

## Abstracts

### Abstracts from the 1st International conference on Advanced Practice in Radiotherapy & Oncology—Sheffield Hallam University, UK

**15th September 2007**

#### ADVANCING PRACTICE—THE SCoR ROLE AND PERSPECTIVE

**Charlotte Beardmore**

*Professional Officer, Society and College of Radiographers, UK*

This presentation will provide an overview of the professional bodies role in developing the framework for the development of new radiographic roles within clinical practice across the UK—from the original Education and Professional Development Strategy in 1999, the DH funded pilot project and development of Occupational Standards, the joint statement on Inter-professional working and Skills mix (SCoR, IPEM, RCR, 2003 ) to the National Radiotherapy Advisory Groups endorsement of a patient pathway tool in 2007. The presentation will provide an overview of work in progress by the professional body to support the professional accreditation of higher levels of practice.

#### THE QUESTIONS OF ADVANCING PRACTICE

**Nicole Harnett**

*Project Manager, Clinical Specialist Radiation Therapist Demonstration Project, Cancer Care Ontario, Toronto, Canada*

Following the work of our international colleagues, the province of Ontario stepped into the ‘advanced practice’ arena in 2003. A number

of stakeholder groups voiced a desire to examine how or whether new models of care in the cancer care system could result in improvements in access to treatment and in the health of our population. With the convergence of these varied driving forces, the Advanced Practice for Radiation Therapists Development Project was born.

After receiving funding from the Ministry of Health and Long-Term Care in August 2004, the 2-year project set out to investigate the feasibility of implementing advanced practice for radiation therapists in a permanent way, and if so, how it could be accomplished.

The main goals of the project were to determine the following:

- What? What would this role(s) look like?
- Where? Where in the system would maximal benefit be realised?
- Why? What evidence could be collected to support advanced practice as a benefit to the system?
- How? What would it take to develop this new cadre of professionals?

While many other questions were asked and answered along the way, this presentation will focus on these four questions in order to provide our Ontario perspective of advanced practice for radiation therapists. It is hoped that by illuminating our findings, conclusions and recommendations for moving forward, it will further

advance the international dialogue on this very important issue.

### ADVANCED PRACTICE—DIFFICULT TO IMPLEMENT AND EVEN HARDER TO MANAGE?

**Jane Head**

*Addenbrookes Hospital, Cambridge University Hospitals NHS Foundation Trust Cambridge CB2 0QQ, UK*

As part of the original DH New Ways of Working project (2000) Addenbrookes was required to implement the advanced practitioners.

The motivations were;

- Service need, with increasing cancer waits and the lack of cancer site specific pathway co-ordination
- Recognition that the skills developed by therapy radiographers could be used to enhance the quality of service provided by the other two healthcare professionals in short supply, clinical oncologists and physicists
- Introduction of new technologies was stalled due to lack of staff
- A real desire amongst the radiographer workforce to be recognised as working at an expert level

The realism of implementing Advanced Practice presented a number of challenges.

Defining it and justifying the title of Advanced Practice Radiographer, developing a career and payment structure (prior to AfC) in a climate of short supply in treatment delivery radiographers, gaining the agreement and support from the Hospital Trust and Strategic Health Authority and importantly, from our colleagues in the Oncology multi-professional team both at Addenbrookes and nationally.

Having surmounted the implementation hurdles, managing a service making full use of advanced practice also raises a number of considerations. Managing the incurred costs of service

improvement using advanced practice can bring. The role of the Professional Head of Service as the advanced practitioner line manager also requires redefining to allow these individuals to flourish as autonomous practitioners in their area of expertise, whilst recognising that having established an individual practitioner led service there will be consequences to that service and patient experience if the individual left.

In 2007, the Oncology Centre has an established Expert Practice team.

### ADVANCED PRACTICE—A DUTCH PERSPECTIVE

**John Coret**

*Board Member, Dutch Society of Radiographers*

In the Netherlands, at this moment, the main developments are role development for the profession of Radiographers in Radiology, Radiation Oncology, Ultrasound and Nuclear Medicine. Related to the role development are the changes involving the education and training of the Radiographers. Main goal is to extend the scope of practice for radiographers. So, with envy, the board of the Dutch Society of Medical Imaging and Radiotherapy are noticing the developments in others countries, for instance, the UK concerning Advanced and Consultant Practitioners and the USA concerning the Physician Assistants. The presentation will highlight the discussions with the Medical specialists, the developments from the vocational training to a 4-year Bachelor degree, the evolution of the Dutch Individual Health Care Profession Act and the opportunities for the future. At the end of the presentation special attention will be for the role of the radiographers in relation to the rapidly changing health care environment, the challenges and opportunities.

Role development will create possibilities for Radiographers to develop to a higher, more responsible, level of practice. And at the other site there will be possibilities for junior Practitioners and assistant Radiographers for Medical Imaging and Radiotherapy.

## EVALUATING THE ROLE OF A MYCOSIS FUNGOIDES ADVANCED PRACTICE RADIATION THERAPIST

**Marcia Smoke, Nicole Harnett, Laura Zychla, Debra Gallinger**

*Juravinski Cancer Centre 699 Concession Street, Hamilton, Ontario L8V 5C2, Canada*

### *Purpose*

The purpose of this study was to design, investigate and evaluate an Advanced Practice Radiation Therapist role in the Mycosis Fungoides Disease Site Team. The overall goal of the project was to develop a new health care role to work within the interprofessional team that would meet health human resource challenges in radiation treatment and improve access to care in order to contribute to Ontario's goal of healthier Ontarians.

### *Methods*

Quantitative and qualitative data were collected to address five key project evaluation measures. The objectives were to measure wait times; access to care; patient satisfaction; stakeholder support and cost benefits to the system.

### *Description*

The Juravinski Cancer Centre is a large ambulatory cancer treatment centre. The Centre is recognized around the world as a national referral site for the treatment of Mycosis Fungoides. Hamilton is the only Centre in Canada that offers total skin electron beam (TSEB) as a curative treatment for Mycosis Fungoides. The Centre has over 35 years of experience with TSEB and houses the largest database of patients treated in the world. The Advanced Practice Therapist was involved in all aspects of the Mycosis Patient continuum of care, from triaging new patient referrals to assessing patients in follow-up clinics.

### *Results*

The study demonstrated positive correlations in all domains measured. Wait times were decreased by approximately 50% with the introduction of an Advanced Practitioner. Patient satisfaction was increased and stakeholders identified that the role was a valuable asset. The cost-benefit

analysis demonstrated the potential for substantial savings.

## THE POTENTIAL ROLE OF THE ADVANCED PRACTITIONER WITHIN THE PAEDIATRIC RADIOTHERAPY SERVICE—DEFINING A SCOPE OF PRACTICE

**Claire McCarthy**

*Superintendent Radiographer, Wade Research Centre, Christie Hospital, Manchester, UK*

In 2006 the College of Radiographers (CoR) published 'Positioning Therapeutic Radiographers within Cancer Services: Delivering Patient-Centred Care', in which it described new models of care relating to the patient pathway, stating;

'It is timely, therefore, for the radiography profession and therapeutic radiographers to set out the nature of the contribution they can make'.

The aim of the CoR within this document was to define the role of the expert practitioner either at an advanced or consultant level, within a service delivery model. The models identified were: site-specific expert practice practitioner, technical specialist expert and the community liaison expert, each providing a framework which can be utilised to develop specific roles that support the delivery of patient-centred cancer services.

As part of a post-graduate education programme, the author sought to investigate how the site-specific expert model of patient-centred care could be applied, with the ultimate aim of determining a potential scope of practice for therapy radiographers in paediatric oncology. To achieve this, a systematic literature review was employed. This enabled a full investigation of the concept of advanced practice, how it applies to therapy radiography and how it can be used to inform service managers and the professional body of potential roles within the patient pathway.

The author will present the results of this review including a possible scope of practice,

incorporating the educational and training requirements necessary to undertake such a role.

#### THE IMPACT OF NEW WAYS OF WORKING ON THE PATIENT'S EXPERIENCE: AN ADVANCED PRACTITIONER'S PERSPECTIVE

**Jo Treeby**

*Advanced Practitioner Urology Radiographer, Addenbrookes Hospital, Cambridge, UK*

With the development of image guided radiation therapy (IGRT) and other treatments within radiotherapy we are able to offer an ever more sophisticated approach to treating patients. It is important to remember that with each advance in technology one fundamental principal remains constant: the patient should be the focus of care, and the impact of new technologies should take into account the patient experience. It is of limited value to develop what we perceive to be improvements in treatment technologies if the overall impact on the patient is unsatisfactory.

Advanced Practitioners work within the framework of the team treating the patient, and may be technical or site specific; in either guise they will be involved in research and development within the department, providing assistance to patients and ongoing support and advice to other members of the team. As site specific advanced practitioner the radiographer supports the patient throughout their treatment journey, from taking consent, care during treatment, a review on completion of a course of treatment, and continuing care during follow up. The role also encompasses breaking bad news, informing patients when treatment has failed and disease is progressing in spite of our best endeavours, thus providing consistency to the patient and continuity of care at a time when they are most vulnerable.

This paper looks at the role of site specific radiographer, the impact it has in patient care, and how its evolution has influenced the rest of the team in the drive to provide an efficient, patient focussed, forward looking service.

#### THE PRINCIPLES AND PRACTICE OF BREAST LOCALISATION AND SIMULATION

**Elaine Wilson**

*Radiation Therapist, Peter MacCallum Cancer Institute, Bendigo Hospital, Victoria, Australia*

Advanced Practice in 'The Principles and Practice of Breast Localisation and Simulation' was piloted at Peter MacCallum Cancer Institute in 2006. I am participating in the second intake of this program.

The primary aim of the program is to develop expert radiation therapist practitioners in breast tissue palpation during radiation therapy simulation. A need was recognised within our organisation in this area to provide a more efficient service to our patients, enhance patient care and increase practitioner's satisfaction. A short course was developed in collaboration with Monash University (Melbourne, Australia) and comprises academic and clinical components.

The academic component was designed to facilitate evidence-based, self directed study of the underpinning principles related to breast cancer and management. The clinical component aims to provide a framework upon which to develop and demonstrate competence in the procedures involved for breast localisation and simulation.

This paper will provide an overview of the program from my experience as a current participant of the course.

#### CLINICAL IMPLICATIONS AND IMPACT OF X-RAY VOLUMETRIC IMAGING BEYOND ROUTINE PRACTICE

**Hazel Pennington<sup>1</sup>, M. Duffy<sup>1</sup>, J. Stratford<sup>1</sup>, J. Davies<sup>1</sup>, P. Whitehurst<sup>2</sup>, C. Rowbottom<sup>2</sup>**

*<sup>1</sup>Wade Centre for Radiotherapy Research, Christie Hospital, Manchester, UK, <sup>2</sup>North Western Medical Physics, Christie Hospital, Manchester, UK*

#### Introduction

X-ray Volumetric Imaging (XVI) was introduced at this institution in 2003 and over

4,000 scans have now been completed. This method of 3D verification is a well established verification tool for patient set-up. Experience in this field has shown that bony set-up alone as a surrogate for tumour position is not optimum for all patients. Additional information for planning target volume (PTV) coverage and patient contour, changes throughout treatment, and hence dosimetric changes, can be assessed.

### Method

The advantage of XVI is the provision of 3D data showing soft tissue definition. This enables not only bony match to be visualised, but also changes in internal anatomy and the impact on target coverage. As a result of this, correction strategies can potentially be more complex involving not just translational corrections but the complete re-plan of a patient's treatment.

Patients undergoing radical radiotherapy frequently lose weight and/or experience shrinkage of nodes that could potentially result in additional hot-spots. The XVI can provide not only invaluable information on tumour coverage but also dosimetric information. At this institution it is now possible to export the treatment XVI into the Pinnacle planning system where strategies have been developed so that the dosimetry can be checked against the original plan and monitor units adjusted accordingly. This data can be used to ensure the planned dose is the actual delivered dose. Dosimetric verification is of paramount importance.

### Results

Expanding the use of XVI ultimately improves the quality of radiotherapy negating the need for additional planning CT scans, and its associated dose, or further immobilisation to be made.

## THE DEVELOPMENT AND IMPLEMENTATION OF AUSTRALIA'S FIRST ADVANCED PRACTICE BREAST MARK-UP AND SIMULATION COURSE

**Melinda Brenker**

*Caroline Wright, Kristie Matthews, Max Enge Peter MacCallum Cancer Institute, Victoria, Australia*

The development and formalisation of Advanced Practice roles in Australia is still in its infancy, this is despite practitioners having informally extended and advanced their practice for many years. Since 2002 there have been a series of documents indicating the need for role advancement. However, there still remains limited progress in realising the recommendations of these. In June 2005, in response to local service need and with the support of the Victorian Department of Human Services, Peter MacCallum Cancer Centre entered into a partnership agreement with the Department of Medical Imaging and Radiation Sciences at Monash University to develop and pilot an Advanced Practice program in breast mark up and simulation. The first cohort of four practitioners commenced the program in January 2006, completed in November 2006 and are now utilising their knowledge and skills in practice. This paper will reflect on the development and implementation of the program so far, focussing on the academic and clinical components of the course and its potential as a possible model for advanced practitioner training. Topics of particular interest in Australia will be considered, such as facilitating the development of Advanced Practice roles in rural and remote areas. The paper will evaluate the first year of running the program and report on the developments which have been implemented as a result of the evaluation. The conclusion will summarise the successes, issues, potential outcomes and future directions for Advanced Practice in Australia.