IMPACT

Influencing Models of Practice with Advanced Competency in Therapeutic Radiation

WELCOME TO THIS EDITION OF IMPACT!

Welcome to this new edition of IMPACT! The focus of this edition is to explore the current and future global state of advanced practice radiation therapy roles. In anticipation of the upcoming 'Leading the Way International Radiographer Advanced Practice Conference" in Toronto, we invited international contributors to share their experiences with the development and sustainability of advanced practice radiation therapy roles.

We are excited to share contributions from Australia, UK and two unique perspectives from Canada. We see that the value and impact of Advanced Practice roles continues to be demonstrated both at home and abroad, but it is not without some challenges.

We begin this edition with the CSRT spotlight and celebration of our former CSRT Community of Practice co-chair Laura D'Alimonte. We thank her for her dedication and support for the CSRT position and the Community of Practice! As always, we finish off the issue by highlighting the academic achievements of the CSRTs since our last edition.

If you have questions or wish to join our readership, contact us at the email addresses listed below.

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CSRT SPOTLIGHT

Laura D'Alimonte, MRT(T), MHsc.

Odette Cancer Centre – Sunnybrook Health Sciences Centre

Laura is currently a Brachytherapy Clinical Specialist Radiation Therapist (CSRT) and also the Professional Practice Lead at the Odette Cancer Centre. Her clinical interests include patient education, prostate cancer and process improvement. Her recent published article in the Journal of Medical Imaging and Radiation Sciences highlighted her leadership in improving the patient experience in a high-volume brachytherapy department using Lean methodology. She has also been recently nominated for the Ontario Association of Medical Radiation Sciences Team Award in leading the Radiation Therapy Research Program at the Odette Cancer Centre.

Laura is dedicated to advancing the radiation therapy profession. As one of the inaugural co-leads of the Cancer Care Ontario CSRT Community of Practice (CoP), she is motivated to support the Ontario CSRTs and to advocate for CSRTs Canada-wide. Laura is passionate in mobilizing CSRTs in improving the efficiency and effectiveness of the cancer system and patient outcomes in Canada.

ADVANCED PRACTICE IN RADIATION THERAPY: INTERNATIONAL PERSPECTIVES

Dr. Rachel Harris

Professional and Education Manager at the Society and College of Radiographers
London, United Kingdom

In 2000, the Department of Health published '*Meeting the Challenge: a Strategy for the Allied Health Professions*' and '*The NHS Plan'*; both documents proposed development opportunities for AHPs. The role of advanced and consultant AHP practitioners were described with the expectation that these posts would improve patient outcomes by ensuring strong professional leadership and change-management facilitation. It was emphasized that these individuals should possess highly specialized knowledge and be working at the forefront of their clinical field within four core domains: Expert clinical practice, Professional leadership and consultancy, Practice and service development, research and evaluation, Education and professional development.

"As a cancer patient as well as a practitioner I truly understand the importance of the 4 core domains and how they interlink to ensure best evidence based care is embedded into our education for the future." The Advance practice document indicated that *"'expert clinical practice' should have a minimum of 50% clinical focus. A problem in implementation of these roles has been the other three core functions were not allocated weighting……therefore often the clinical practice element of the role has taken a larger priority, and for many the creation of their role was driven by: the necessity to meet government waiting-list targets; a shortage of radiologists to cover the demanding workload; and to meet local service needs."*

Advanced and consultant practitioners are expected to challenge traditional ways of working and influence at a strategic and interprofessional level, as such The College of Radiographers expects all advanced practitioners to be educated to Master's level, and consultants to be working at Doctoral level. Across the UK there is increasing momentum to support the implementation of advanced and consultant roles and further guidance has been published by the government bodies in order to support transformational system change. Focused work is being supported with defined capabilities for advanced clinical practice, and similar work for consultant levels of practice.

Dr. Fiona Mitchell

Senior Practice Leader Radiation Therapy
Alberta Health Services, Edmonton, Canada

In April 2017, Alberta Health Sciences (AHS) created a new position – Senior Practice Leader Radiation Therapy (RT) to be accountable for leading the advancement of the RT profession in Cancer Control Alberta (CCA) by integrating clinical and professional standards into professional practice and research. An environmental scan of RT in Alberta was undertaken to understand the current practice. This involved visiting the RT departments, talking with and observing the therapists practice, reviewing job descriptions and department information over a 3-month period.

Approximately 200 therapists work in four centers in Alberta with over 10,000 patient visits per month. While there are no advanced practitioner roles in Alberta yet, therapists do work in Edmonton's Palliative Radiation Oncology clinic and the hope is to expand this role to an Advanced Practitioner in palliative care using the Ontario experience and following the CAMRT guidelines.

Fiona highlights an area of challenge to Advanced Practice: "*the only metrics used to measure radiation therapists' performance are based on treatment waiting times, and numbers of patients. While these are good indicators of quantity, they are not a good measure of quality……..nor do these metrics encourage work in advanced roles. To move beyond the quantity metrics we must understand what it means to work beyond the full scope of practice, which embraces a cultural of patient centred care and includes collaborative practice."*

Kristie Matthews

Education Coordinator at Peter MacCallum Cancer Centre
Melbourne, Australia

Interest in advanced practice in Australia started in the early 2000s. Building on the government's 'Report of the Radiation Oncology Inquiry' in 2002, the Australian Society of Medical Imaging and Radiation Therapy (ASMIRT) released discussion papers in 2006, 2009, and 2012, which resulted in a framework for advanced practice accreditation in 2014. Education to support these roles was introduced through short-courses in 2005 and by 2014 evolved to a Masters framework.

"By 2014, and *after many years of discussion and developing pathways and frameworks, advanced practice for radiation therapists in Australia was ready to launch. However, despite this, it has not yet made a significant impact at the national level, and to date we still only have four accredited radiation therapy advanced practitioners (of about 2500 registered radiation therapists) across the country."*

To look at why advanced practice for radiation therapists is yet to make inroads in Australia, Kristie is investigating the factors that might be influencing the implementation, or lack of implementation, of advanced practitioners across the country for her PhD. She states "*Using a qualitative approach, findings to date suggest practical, cultural/social and individual/professional identity factors are all influencing the success or otherwise of advanced practitioner implementation."* Look for more information on Kristie's findings at the LTWRAP conference.

Christopher Topham

Director, Advocacy and Communications
Canadian Association of Medical Radiation Technologists, Ottawa, Canada

The development of the CAMRT Advanced Practice Framework provides a view of advanced practice that reflects both current practice (like CSRT) and anticipated future practice (like advanced practice in imaging). There are challenges in gaining support while expanding and sustaining current roles in Ontario.

"My challenge now lies in translating this vision into support from the MRT community and action from healthcare employers and governments across the country. With healthcare governed at the provincial level in Canada, this has its challenges, since different jurisdictions are not always looking at the same solutions, or even to address the same challenges, at the same time. While awareness of the ground-breaking CSRT work in Ontario is growing amongst radiation therapists nationally, much effort is still required to achieve the concrete results we seek……we are building capacity to reach beyond the very strong support of the existing network with evidence deployed in awareness and advocacy tools.

One other important aspect of our CAMRT strategy to expand advanced practice is the establishment of a nationally-recognized standard. CAMRT's Advanced Practice Registered Technologist (Therapy) Certification process was built to provide a standardized means to recognize and certify radiation therapists working at an advanced level in Canada. What this means for the profession is a reliable and reproducible standard of practitioner across the country, allowing for other provinces to adopt and replicate the success of Ontario. For the individual radiation therapist, it provides a certification that they can carry from one position to another, even across provincial lines when that time comes.

The way radiation therapists in these roles can extend the quality of care provided to patients, while enhancing access, often at a savings to the system is transformative for the healthcare system.

CAMRT looks forward to working together with all the champions of advanced practice for radiation therapy in Ontario in spreading advanced practice in radiation therapy."

CSRT ACADEMIA

Peer-Reviewed Manuscripts

Harnett N, Bak K, Lockhart E, Ang M, Zychla L, Gutierrez E, Warde P. (2018) The Clinical Specialist Radiation Therapist (CSRT): A case study exploring the effectiveness of a new advanced practice. J Med Radiat Sci (65)2: 86-96.

Erler D, Brotherston D, Sahgal A, Cheung P, Loblaw A, Chu W, Soliman H, Chung H, Kiss A, Chow E, Poon E (2018) Local Control and Fracture Risk Following Stereotactic Body Radiation Therapy for Non-Spine Bone Metastases. Radiother Oncol (127):304-09.

Ezezika J, Easton L, Chung H, Barbera L, Ravi A, Hill-Mugford D, Vesprini D, **D'Alimonte L** (2018) Going Lean to Improve the Patient Experience in a High-Throughput Brachytherapy Program. JMIRS 49(2):130-135.

McGuffin M, Devji N, Kehoe L, Carty A, Russell S, Di Prospero L, DeAngelis D, Kiss A, Vesprini D, Loblaw A, **D'Alimonte L.** (2018) To prep or not to prep - that is the question: A randomized trial on the use of antiflatulent medication as part of bowel preparation for patients having image guided external beam radiation therapy to the prostate. Pract Radiat Oncol 8(2):116-122.

Nguyen N, **Timotin E**, Hunter R, Sur R. (2018) High-dose rate intraluminal brachytherapy: An effective palliation for cholangiocarcinoma causing bile duct obstruction. Surgical Oncology 27, 625-629.

Oral Presentations (RTi3)

D'Alimonte L, **Erler E**, **Holden L**, **Sinclair E**, Dawdy K, Oliver J (2018) Rethinking Patient Education: Understanding the Impact of Drop In "Ask an RT" Patient Education Sessions. JMIRS (49)1: S9

Erler D. (2018) Leveraging Advanced Practice: Building Capacity and Maximizing Impact. JMIRS (49)1: S7-S8.

Javor J, Roussos J. (2018) Communication is Key: Changing How Patients Receive Their CT Simulation Appointments to Improve Utilization of Radiation Therapy Services. JMIRS (49)1: S9-S10 ***[RTi3 2018 Best Oral Presentation Award].***

Kong V, Chung P, Craig T, Taylor A, Rosewall T. (2018) Comparison of Three Image-guided Adaptive Strategies for Bladder Loco-Regional Radiotherapy. JMIRS (49)1: S15.

Lee G, Tsui F, Koch A, Fyles A, Dinniwell R (2018) Location of Recurrence in Women Treated with Conventionally Planned Whole Breast Radiotherapy. JMIRS (49)1: S7.

Linden K, McGrath C, Dennis K. (2018) Defining the Range of Standard Practice for Field Placement and Target Volume Definition for Bone Metastases at the Ottawa Hospital; Groundwork for Evaluating Skill Competency in a Clinical Specialist Radiation Therapist. JMIRS (49)1: S6-S7

Linden K, Zohr R, ElSayed A, Renaud J, MacPherson M, McGrath C, Dennis K. (2018) Treatment Planning Study of Volumetric Modulated Arc Therapy for Same-Day Planning and Treatment of Vertebral Bone Metastases Within a Rapid-Access Palliative Radiation Therapy Program. JMIRS (49)1: S14-S15

Shessel A, Driscoll B, Wong R. (2018) The Lutetium Project: Nuclear Medicine and Radiotherapy Treating Neuroendocrine Disease Together. JMIRS (49)1: S13

Poster Presentations (RTi3)

Chan K, Cashell A, Rosewall T. (2018) From CT-Guided to MR-Guided Intracavitary Brachytherapy for Cervical Cancer: What Do the Key Stakeholders Have to Say About the Transition? JMIRS (49)1: S18

Kong V, Taylor A, Chung P, Rosewall T(2018) The Evaluation of Resource Requirement Associated With Adaptive Strategies for Bladder Cancer Radiotherapy. JMIRS (49)1: S18

Shessel A, **Kong V, Chan B**, Moseley J, Sun A, Bissonnette J. (2018) Deformable Image Registration and Dose Accumulation for Locally Advanced Non-Small Cell Lung Cancer, Comparing Delivered and Planned Radiotherapy Doses. JMIRS (49)1: S15 ***[RTI3 2018 Best Poster Award]***