simulation of various scenarios relevant to each stage of training, providing a unique, dynamic approach to radiotherapy education. Approximately €350,000 has been used in the establishment of the school, headed by an RTT. The expertise of successful RTT schools is recognized, and international guidance has been sought.

The center will function as an RTT hub, providing CE in addition to entry to practice education. Inter-departmental research will be facilitated through the center and encourage RTTs to participate.

Conclusions: Funds were raised through a successful campaign. The VERT system is installed. Eclipse software will be used to teach the gamut facilitated through the center and encourage RTTs to participate.

The center will function as an RTT hub, providing CE in addition to the patient school. The expertise of successful RTT schools is providing a unique, dynamic approach to radiotherapy education.

Purpose/Objective: It is a very confusing and worrying situation for head/neck cancer patients and their friends and families, in the process of the patient having to start a long and stressful treatment course. Many of the patients are disadvantaged and in poor general condition prior to starting the treatment. The purpose of the interdisciplinary education is to provide patients, undergoing a curative treatment, wide-ranging information about the course as a whole (chemo/radiation therapy). Also the aim is to prepare the patients and their relatives for the side effects, the treatment may cause.

Materials and Methods: In the year 2010 we implemented the patient school. We have gathered all the information for patients and their relatives in an interdisciplinary meeting with the duration of about two hours. The information meeting takes place prior to the patients starting the nearly five weeks of treatment. The teaching is carried out by an oncologist, a nurse from the ambulatory facility, an RTT, and an occupational therapist. All curative head/neck cancer patients and their relatives are offered this educational meeting, and 99 percent choose to participate. The patient school is scheduled once every two weeks. It consists of oral presentations and PowerPoint presentations together with imaging pictures of the radiotherapy procedure, together with practical exercises provided by the occupational therapist. We provide ample opportunity for the participants to ask questions. Also, we provide them with written information. One year ago we conducted a questionnaire survey among approximately 110 patients and their relatives to evaluate the satisfaction with the patient school.

Results: The survey showed only good feedback: By gathering all of this information the patient must attend only once, in order to receive the information, which also makes it easier for their friends and families to participate. The relatives are more prepared for supporting the patients, since they have the same knowledge about the treatment course. The patients meet other patients in the same situation, and by that it becomes easier and more legitimate to talk to each other. Also they find it encouraging to see the close cooperation between the different professions, and they experience a correlation in their treatment course.

Conclusions: The questionnaire survey has shown great satisfaction with the patient school. Also, as a part of the RTT group, we experience that head/neck cancer patients and their relatives have more knowledge and understanding in relation to their treatment, than what we experienced earlier. On the day of the first radiotherapy treatment all patients are offered a pre-treatment consultation with an RTT. This conversation has now become more individual and based on each patient’s particular problems, rather than it being a general kind of information. The patient school can advantageously be applied to all cancer diagnoses.

OC-0558 Patient school for patients with head/neck cancer
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Purpose/Objective: It is a very confusing and worrying situation for head/neck cancer patients and their friends and families, in the process of the patient having to start a long and stressful treatment course. Many of the patients are disadvantaged and in poor general condition prior to starting the treatment. The purpose of the interdisciplinary education is to provide patients, undergoing a curative treatment, wide-ranging information about the course as a whole (chemo/radiation therapy). Also the aim is to prepare the patients and their relatives for the side effects, the treatment may cause.

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OC-0559 A local partnership as part of the national collaboration and implementation of VERT into Australian RTT curricula
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¹University of South Australia, Royal Adelaide Hospital, South Australia, Australia
²University of South Australia, Division of Health Sciences, South Australia, Australia

Purpose/Objective: A joint submission for funding made to the Australian Government by a group of Australian Universities was approved in 2011. As a result Virtual Environment Radiotherapy Training (VERT™) facilities were installed in each University where Radiotherapy entry level programs are offered. Five fully immersive 3D installations were funded as well as 6 academic positions established. These were to enable collaboration in developing resources using VERT™ in a part time capacity over 3 years. The collective group of academics formed a VERT™ Academic Community of Practice (VACoP). The Universities sought a variety of employment options including a secondment arrangement to be entered into with the successful applicants’ clinical site.

Materials and Methods: In 2012 a secondment agreement was entered into between the clinical site and the University. A new position was created within the Universities as a VERT™ Academic Resource Developer. The essential criteria for this position included current clinical expertise in treatment planning and delivery. Experience in training, mentoring and supervision were also key qualifications as well as knowledge of research methods. As the successful applicant would retain their clinical role part time it was necessary to establish support from the clinical provider for this initiative to be successful.

Results: Outcomes of this partnership include;
- Collaboration between Australian Universities for the development of course material for both lecture and tutorial delivery formats using VERT™
- Sharing of anonymous data set information and comparison of techniques from various clinical sites
- Ongoing training of students and academics
- Further collaboration for multi-disciplinary teaching
- Developing patient information videos and demonstrations
- Using VERT as a marketing and information tool
- Embarking on research into simulated learning environments
- Sharing of experiences and broadening exposure in the international arena
- Bringing VERT™ awareness into the clinical setting

Conclusions: This presentation will outline what has transpired at the conclusion of the first year of the secondment and the future direction for the upcoming year. It will highlight the benefits to institutions of entering into such employment arrangements. It will also elaborate on how the VERT™ Academic Community of Practice (VACoP) was developed as a model that has expedited resource development and research into innovative new teaching models. All parties continue to work together to share resources and discuss other avenues where simulated learning can enhance clinical initiatives.

OC-0560 Job satisfaction of the UK radiotherapy workforce: physics and radiography, a strategy to improve satisfaction
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²Sheffield Hallam University, Faculty of Health and Wellbeing, Sheffield, United Kingdom
³Christie Hospital, Radiotherapy, Manchester, United Kingdom
⁴Clatterbridge Cancer Centre, Clinical Governance, Bebington, United Kingdom

Purpose/Objective: Developing a strategy for retaining a skilled radiotherapy workforce, requires a strong understanding of the issues involved, including a greater understanding of the factors that influence satisfaction of radiotherapy professionals. There are a number of factors, under the influence of service leaders and organisations, which can enhance the job satisfaction of RTTs, Physicists, dosimetrists and technicians, and as a consequence the service provided to patients. This work sought to;
- gain understanding of the issues and factors influencing job satisfaction, retention and burnout.
- Identify factors to support the development of strategies to increase the level of job satisfaction and consequently retention and effectiveness of their radiotherapy workforce.

Materials and Methods: A quantitative survey tool was employed (with limited free text options to allow for greater depth and insight). The questionnaire comprised of 7 sections; demographics, job
Teamwork is essential for safe, efficient and effective delivery of radiation therapy. The purpose of the current work was to gain further understanding of how team dynamics in radiation therapy impact the quality, safety and efficiency of external beam radiotherapy treatments. The objective was to answer the following questions: 1) What characteristics do radiation therapists identify for effective teams? 2) What are the barriers to effective teamwork? and 3) What strategies can be employed to improve team dynamics.

Materials and Methods: Eighty radiation therapists from treatment delivery, CT simulation and dosimetry were invited to complete a team assessment tool (Lencioni, 2005) to evaluate the current state of teamwork in the department. Through an additional open-ended question, participants offered diverse perspectives regarding the optimization of team performance. Following the survey, 29 radiation therapists engaged in a facilitated discussion forum known as a World Café where topics such as trust, accountability, communication, leadership and teamwork were explored. Qualitative data analysis of the open ended survey question and the world café responses was achieved through coding and theming. Quantitative data analysis of the survey responses resulted in average scores per category suggesting low, medium and high team function.

Results: The lowest survey scores indicated ‘avoidance of accountability’ and ‘absence of trust’ were key areas the centre needed to address. Key themes emerged from the data analysis and are presented as the findings for the project: Team trust, effective communication and conflict resolution strategies are key elements for high-functioning teams; professional accountability was commonly defined, but inconsistently practiced; and the team structure and the rotational schedule impact team effectiveness. Participants confirmed that when team dynamics break down, communication suffers; conflict and tension build and patient care, efficiency and safety can be compromised.

Conclusions: Evaluation of the findings in conjunction with a literature review led to recommendations: Leadership should consider developing and aligning the teams to a common goal and shared vision; the radiation therapy department should build on best practices and develop a decision-making framework for radiation therapists; and the teams should receive ongoing professional development in conflict resolution, generational differences, leadership development, and communication practices.

OC-0561

Optimizing teamwork in radiation therapy: A Canadian experience
M. Udozicted1, M. Civitella1, K. Gunning-Mooney2
1Tom Baker Cancer Centre, Radiation Oncology Department, Calgary Alberta, Canada
2Royal Roads University, Faculty of Leadership Studies, Victoria BC, Canada

Purpose/Objective: Teamwork is essential for safe, efficient and effective delivery of radiation therapy. Before implementation, possible implications of these changes are discussed, often using the Failure Mode and Effect Analyses (FMEA) method. The results of these analyses, as well as the reasons why and how adaptations in RTQC processes are made are clearly documented for future reference. The management team is advised about the outcome of these FMEA analyses and after formal agreement by the management team, the new procedures are implemented.

Results: With the overview all existing RTQC all employees know exactly which checks are performed. There are no longer double RTQC or flaws and the awareness of the importance of checks is increased as employees now know that a particular check will be performed only once. In the past several RT treatment related parameters such as MUs, patient position and field sequence were double checked at several steps of the RT process. In the past it took about 20 minutes to get a new RT-plan approved, which is now reduced to 5 minutes. There are fewer mistakes due to the automatic transfer of data. The employees were used to type parameters manually, thereby introducing errors. It was also detected that data approval in our R&V system Mosaïq could lead to serious field parameter changes. An extra RTQC with in-house build software was successfully implemented to prevent these errors. The team is now working on an overarching checksum which will ensure that the correct treatment plan as approved by the radiation oncologist and clinical physicist is actually given to the patient.

Conclusions: A multidisciplinary RTQC team was formed. The team has implemented an efficient, effective and safe RTQC system which keeps evolving.

OC-0561

Save time and money & get happier colleagues with a radiotherapy quality checks team
M. Verhoeven1, M. Roozen1, J. Steenhuisenen1, C.W. Hurkmans2
1Catharina Ziekenhuis, Radiation Oncology, Eindhoven, The Netherlands
2Catharina Ziekenhuis, Radiation Oncology, Eindhoven, The Netherlands

Purpose/Objective: Since years a lot of radiotherapy quality checks (RTQC) are performed in our department. However, the overview of these RTQC was lacking. The QC process was not in control and it was felt that the effectiveness and efficiency of our RTQC process might be improved. We present how the department became and stayed in control again.

Materials and Methods: The RT management team established a multidisciplinary RTQC team in 2005 consisting of RTT’s with different areas of interest, an administrator, a radiation oncologists and a clinical physicist. The team meets at least quarterly. First, an overview of all existing RTQC was generated together with a full description of our workflow and dataflow. Next, the existing incident reporting system of our department was analysed and linked to this combined workflow and RTQC overview.

After this initial phase, flaws as well as replicates in RTQC were detected and repaired. The RTQC now continuously evolve as the team is involved in the implementation of all new irradiation techniques, supporting software and procedures in the department.

Results: 658 completed responses were returned, representing a response rate of ~18%.

A statistically significant difference was seen in distribution of mean job satisfaction scores and its aspects across professional groups and treatment centres.

The radiotherapy workforce demonstrate higher levels of emotional exhaustion, depersonalization, and low personal accomplishment as compared to health care workers outside of radiotherapy and oncology, and non-health care occupations. The highest survey scores indicated ‘avoidance of accountability’ and ‘absence of trust’ were key areas the centre needed to address. Key themes emerged from the data analysis and are presented as the findings for the project: Team trust, effective communication and conflict resolution strategies are key elements for high-functioning teams; professional accountability was commonly defined, but inconsistently practiced; and the team structure and the rotational schedule impact team effectiveness. Participants confirmed that when team dynamics break down, communication suffers; conflict and tension build and patient care, efficiency and safety can be compromised.

Conclusions: Evaluation of the findings in conjunction with a literature review led to recommendations: Leadership should consider developing and aligning the teams to a common goal and shared vision; the radiation therapy department should build on best practices and develop a decision-making framework for radiation therapists; and the teams should receive ongoing professional development in conflict resolution, generational differences, leadership development, and communication practices.

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