describe how this workflow has been adapted to enable a radiographer led service. It will provide a summary of radiographer training and ongoing governance in addition to ambitions to future plans.

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P108 The introduction and implementation of a formal process and electronic workflow template for missed radiotherapy treatments

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Background: When delivering radiotherapy, overall treatment time (OTT) is a vital factor to take into consideration as prolongation may have a detrimental effect on treatment outcomes. Research indicates that accelerated repopulation has a significant role in local failure, especially in rapidly proliferating tumours, whereas research shows that a gap in treatment may have no consequence dependent on tumour type.

Method: An electronic workflow template was created for use within the institutional record and verify system to ensure formal processes have been adhered to. The workflow template was added to any patient in the authors department that missed a fraction of radiotherapy for any reason other than a machine breakdown. The workflow template prevents further fractions being delivered without the appropriate tasks being performed, encouraging communication of information and the formal process is followed before patients return to treatment.

Results: In the first month of use there was an uptake of 63.3% correct uses of the workflow template out of 30 patients, with 72.2% of those returning to finish their course of treatment. The workflow template was used most for patients who had a gap in treatment of more than 1 fraction.

Conclusions: The addition of the workflow template and formal process is feasible as part of normal radiotherapy working practices. Further follow-up required at 3- and 6-months post introduction, the process allows for further study into the effect of unplanned gaps and the impact on overall survival.

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P109 Adequacy of sexual care information given to prostate cancer patients receiving radical external beam radiotherapy

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University of Liverpool

Background: Despite the acknowledged value of providing prostate radiotherapy patients with sexual dysfunction information, there is little evidence related to patient perceptions of this or the extent to which information is provided to them. This study aimed to critically evaluate the quality and format of sexual dysfunction information given to patients before, during, and after radical EBRT to treat prostate cancer.

Method: Members of UK prostate cancer support groups were asked to complete an anonymous online survey tool seeking opinions of the sexual dysfunction information they were given before, during, and after external beam radiotherapy.

Results: There were 56 complete responses to the survey with over 42% of respondents reporting that they had not received any sexual dysfunction information. Of those who did, 78.1 % (25/32) received information before the start of external beam radiotherapy treatment. Physicians were the most involved in the provision of sexual dysfunction

information, with nurses and therapeutic radiographers being underutilised. Responses were mostly negative, or neutral regarding the quality of sexual dysfunction information and the information received about impact on relationships, psychological and emotional health. Many participants wanted more information and support.

Conclusion: This study demonstrates that prostate cancer patients who have undergone radical external beam radiotherapy have not received adequate information relating to potential sexual function side effects and the psychological and emotional effects of sexual dysfunction. This information should be included in verbal and written information provided at all stages of the radiotherapy pathway.

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P110 Audit on the radiology review of cancer coded patients resulting in cancer diagnosis

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Background: Radiology cancer flagging system has been introduced to our trust aiming at creating a critical alert of new cancer diagnosis and referring the patients efficiently to the corresponding MDT teams.

Method: This is a retrospective analysis of all patients marked with radiology cancer flags from January 2019 to December 2019 in our trust, obtained from radiology information system (CRIS); following approval by the trust clinical effectiveness team. These were subdivided by the flagging codes used into 6 groups: Cancer chest, Upper GIT, Lower GIT, Urology, Haematology, Gynaecology. A thorough analysis of the clinical outcome of the patients with reference to their MDT discussion +/- pathological outcome has been performed.

Results: The clinical outcomes of the patients have been eventually divided into four categories; new cancer diagnosis, cancer follow up/ recurrence, benign and unknown/ drop out. We concluded that the flagging true positive rate was 60 % of the whole flagged cases, while we had 40% of false positively alerted cases.

Conclusion: Radiology cancer flagging accuracy has varying percentage from one flagging code to another. Modified coding system needs to be introduced with adding a flag for the cancer follow up/ recurrent cases. This would help saving the manpower and resources used on MDT sessions and improve the quality of patient care.

P111 Re-establishing radiotherapy research during a pandemic - a demonstration of research radiographers adaptability to meet evolving clinical priorities

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Gloucestershire Hospitals NHS Foundation Trust

Background: Evidence demonstrates that clinically research active hospitals have better patient outcomes (1). (Name of department) Radiotherapy department has a strong research focus, with a Research Lead Radiographer and Senior Radiographer embedded in the department. The lead post (0.6WTE) is funded by the Trust Research & Development, with the Senior post (0.6WTE) being funded for two years by the local cancer charity, FOCUS. The presentation aims to explore the impact of the SARS COVID-19 pandemic on these roles.

Purpose: At the outset of the pandemic, the research radiographers were redeployed to work clinically in the radiotherapy department. Radiotherapy attendances soon reduced (due to hypofractionation/deferring of treatment). The Research radiographers were then redeployed to assist with urgent national research studies and then COVID radiotherapy studies. By the summer of 2020 the research radiographers were able to safely re-open the majority of radiotherapy trials by working with the trials units and radiotherapy department to adapt our ways of working and offer more remote trial consultations and follow ups. Prioritising re-opening order based on potential patient benefit and safety. The profile of research nationally has increased as result of the pandemic and feedback from patients taking part in trials throughout it has been very positive.

Summary: Research radiographers have been highly adaptable throughout the pandemic, being deployed to clinical work, working on COVID research studies, safely re-opening radiotherapy trials and carrying out local research and development projects to benefit patients and continue to embed a culture of research within the department.

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P112 A survey exploring the views of radiographers and radiologists on non-medical consultancy in radiology

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University of Liverpool

Background: Consultant radiographers are expert radiographers performing roles traditionally designated to radiologists. Most research into consultant radiographers is limited to only the views of consultant radiographers. This study explored the views of diagnostic radiographers and radiologists in the UK on consultant radiographer practice in radiology.

Method: Following University ethical approval, an invitation e-mail with a link to a questionnaire and participant information sheet was disseminated via e-mail and Twitter to diagnostic radiographers and radiologists across the UK. Questions concerned opinions on consultant radiographer's impact on workload, patient care and report quality as well as opinions on consultant radiographer pay. The survey was open for 8 weeks in total, with a reminder in week 7.

Results: Across the 84 respondents (70 diagnostic radiographers and 14 radiologists), 57% of radiographers believed consultant radiographers and radiologist cross-sectional reports were equal in quality, compared to 7% of radiologists. Most radiographers believed consultant radiographers had sufficient training to provide a quality report, and should receive Band 8a pay. Some radiologists believed that medical training is needed to answer the clinical question; most believed consultant radiographers should be paid at Band 7.

Conclusion: Whilst both diagnostic radiographers and radiologists agree training more consultant radiologists will help meet reporting requirements, radiologists were of the opinion consultant radiographers do not provide the same quality in reporting as radiologists. A slight discrepancy was seen in the opinions relating to the remuneration consultant radiographers should receive. The small number of radiologist responses is a limitation to the study.



EDUCATION AND WORKFORCE POSTER PRESENTATIONS

P114 Cone Beam CT awareness and training needs for radiographers

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Cavendish Imaging Ltd; ²

Background: The Cone-Beam CT (CBCT) imaging has boomed over the last 20 years in the dental world and made tremendous progress in maxillofacial, ENT and orthopaedic applications. It focuses on small volumes and is a technique of choice to visualise detailed 3D bony anatomy quickly and effectively. Beyond its diagnostic capabilities, CBCT is also a key element to the "digital surgical workflow", together with 3D printing, because of its ease of access and low radiation dose. Yet, it is not generally taught in radiography degrees and recruitment of radiographers with the relevant skills is difficult.

Method: Analysing past radiography staff training records, a review of the gaps in knowledge before and after a) CBCT equipment-specific training, and b) application-specific training, was performed.

Results: The gap-analysis showed the lack of anatomical knowledge as the largest factor creating difficulties with CBCT for the radiographers. Dexterity in 3D image manipulation was crucial to self-appraise the scan quality. When the end-use (diagnostics vs computer-aided surgery) of the CBCT scan by the referrer was clearly understood, radiographers were better equipped to perform the correct scans.