

Clinical Specialist Radiation Therapist (CSRT) Community of Practice (CoP)

Annual Report 2018



August 2018

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Terminology

Advanced Practice in radiation therapy (APRT) – this is a non-specific term that describes an advanced level of practice in radiation therapy. It is often used interchangeably with “CSRT” (see below) in Ontario-based reports, but applies to positions beyond Ontario where there may not be an alternate, more formalized definition.

Clinical Specialist Radiation Therapist (CSRT) – this professional title is that given to advanced practice radiation therapists (APRTs) in Ontario for the purposes of the CSRT Project series conducted by Cancer Care Ontario from 2004 – 2006. The official definition of a CSRT was “a registered medical radiation technologist in the specialty of radiation therapy in Ontario who brings **advanced clinical, technical and professional radiation therapy competencies** to the existing inter-professional health care team.”

Advanced Practice Registered Technologist (Therapy) (APRT(T)) – this the official, protected professional designation conferred on a radiation therapist who has successfully completed the national certification process.

1.0 Executive Summary

In preparation for the end of the Clinical Specialist Radiation Therapist (CSRT) Projects in 2016, the focus of work began shifting from project-driven initiatives to an operational Community of Practice (CoP) lead structure to support continued quality improvement. In 2016, Cancer Care Ontario (CCO) officially welcomed the CSRT CoP under the Radiation Treatment Program CoP structure. In response, the CoP established goals and priorities and developed terms of reference to govern the structure and membership of the CoP. These goals and deliverables inform the structure and priority of work to be accomplished:

1. CSRT Role Definition – Promote and affirm role identity and utilization in the cancer care system
2. Encourage collaboration, knowledge /information sharing, and provincial process improvement initiatives
3. Promote mentorship and peer-to-peer support networking for new and existing CSRT roles

During 2017 the CSRT CoP has achieved several accomplishments towards the overall goals of the CoP. In order to promote and affirm the CSRT role, CoP members have collaborated with the CAMRT for a number of years on the development of a new, nationally recognized professional credential – the Advanced Practice Registered Technologist (Therapy) (APRT(T)). In 2017, two of the first three radiation therapists awarded this credential were members of the CSRT CoP – Lilian Doerwald-Munoz and Lori Holden. In addition to working on a consistent, standard for advanced practice in radiation therapy, the CoP has ensured the dissemination and sharing of information about the role. This is achieved through the use of social media (Twitter, Facebook) and the publication of a semi-annual Influencing Models of Practice with Advanced Competency in Therapeutic Radiation (IMPACT) newsletter distributed by email to the CSRT CoP distribution list. Both followers and subscribers are consistently increasing and expanding beyond provincial and national borders to international stakeholders.

Encouraging collaboration, knowledge sharing and efforts towards process improvement, the CoP has been involved in a number of ongoing projects. First, in order to standardize data collection that CSRTs need in order to provide ongoing evidence of their local impact, the CoP has developed (and is finalizing) a set of workload codes that they will use to document their clinical work. These codes will be used consistently by CSRTs across the province in the RT-EMRs. In addition, the Palliative CSRT Working Group, made up of all the palliative CSRTs in Ontario, has been writing an impact report to support the optimal deployment of palliative RT advanced practice. This comprehensive document will assist future departments with the expedited implementation of this position.

Finally, an Advanced Practice Resources working group was formed to assist in promoting mentorship and peer-to-peer support for CSRTs. In response to the results of a needs assessment conducted in 2017, resources are constantly being gathered and activities scheduled at the annual CSRT CoP In-Person meeting to provide professional development opportunities for the members of the CoP.

The CoP also collects information to monitor the achievements of its members as well as to chart the course for the future. As such, metrics regarding academic activities are reported to understand the scholarly impact of the CoP members. In 2017, eight manuscripts were published in peer-reviewed journals, 10 peer reviewed podium presentations and six poster presentations were delivered at provincial, national and international conferences. In addition, these scholarly products garnered awards including “best poster presentation” and “Editor’s Choice” awards. Of special note was the award of a \$24,000 research grant for a CSRT as the principal investigator (See Section 6.1 below).

Overall the success of the CoP relies on its members. Engagement continues to increase as members see the value in the work they are doing and how the initiatives may affect them in their day-to-day roles, now and in the future. The development of networks for the CoP is supporting the two-way flow of information in and out of the CoP augmenting its influence in the cancer care sector. We look forward to



many more successes in the future including the continued establishment of the role on the radiation therapy team.

2.0 Background

2.1 Advanced Practice and CoPs in Ontario – Pdraig Warde

At the turn of the century, the province of Ontario was facing challenges that included increased demand for cancer services, pressure to meet government targets, implementation of complex treatments, shortages of specialized staff and an aging workforce.¹ In this context, there was demand for innovative models of care, responsive inter-professional teams and advanced practice (AP) initiatives.² These factors led to the development of new healthcare provider roles,² including the Clinical Specialist Radiation Therapist (CSRT). From 2004 to 2016, Cancer Care Ontario sponsored a series of projects designed to assess the feasibility of implementing this advanced radiation therapy role, and subsequent to that, evaluate the impact of adding this role to the existing inter-professional health care team.³ One of the enduring challenges of the project was the long term sustainability of the individual positions as well as definition of the role in general.

In 2010, in an effort to offset the impact of decentralization of cancer centres in Ontario, the Radiation Treatment Program at Cancer Care Ontario identified Communities of Practice (CoPs) as a strategy for supporting continued quality and safety improvement in radiotherapy. Literature showed such CoPs as effective tools for enhancing collaboration, knowledge transfer exchange (KTE), identification of gaps in practice, and standardization of practice across the province. In 2015, as the CSRT Projects came to a close, a community of practice was struck to provide a platform for CSRTs and interested stakeholders to perpetuate and sustain the advanced practice radiation therapist role within the province of Ontario.

2.2 Purpose of the Annual Report

To document the work, progress and successes of the CSRT concept in Ontario, and to fulfill the objectives of the CoP, the CSRT CoP has elected to produce annual reports that will provide a snapshot resource for interested stakeholders. In each report, the CoP examines its mandate and its related accomplishments. The ongoing desire to perpetuate an evidence-based approach to practice implores the CoP members to collect and disseminate its findings and the conclusions drawn from those findings. The CoP hopes, over time, to be able to provide guidelines and recommendations for advanced radiation therapy that are based on findings and lessons learned. It is hoped that this report provides information that will help readers understand the CSRT-facilitated model of care developed and implemented in the Ontario cancer care sector.

¹ Cancer Care Ontario. Ontario Cancer Plan 2008-2011.

<https://www.cancercare.on.ca/common/pages/UserFile.aspx?fileId=13808>. Accessed January 2014.

² Cancer Care Ontario. New ways of working: A provincial Strategy for Advanced Practice Roles in Canada: Summary Strategy Document. <https://www.cancercare.on.ca/common/pages/UserFile.aspx?fileId=13478>. Published July, 2006. Accessed June, 2017.

³ Harnett N, Bak K, Zychla L, et al. A roadmap for change: charting the course of the development of a new advanced role for radiation therapists. *J Allied Health*. 2014;43:110-116.

3.0 CSRT Community of Practice

3.1 Terms of Reference and Mission

Background

The role of Clinical Specialist Radiation Therapist (CSRT) was introduced by HealthForce Ontario in 2006, and a pilot investigation of the feasibility of the role was initiated in 2007, and completed in 2016. CSRTs are part of a novel model of care for the cancer patient population, and consequently, it is important to foster intra- and inter-regional knowledge sharing amongst the geographical regions where CSRTs practice, and a culture of continuous quality improvement within the CSRT community. The CSRT CoP was formed to facilitate knowledge exchange and drive quality initiatives forward to ensure that patients who interact with CSRTs in Ontario receive the highest quality of care. The development of a CoP for CSRTs involved in the cancer patients' pathway is a feasible and effective approach to enable their practice and to ensure CSRTs continue to be an important part of Ontario's cancer centres and its delivery of high-quality radiotherapy care to patients.

Purpose

To advocate for and support a collective CSRT/APRT identity that will ensure role sustainability and growth by means of collecting evidence, communicating results and advocacy for the value of the role with relevant stakeholders. The purpose of the CSRT CoP is to facilitate knowledge exchange between CSRT/APRTs and to drive forward quality improvement initiatives to ensure that the field of advanced practice in radiation therapy delivers the highest quality of care to Ontarians.

Outcomes and Deliverables

- 1. CSRT Role Definition – Promote and affirm role identity and utilization in cancer care system**
 - Develop and protect the standards of the CSRT/APRT role
- 2. Encourage collaboration, knowledge /information sharing, and provincial process improvement initiatives**
 - Provide opportunities/forum for sharing best practices amongst CSRT roles in different institutions
 - Provide opportunities for sharing and exchange of institutional experiences / processes / guidelines to enhance existing (APRT) practices
 - Identify process improvement opportunities in the area of advanced practice to improve processes and standards of practice
 - Interact with local, regional and national partners to identify strategies for the long term sustainability of the CSRT role
 - Demonstrate continual evidence-based impact of CSRT roles through collection of evidence/data that supports the role(s); and data management and dissemination to relevant stakeholders (i.e. via publishing of CSRT work)
- 3. Promote mentorship and peer-to-peer support networking for new and existing CSRT roles**
 - Create/Provide tools relating to impact metrics, education, etc.
 - Sharing of lessons learned (i.e. developing relationships, change management, overcoming barriers, establishing framework, etc.)
 - Establish formal mentorship working group

The outcomes and deliverables identified above can be re-evaluated and re-prioritized based on CSRT community needs, as well as in relation to changing advanced practice and radiation therapy landscapes at hand.



CoP Co-Leads Election Process and Term

The CSRT CoP has two volunteer or elected co-leads with a tenure of two years in length (renewable one time). Co-leads are determined by the following election process:

1. Members may volunteer for the position and/or CoP members may nominate candidates for the position.
2. If there are more volunteers and/or nominated candidates than co-lead positions available, the CoP members will vote to determine the new co-lead(s).
3. Each co-lead position will follow a different term cycle to ensure that one co-lead position will be replaced at a time to support sustainability and continuity of the CSRT CoP.
4. If a co-lead needs to step down from the position before the end of the assigned term, the selection of a replacement co-lead would follow the election process outlined above.

Meeting Schedule

Provincial:

- Participate in monthly teleconference or web-conference meetings with the provincial CSRT CoP, as scheduled
- Review and provide feedback on relevant documents circulated electronically between meetings
- Participate in provincial CSRT CoP in-person meetings held annually
- Establish guidelines to promote regular communication amongst CSRT representatives in external committees (e.g. CAMRT credentialing) and the CSRT CoP, e.g. Standing meeting agenda items for updates, in order to ensure the entire CoP is being represented

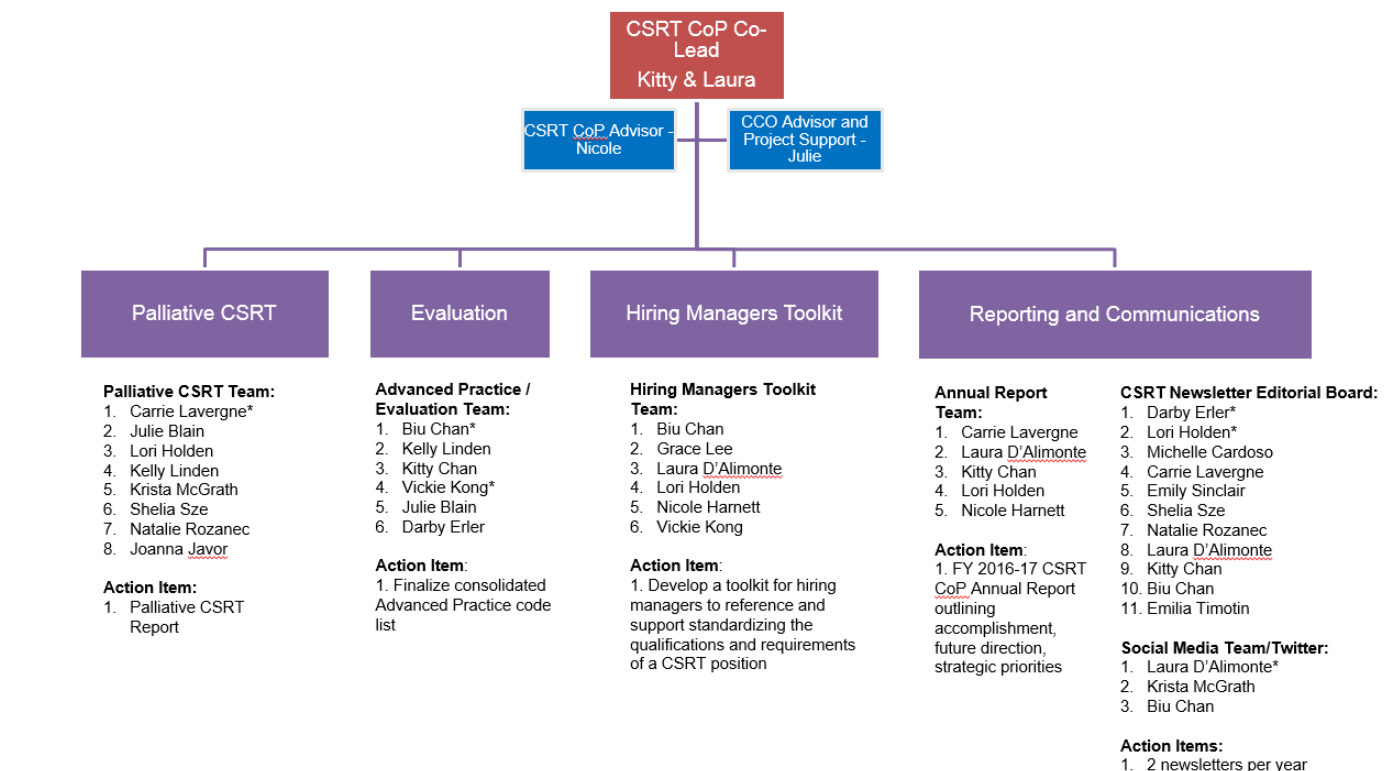
Initiative/Working Group-specific:

- Participate in the identification and prioritization of various working group initiatives
- Participate in teleconference or web-conference meetings with initiative-specific working groups, as scheduled by the Group Leads
- Review and provide feedback on relevant documents circulated electronically between meetings
- The level of participation in meetings and activities required to drive initiative-specific quality agendas may vary depending on the unique needs of the working group

CSRT CoP Co-Lead Responsibilities:

- Participate in monthly check-in teleconferences with the CSRT Project Manager and the CSRT CCO Lead in order to develop the CoP meeting agenda and provide key project updates
- Lead the discussion within the quarterly CSRT CoP teleconferences
- Lead the discussion within the annual CSRT CoP in-person meetings
- Work alongside the CSRT CCO Lead and CSRT CoP Advisor to develop action items, key next steps and project directions as required
- Work alongside the CSRT CCO Lead and CSRT CoP Advisor to develop connections to other relevant projects and provincial/national initiatives as required

3.2 Organizational Structure



3.3 Membership

Membership

The CSRT CoP consists of a CSRT CoP Advisor, CCO CoP Lead, and CSRT/APRT volunteers from across the Province of Ontario (Organization Structure in Section 3.2). The CoP also accepts Affiliate members, who may be interested in attending a specific meeting and/or being included on the distribution list of the IMPACT newsletter/annual reports. Affiliate members may be those professionals in the field of radiation oncology and Organization Affiliates are organization(s) that share the same vision as the CSRT CoP in promoting advanced practice radiation therapists.

Process to Alter Group Membership

As the CSRT CoP consists of volunteers, CSRTs who wish to join the group can contact RTP CCO CoP Advisor (RTP@cancercare.on.ca) in order to be added to the membership list. Any CSRTs who wish to opt out of the group, can also contact the CCO RTP Advisor at the above stated email in order to be removed from the membership list.

	CSRT CoP MEMBERSHIP TYPES	DEFINITION
1.	Full Member	CSRT is a resident in the province of Ontario and is actively participating in one (or more) CoP working group initiatives
2.	General Member	CSRT is a resident in the province of Ontario and wishes to remain in the CoP but is not actively participating in one (or more) CoP working group initiative
3.	Affiliate	All professionals in the field of radiation therapy and individuals interested in the field of radiation oncology who may be interested in attending a specific meeting and/or being included on the distribution list of the IMPACT Newsletter/annual reports Individual may be referred to the CSRT CoP by a current member
4.	Organization Affiliate	Organization/Group that shares the same vision as the CSRT CoP to promote advanced practice radiation therapists

4.0 Progress and Results

The progress and results of the CSRT CoP have been organized against the three outcomes of the CoP as described in the Terms of Reference (section 3.1) of the report. Each year, ToRs are reviewed for relevance and to guide goals setting for the upcoming year.

4.1 Outcome 1: CSRT Role Definition – Promote and affirm role identity and utilization in cancer care system

The CoP and its members were engaged in a variety of activities that continue to influence the permanence of this new health care provider category in radiation therapy. The CSRT community was very stable in 2017 – 23/25 positions filled in 2017 - with a number of new positions being considered in the province. Work continues on those developments. In July 2017, following years of significant input from the CSRT Projects at Cancer Care Ontario (CCO), and subsequently through the members of the CoP, the Canadian Association of Medical Radiation Technologists (CAMRT) reached its ultimate pinnacle - the first 3 advanced practice radiation therapists (APRT(T)) in Canada. Two of the 3 APRT(T)s announced are active CoP members and long-time CSRTs. The Advanced Practice Registered Technologist (Therapy) (“APRT(T)”) is a national credential that recognizes those radiation therapists (RTT) who have demonstrated competence at an advanced practice level. The certification process, which provides a standardized means to recognize and certify RTTs working to the defined advanced level in Canada, was tested and formalized from 2016 to 2017. The CSRT CoP monitored the process development closely through the CSRT CoP advisor who also served as Chair of the committee developing the national process. Our APRT(T) candidates worked closely with Katherine Smith (Manager, Professional Practice) and Mark Given (Director of Professional Practice) at the CAMRT in the pilot phase to provide detailed feedback on the various phases of the processes and clarity and feasibility of the undertaking. The successful APRT(T)s will be invited to sit on the APRT(T) Steering Committee at the CAMRT to participate in further development and refinement of this novel program. The CoP strongly endorses this credential as it denotes a specific and clear standard of practice for advanced practice. CoP members will be encouraged to prepare for and undergo this certification process. Future work will involve developing resources and a support framework for those hoping to undergo the certification process.

Given that the “CSRT” is a very Ontario-focused concept, it is incumbent upon the CoP to find mechanisms to share information and data about the work being done in this province and to support the adoption and uptake of the role in other provinces. To facilitate that goal, a **Communications Working Group** was formed and a number of initiatives began. The first initiative of the group was the creation of a CSRT newsletter in late 2016, as a way to share with the community at large, the impactful work and accomplishments achieved by our collective CoP CSRT group. The inaugural edition of **IMPACT** (Influencing Models of Practice with Advanced Competency in Therapeutic Radiation), created with a focus on introducing the concept of CSRTs and the new CoP, was distributed in May 2017 to a target audience of 54 individuals. This distribution list was created by CSRT members identifying individuals thought to have an interest in or benefit by having insight into the current activities of the CSRT world (i.e. RT managers, champions of the CSRT development). In September 2017, our second edition, focusing on Advanced Practice in Radiation Therapy, was established and sent out to a slightly larger group of 63 individuals. Although the majority (94%) of the target audience resides in Canada, the newsletter audience extends into the United States and even as far as Japan. The goal for 2018 is to increase our distribution by 100%, as well as further increase the range of who receives the newsletter and who read it. The newsletter is now also being posted on the Radiation Treatment Program Resource Hub for broader reach.

On a similar note, our Twitter account (@AdvPracticeRT) has gone from 0 to 275 followers and has produced 324 tweets in the past year. This activity is considered impressive given the small size of the advanced practice community and when compared to industry standards. The activities have reached international audiences, with followers including: individual radiation oncologists, fellow radiation therapists and medical physicists from Australia, USA and the UK; and organization followers including Princess Margaret Cancer Foundation, Sheffield Hallam University, Australian Society of Medical Imaging and Radiation Therapy, Texas Society of Radiologic Technologist, MedRadJclub, CAMRT, Leading the Way: International Radiographer Advanced Practice Conference; University of Toronto Department of Radiation Oncology, Journal of Medical Imaging and Radiation Sciences. It is our hope to increase our number of followers by approximately 10% for 2018 (0.76% per month is the average increase for Twitter brand profiles).

4.2 Outcome 2: Encourage collaboration, knowledge /information sharing, and provincial process improvement initiatives

CSRTs conduct a significant portion of their work in isolation with little support from other healthcare providers or peers. . This means they are often developing ideas or concepts de novo. In order to provide better mechanisms for individual CSRTs to collaborate and synergize efforts, the CoP has established several working groups. One of the key objectives of the CoP is to ensure that existing CSRT positions continue to be supported in their individual centres. With that in mind, the **Advanced Practice Codes Working Group** was struck to extend the workload data collection activities of the CSRT Project beyond the completion of the projects. It was deemed imperative to the sustainability of each position to have annual data that characterized the clinical and technical work of the individuals' practice to ensure ongoing local support for their contributions. In 2017, the working group collected and compiled a list of codes currently used by CSRTs from different cancer centres for capturing their advanced practice activities. During the first iteration, the codes were compared against the existing National Hospital Productivity Improvement Program (NHPIP) codes for duplication and differentiation. A new set of codes along with a description that reflects activity common to CSRTs of similar roles was then proposed and is being finalized by the working group. In mid-2018, the finalized list of codes will be submitted to the Radiation Therapy Program managers for approval. Once approved, the codes will be used by CSRTs to capture workload.

The second initiative facilitating collaboration and knowledge sharing is the work of the **Palliative CSRT Working Group** to effectively share best practices and develop an impact report on the impact of the Palliative CSRT role within Ontario. The palliative CSRTs (pCSRTs) formed its own working group within the larger CSRT CoP. Through brainstorming, it was determined that the pCSRTs would create a report to demonstrate their unique impact to patients, providers and the radiation therapy program. These impacts can be summarized best utilizing the following three themes:

1. Increase access to care
2. Improve quality of care
3. System improvement

The CSRT model of care has been shown to increase access to care for patients and improve the quality of patient care. There are currently eight CSRT roles, focusing on palliative care at eight different Ontario Cancer Centres with a variety of clinical foci within radiation medicine. Although each cancer centre has different needs, it is clear that the Palliative CSRT is one that can offer universal benefit. Utilizing experiential data as well as published research, six pCSRTs continue to work on creating a universal report to illustrate the advantages and benefits of a pCSRT. It is anticipated that the report will be finalized by mid-2018, with three reports to be submitted for publication utilizing the three themes shared above.



4.3 Outcome 3: Promote mentorship and peer-to-peer support network for new and existing CSRTs

The CoP has established a working group that aims to develop tools to assist CSRTs with their work at the front lines. The Working Group administered a member survey in early 2017 to inquire about members' needs regarding training and career development. The survey result revealed that members sought leadership, development and research skills. As a result, the **Advanced Practice (AP) Resources Working Group** lead curated a resource list to address learning needs of CSRTs in Ontario. Furthermore, CoP co-leads invited two experts from Sunnybrook Health Sciences Centre (Vice-chair to the Research Ethics Board and the Program Manager of Practice-based Research and Innovation Strategy) to our annual in-person meeting to facilitate an Abstract Writing Workshop for all members. The feedback from the workshop was very positive, resulting in a generation of over 20 abstract ideas to be submitted to the international conference Leading the Way: Radiographer Advanced Practice (LTWRAP) in October 2018.



5.0 Engagement

5.1 Overall Membership

CoP membership amongst CSRTs in Ontario is high. In 2017, 21 of 23 (91%) CSRTs in the province enrolled as a CoP member. The members of the CoP have been very active in the last year ensuring their influence is felt and their voices are heard in Ontario and across the country. With two members of the CoP already having the APRT(T) designation, the CoP CSRTs and APRT(T)s continue to work with CAMRT to further refine the process and to create the kind of resources required to envision and develop advanced practice in new centres and jurisdictions. This includes working with the Advocacy team on a variety of projects including individual CSRT interviews and striking a working group to build toolkits and resources packages for those interested in how advanced practice could contribute to their model of care.

5.2 Evaluation

In December 2016, The CoP conducted an electronic survey to obtain early impression and feedback on the structure and value of the CoP by all of its CSRT members. Satisfaction with the CoP is mixed, but high interest and willingness to participate demonstrate a desire to see the CoP continue and evolve as necessary to meet the members' needs. Survey results were used to modify CoP structure and new 2017 goals were designed to align the work of the community in the right direction with members' needs. The survey results also highlight the need to routinely evaluate the goals and value of the CoP to ensure it has maximum impact amongst the community and field. The CoP leaders will administer an annual survey to provide continuous assessment and opportunities for improvement.

6.0 Achievements

The following section includes achievements by CSRT in Ontario between dates Jan 1 – Dec 31, 2017

6.1 Grants

1. **Vickie Kong** 2017 SANOFI grant, “Image guidance strategies for pelvis and prostate radiotherapy – A comparison based on accumulated delivered dose”. (\$24,000 CAD)

6.2 Awards

As a group, we have received awards at international, national and also at the local level.

Local Level:

- Pat Mandy Diversity Award 2017

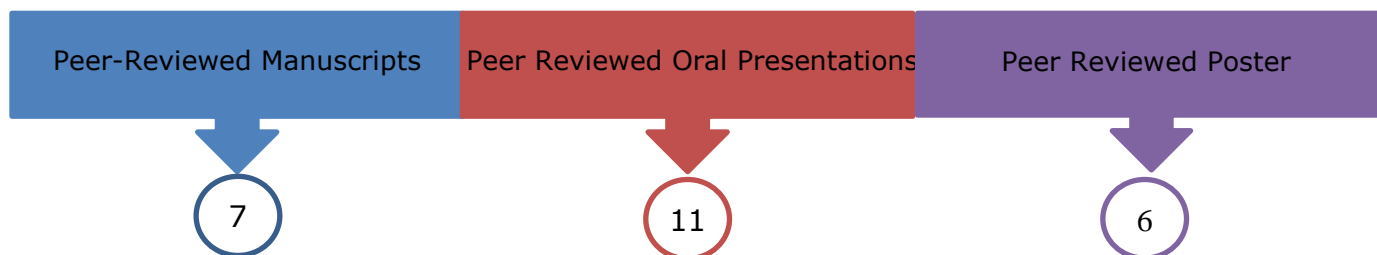
National Level:

- CARO 2017 Best Poster Award

International Award:

- Top 5 Papers Editor’s Choice Award 2017 (JMIRS Journal)
- ESTRO 2017 Best Poster Award (Radiation Therapy Stream)

6.3 Knowledge Dissemination



Peer-Reviewed Manuscripts

1. **Chan K**, Cashell A, Rosewall T. From Computed Tomography–Guided to Magnetic Resonance Imaging–Guided Intracavitary Brachytherapy for Cervical Cancer: What Do the Key Stakeholders Have to Say about the Transition? JMIRS 48(4): 394-401(2017) **Recipient of Top 5 Papers Editor’s Choice Award**
2. **D’Alimonte L., Holden L.,** Turner A., **Erler D., Sinclair E., Harnett N.,** Di Prospero L. Advancing Practice, Improving Care, The Integration of Advanced Practice Radiation Therapy Roles into a Radiotherapy Department: A single institution experience. JMIRS 48(2): 118-121 (2017).
3. **Kong V.,** Taylor A., Rosewall T. Adaptive Radiotherapy for Bladder Cancer – A Systematic Review. Journal of Medical Imaging and Radiation Sciences. In press.
4. **Rozeane N.,** Chan E., Malam S., Loudon J. The automated patient discharge summary: improving communication at transfers of care after completion of radiotherapy. Journal of Radiotherapy in Practice Published online: 04 May 2017, pp. 1-7.



5. **Rozanec N.**, Smith S., Wells W., Moyo E., Zychla L., **Harnett N.** Patient satisfaction with the role of a Clinical Specialist Radiation Therapist in palliative care. *Journal of Radiotherapy in Practice*, Online: 09 May 2017, pp. 1-6.
6. **Timotin E.**, Doerwald-Munoz L, Hann C, Wright J, Sur R. Odynophagia in esophageal cancer patients treated with high dose brachytherapy (HDRBT) – Results from a prospective study of fungal infections. *J Natl Compr Canc Netw* (2017) In press.
7. Vapiwala N., Giuliani M., **Harnett N.** Advancing Our Practice Through the Advanced Practice Radiation Therapist Model: Catching Up with Canada. *IJROBP* 98(3), 2017.

Peer Reviewed Oral Presentations

1. **Chan K.** MR-guided multi-channel vaginal applicator brachytherapy for vaginal cancer. RTi3 Conference, Toronto, Ontario, Canada. March 2017.
2. **D'Alimonte L.** The Role of the Clinical Specialist Radiation Therapist in Delivering Person Centred Care Across the Cancer Continuum. RTi3 Conference, Toronto, Ontario, Canada. March 2017.
3. **Erlor D.** Quantify the Impact of CSRTs: The Creation and Evaluation of Workload Codes. RTi3 Conference, Toronto, Ontario, Canada. March 2017.
4. **Kong V.** Assessing the Performance of Deformable Image Registration for Pelvis. RTi3 Conference, Toronto, Ontario, Canada. March 2017.
5. **Kong V.** Impact of Interobserver Variability Delineation on Deformable Image Registration for Prostate. RTi3 Conference, Toronto, Ontario, Canada. March 2017.
6. **Lavergne C.** Improving Same Day Simulation and Treatment in Radiation Therapy. RTi3 Conference, Toronto, Ontario, Canada. March 2017.
7. **Lee G.** Radiation therapy patient experience survey of early-stage breast cancer women. RTi3 Conference, Toronto, Ontario, Canada. March 2017.
8. Parmar H, **Shessel A**, Li W, **Lee G.** Planned vs. Delivered Lumpectomy Cavity Dose During Conformal Breast Boost Radiation Therapy, RTi3 Conference, Toronto, Ontario, Canada. March 2017.
9. **Lee G**, Tsui F, Koch CA, Fyles A, Dinniwell R. Are we missing the post-operative cavity in whole breast radiotherapy? Canadian Association Radiation Oncology (CARO) Annual Meeting, Toronto, 2017. Toronto, Ontario, Canada. Sept 2017.
10. **Linden K.** Journey of the palliative patient. Canadian Association of Medical Radiation Technologists 2017 Annual General Conference (CAMRT/OAMRS). Ottawa, Ontario, Canada. April 2017.
11. **Linden K.** The implementation of a CSRT and a rapid access clinic. Canadian Association of Medical Radiation Technologists 2017 Annual General Conference (CAMRT/OAMRS). Ottawa, Ontario, Canada. April 2017.

Peer Reviewed Poster Presentations

1. **Chan K**, Simeonov A, Di Tomasso A, O'Leary G, Lopez-Filici A, Rink A, Beiki-Ardakani A, Borg J, Croke J, Fyles A, Han K, Milosevic M. Implementation of real-time MR-guided interstitial brachytherapy for gynecological cancer. Canadian Association Radiation Oncology (CARO) Annual Meeting, Toronto, 2017. **Recipient of 2017 CARO Poster Award**
2. **Chan K**, Simeonov A, Di Tomasso A, O'Leary G, Lopez-Filici A, Rink A, Beiki-Ardakani A, Borg J, Croke J, Fyles A, Han K, Milosevic M. Implementation of real-time MR-guided interstitial brachytherapy for gynecological cancer. American Society for Radiation Oncology (ASTRO) Annual Meeting, San Diego, 2017.
3. **Erlor D**, Brotherston D, Sahgal A, Cheung P, Chu W, Soliman H, Loblaw D, Chung H, Chow E, Poon I, Stereotactic Body Radiation Therapy for Non-spine Bone Metastases: A Single Institution's Experience. American Society for Radiation Oncology (ASTRO) Annual Meeting, San Diego, 2017.



4. **Erlor D**, Brotherston D, Sahgal A, Cheung P, Chu W, Soliman H, Loblaw D, Chung H, Chow E, Poon I, Stereotactic Body Radiation Therapy for Non-spine Bone Metastases: A Single Institution's Experience. Canadian Association Radiation Oncology (CARO) Annual Meeting, Toronto, 2017.
5. **Javor J**, Zhang B, Wong O, Hope A, Waldron J, Bratman S, Bissonette JP, Giuliani M, McNiven A, Assessment of PTV Margin Reduction for Nasopharyngeal Carcinoma Using Deformable Image Registration and Dose Accumulation. Canadian Association Radiation Oncology (CARO) Annual Meeting, Toronto, 2017.
6. **Kong V**. Comparison of 3 Image-guided Adaptive Strategies for Bladder Radiotherapy. European Society for Radiotherapy & Oncology (ESTRO) Annual Meeting. Vienna, Austria. May 2017.

6.4 Reviewer and Editorial activities

The CSRT CoP has collectively contributed to review and editorial activities. As a group, the CSRTs have reviewed 57 abstracts for the RTi3 2017 Conference and seventeen (17) manuscripts for the following ten (10) journals:

- Journal of Medical Imaging and Radiation Sciences
- Medical Dosimetry
- Journal of Radiotherapy Practice
- Tohoku Journal of Experimental Medicine
- Hindawi Publishing Corporation
- Physics in Medicine & Biology
- European Journal of Pain
- Journal of Pain and Symptom Management
- Clinical Oncology
- Cardiovascular and Interventional Radiology Journal

6.5 Education activities

Our CSRTs are contributing to medical education for radiation therapists, medical physicists and radiation oncology residents in both clinical and didactic settings. CSRTs are routinely participating in curriculum design and lecture delivery at the following universities:

- University of Toronto
- McMaster University
- University of Ottawa

6.6 Academic Appointments

Embarking on an academic career path is one hallmark of advancement in health care professions. In some academic health science centres, CSRTs are able to apply for and be awarded academic appointments at their affiliated university department.

To date, of the 21 CSRT CoP members, seven (7) CSRTs hold academic appointments as outlined below:

- Assistant Professors (2)
- Lecturers (4)
- Instructor (1)



7.0 Future Goals

7.1 Short Term Goals (2018)

In the short term, the CSRT CoP group would like to continue the work of the working group initiatives. Firstly, there is a plan for the completion of the Palliative CSRT Impact Report by all Palliative CSRTs in Ontario. This will be an important contribution to the literature on advanced radiation therapy practice. Secondly, it is hoped that the Advanced Practice Workload Codes, designed to quantify advanced practice workload for all CSRTs, will be implemented by all centres that have a CSRT position. The CoP will drive the ongoing development of information sharing, knowledge dissemination and social media engagement will accelerate the awareness and uptake of the CSRT message locally, regionally and beyond.

7.2 Mid and Long Term Goals

There are several mid to long term goals the CSRT CoP has identified as pertinent to the success and sustainability of the CoP into the future. The CoP is focused on initiatives that support CSRTs as they attempt to obtain the APRT(T) credential. Study groups, templates and other approaches will be engaged to ensure, as far as possible, success for Ontario's CSRTs in this endeavour. There is interest in liaising with stakeholders responsible for funding to secure the health provider position in the system into the future. The CoP working groups will continue to focus on perpetuating formal guidance documents, recommendation reports, toolkits, and evidence to support the awareness of the impact the CSRT position has on the health care system and specifically, the field of radiotherapy.] The CoP will continue to search for opportunities to engage with stakeholders and activities that move the agenda of permanence forward. The CSRT CoP will continue establish the group as the hub for advanced practice at a national level. Upcoming in 2018 the Advanced Practice Resource Working Group will focus on finalizing the strategy to quantify advanced practice workload. The Reporting and Communication Working Group will work to share and highlight the data that is collected.



8.0 Conclusion

As we enter our third year of operation, we reflect upon and celebrate the progress we have made to date to ensure we reach our goals and mandate as a CoP. The purpose of the CSRT annual report is to acknowledge the work, progress, and successes of the CSRT concept in the province and to achieve the objectives of the CSRT CoP. We have undergone refining our organization, governance and structure; consolidating working groups to maximize our outcomes and to achieve our goals. We have continued to fulfill the vision and mandate, and have successfully commenced, continued and completed several initiatives including; the creation of a twitter account bi-annual newsletter. We've seen two of our members successfully complete the Advanced Practice national certification with more members looking to become certified on the horizon. We are nearing completion of establishing provincial advanced practice workload codes which will help us better assess the impact advanced practice roles have on the cancer care system. As we look to the future, we will continue to find opportunities to engage our members and also promote the role of CSRT in the cancer system. We look forward to many more successes in the future.