P128 The value of pre-application clinical visits and online resources in informing career choices

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Background: Clinical visits are a mandatory part of the admission process for most radiography courses but not for operating department practice (ODP) where observation visits are challenging to secure. However the Covid-19 pandemic interrupted the delivery of visits for all prospective students and alternatives are needed. This study investigates stakeholder perceptions of the 'ideal' clinical visit, and the potential for documentary style videos/online simulations as an alternative.

Methods: A qualitative study design using thematic analysis explored participants' experiences of clinical visits and alternative resources. Six focus groups (were conducted, two with radiography managers and practice educators (n=5). Four focus groups included 25 first year students interviewed prior to their first clinical placement (fourteen therapeutic radiography, five diagnostic radiography and six ODP students).

Results: Four themes were constructed, namely: informing career choices, the clinical visit experience, the value of clinical visits and virtual alternatives. Clinical visits affirmed rather than inspired career choices. The best timing for a visit was before admission interviews and optimal duration was a full day. Interacting with current students was the most valued aspect. Simulated visits provided in-depth information about the professional role and allowed replay, but some participants found the videos uninspiring.

Conclusion: Clinical visits were deemed 'vital' to radiography student career choices, yet ODPs who could not access visits were comfortable with simulations. Simulated visits are a safe option amidst the pandemic and a sustainable, cost-effective method for the future. Simulations must capture the dynamic and patient-centred nature of practice to accurately inform career choices.

CLINICAL ONCOLOGY POSTER PRESENTATIONS

P129 Value of a Therapeutic Radiographer Clinical Fellow

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Introduction: Therapeutic radiographers are a small profession, with approximately 3000 posts in 2019(1). However, they are a key healthcare professional (HCP) in cancer services as approximately 50% of all patients will receive radiotherapy(2) and that figure is set to rise to 60% by 20253. The workforce will need to expand and develop to support the growth of demand for cancer services. It is predicted that a 45% increase in therapeutic radiographers is needed by 2029 (4). The challenges in recruitment and retention has been well documented (5, 6,7) and it has been recognised that to improve cancer services therapeutic radiographers should extend their scope of practice (9, 10) and new ways of working are needed(11). Therapeutic radiographers make up 20% of the non-surgical oncology workforce(9) and there has been some progress in workforce redesign with more roles undertaking duties traditionally carried out by medics such as independent prescribing. However, there is more work to be done as many HCP, don't fully understand the radiographer profile (12) and the diversity of roles they have the potential to undertake. Barriers remain, ranging staff shortages and lack of support to some cancer jobs being limited to nurses only.

Method: To raise the profile and address some of the challenges outlined HEE, supported by SCoR and Macmillan, funded 2 therapeutic radiographer clinical fellows.

Results: The fellows designed a range of initiatives: virtual careers events, 'I am a therapeutic radiographer ...' campaign, Girl-guides and schools engagement, and Intelligence gathering in current advanced.

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P131 Implementation of an electronic permit to work/clinical status system in a radiotherapy environment

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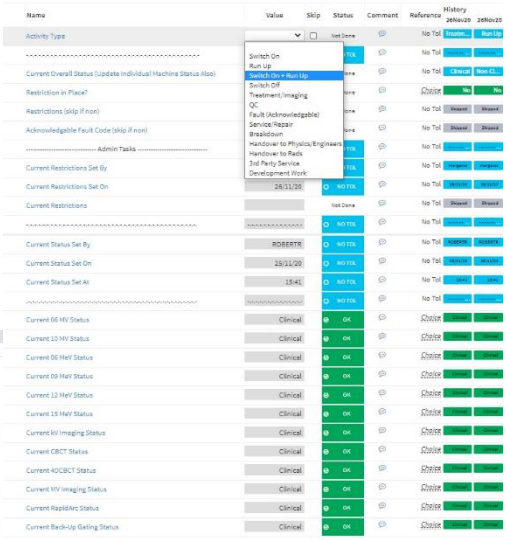
Introduction: An electronic Permit to Work (PtW) \ Clinical Status (CS) system was implemented using open-source software (QATrack+, 2018) alongside an in house developed web application GUI.
Method: QATrack+ functions by creating "Tests" (individual items e.g. 6MV Status). "Tests" are organised into "Test Lists" and assigned to each machine. Data is stored back to the QATrack PostgresSQL database. CS & PtW are set via "Test Lists" for any changes (Activity/Staff) with PtW importing the CS data. As these are machine specific a web-app was created to present the data in user friendly web interface. An SQL query was created using Python to create a table of the most recent data for "Tests" based on unique "Test ID". Data is extracted based on "Test List ID", allowing data to be grouped for each machine type (i.e. Linacs) then further grouped by "Unit Name" to create a row per machine. Not all machines have the same functionality (i.e. Electrons, FFF) the data extraction is modified such that if there is no entry for a machine it is set to N\A. The data is then passed to a HTML file which to create the GUI for the web-app which creates the structure of tables and applies various formatting such as colour co-ordinating the table items based on values to further improve the functionality of the GUII.
Conclusion: QATrack+ offers a solution for the implementation of electronic PtW/CS. However, the usability can be inefficient and benefits additional interfaces for data presentation.



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P132 Halcyon versus truebeam: a patients experience

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Background: The aim of our small study was to establish if the patients preferred the Halcyon or Truebeam Linac for their prostate Radiotherapy as measured by their patient experience.
Method: 30 patients were selected and two questionnaires designed to encompass information on the aesthetics of the Halcyon/Truebeam and a free area text box for comments. The questionnaire was given to the patients after their first fraction on each of the machines. The cohort was split to start on each machine and swap over half way through treatment which allowed for unbiased direct comparison. The last fraction questionnaire was given to the patients after their appointment and was designed to see if our patients had a preference to the machine they had their treatment on.
Results: The P value was not statistically significant in any of the questions and this is part due to our limited sample size. However, patients experience feedback comments supported the theory that their overall experience was better on the Halcyon. 60% of patients had a preference to what machine they had their treatment on with 89% of this group having a preference to the Halcyon machine.
Conclusion: The questionnaire comments highlighted what patients' value in their overall experience. These were effective staff interactions, care and communication and support in their anxiety with new situations rather than the specification of the machine. Their invaluable input supports the importance of patient involvement in service improvement.

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P133 F18-FDG PET CT uptake time audit

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Background: The Standard Uptake Value (SUV) can help to differentiate between benign and malignant tissue in PET CT. The accuracy of the SUV may be affected significantly by the tracer uptake time. The uptake time should ideally be 55 - 75 minutes, in keeping with the European Association of Nuclear Medicine (EANM) guidelines for Oncology.
Method: 200 consecutive patients' records were audited between 6 July and 21 July inclusive. The time of the administration of radiotracer and the scan time were recorded, along with which scanner (Siemens Biograph/ GE VCT), scanning protocol and number of bed acquisitions. Notes and scanned images entered onto Soliton were also audited for comments to see whether a reason had been given for an increased uptake time.
Results: The uptake time for both scanners were 95% and 92% respectively.
Conclusion: It was evident from the data that the acquisition delays were caused by subsequent patients requiring vertex to knees or vertex to toe protocols. There was no evidence to suggest that these patients were scanned late due to being injected too close together. Due to a lack of notes scanned in on the documentation, it was difficult to assess reasons for delays. Recommendations include dedicated vertex to knee/toe slots to ensure better compliance.

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P134 Rapid Response by a Specialist Cancer Trust to support the UPH Study SIREN

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Introduction: The COVID-19 pandemic provided the NHS with huge challenge across all healthcare sectors. The need for research has never been stronger. The SIREN study, follows healthcare workers for at least a year and studies their immune response to the virus causing COVID-19. CCC as one of the largest networked cancer centres has the infrastructure to provide a rapid response in answer to the call to support SIREN.
Method: The Centre has a hub and spoke model so has a framework for cross clinic working over different sites within the Trust under one organisational umbrella established for standard of care and trial delivery thus maximising recruitment potential with staff support in place. CCC already had a weekly COVID Research Response Meeting in place, led by the Clinical and Operational Directors of R&I. The R&I Team have an agile staff structure with a robust delivery team already in place to support complex cancer research studies supported by Research Practitioners, Data Managers and Phlebotomy and laboratory staff. CCC has configured the Edge system to provide a single integrated system linking governance, to study information that is easily reportable. This in tandem with new Research Officer Posts who provide autonomous support for non-interventional studies means that CCC could set-up and deliver at pace.
Outcome:
• 23 days to open the study
• 6 days from site opening to first participant recruited
• 46 days to reaching target recruitment of 152 (10% of total staff)
• 110 days to reach an extended recruitment target.

P135 Differentiating between Neutropenic and C. Diff Colitis in a patient with Mycosis Fungoides on Immunotherapy (Brentuximab)

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Case presentation: A 61 year old man with Mycosis Fungoides was admitted with decreased nutritional intake and mobility. He received two cycles of Brentuximab, with the last cycle one-week prior to admission. He was treated for skin sepsis and supported with intravenous hydration and enteral nutrition. Whilst he was an inpatient, he developed febrile neutropaenia, transaminitis, and watery diarrhoea. Initial stool culture was negative for C. diff toxin and serologies were negative for hepatitis viruses, CMV, EBV, and HIV. He continued to deteriorate with rising inflammatory markers. Several days later he had a positive C. diff toxin and was started on fidaxomicin. Initial CT-AP showed dilated large bowel but no evidence of colitis. Due to ongoing deterioration, he had a repeat CT-AP two-days later which showed pancolitis with toxic megacolon. He continued to deteriorate and died in intensive care.
Discussion: The learning points have been divided into two: 1. Clinical correlation: This gentleman was on antibiotics and a proton-pump inhibitor known to cause pseudomembranous colitis. Neutropenia and typical symptoms would further increase clinical suspicion. Early empirical antibiotics should be considered in high-risk patients despite initial atypical radiological features and negative stool culture. 2. Differentiating between neutropenic and pseudomembranous colitis on CT: C. Diff infections typically have the accordion sign, bowel wall thickening, free fluid (ascites) in up to 40% of cases, and rectal involvement in 90-95% of cases. Neutropenic enterocolitis on the other hand may demonstrate thickening of the caecum, intramural bowel gas, bowel wall thickening, and ileus.

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SERVICE DELIVERY AND INNVOATION POSTER PRESENTATIONS

P136 Percutaneous biopsy procedures audit project

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Background: Percutaneous image-guided biopsy is a common procedure in radiology departments today (1). In the past 2 decades, imaging techniques and biopsy equipment have progressed to enable safe and accurate diagnosis in a less-invasive way (2,3). The documentation of image-guided procedures is a very important practice. Adequate documentation of biopsy procedures, including the number of passes and samples obtained and the size of the needle used, can guide the team in case of inadequate sample for pathology diagnosis. Based on these data, the team can decide if they should repeat the same procedure or go for something else.
Audit-Cycle: Target: 80-90% of specimens which are adequate for histological/cytological diagnosis (4,5). Reports of biopsy procedures should include(target:100%) (6): The site/organ biopsied The biopsy technique The size of the needle The number of samples obtained
Method: Retrospective analysis of the cases underwent imaging guided biopsy last month.
Results: Initial results showed that only72%of the biopsy samples were adequate for pathology assessment (Target-not-met) The site of organ biopsied and the technique used were mentioned in100%of the procedures(Target-met) The size of needle and number of samples were mentioned in75%of the cases.(Target-not-met)
Conclusion: The results were discussed in the radiology department audit meeting. Obtaining multiple samples from different sites was encouraged. A template for biopsy procedures covering all the essential items that needs to be documented was introduced*. Re-audit results: The percentage of adequate samples for pathology assessment has increased from 72%to88%. Thanks to the introduced template, 100%of the reports included the essential data (biopsy-technique, site-biopsied, needle-size and samples-number). *

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