cancer care ontario | action cancer ontario

CLINICAL SPECIALIST RADIATION THERAPIST (CSRT) SUSTAINABILITY PROJECT

*FINAL REPORT – **2011/12***

FINAL REPORT
May 15th, 2012

Driving quality, accountability and innovation in all cancer-related services

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Beginning in May 2006, in the face of increasing cancer burden and human resource pressures, the Ministry of Health and Long-Term Care (MOHLTC) funded a series of projects to investigate a new health care provider role – the "clinical specialist radiation therapist" (CSRT). The results of the CSRT Demonstration Project showed a number of positive impacts in local radiation treatment programs. In March 2011, the CSRT Sustainability Project was approved.

The Project is funded for a three-year period, focusing on six key elements related to long-term sustainability of the CSRT role in Ontario:

1. Extending agreements with each employment site for the original (up to) nine FTE CSRTs that guides the ongoing relationship and oversees the continued data collection as they transition to full scope;
2. Creating and overseeing the "Integration Support Team" which will assist with the integration of original and new CSRTs into cancer care teams;
3. Supporting the hiring of (up to) nine FTE additional CSRTs and providing ongoing assistance with position implementation and assessment;
4. Formalizing the CSRT role through ongoing data collection and work with relevant organizations;
5. Developing comprehensive "models of care" for radiation medicine which capture the contributions of the CSRT and consider other roles that may be introduced to maximize system efficiencies; and
6. Conducting knowledge creation and dissemination activities including employer surveys to contribute to labour market knowledge.

This report provides an update on CSRT Sustainability Project activities as of March 31, 2012.

Since last report, the Integration Support Team (IST) has overseen a rapid escalation in activities related to the selection and implementation of (up to) 9 new positions in Ontario. The successful sites are currently engaged in the selection of the radiation therapists who will fill the respective CSRT positions beginning in July, 2012. The IST also remains poised to conduct an additional Request for Proposals round should the 4 additional spots requested be approved. This would bring the total number of CSRT positions in the province to 20. The IST is now working on the development of the contracts that will formalize the relationships with the cancer programs and ensure, as far as possible, the sustainability of these positions beyond the life of the Project.

Efforts continue to understand and articulate the positive benefits the CSRTs have on their local programs. Data consistently show impact on both quantity and quality, including the improvement of both the patient and provider impact. A collective and concise description of the CSRT impact is an ongoing focus as is the establishment of standards and consistent approaches to CSRT implementation and integration. To this end, work with the College of Medical Radiation Technologists of Ontario is ongoing in order that the new role can be characterized and documented in alignment with the regulatory requirements.

Sustainability efforts are also being advanced through the establishment of "permanent" CSRT positions in the provincial cancer centres. The CSRT positions at the Odette Cancer Centre have been approved and are now permanent positions while positive

progress continues to be made at the remaining 2 original sites – Juravinski Cancer Centre (Hamilton) and Princess Margaret Hospital (Toronto).

One of the most important initiatives related to the sustainability of the CSRT role is knowledge dissemination and promotion of the positive benefits of the role. CSRTs continue to undertake innovative and practice changing activities as well as writing and presenting about their work. The Project also continues to seek out opportunities to share experiences including publication of Project work and presentations and workshops at relevant professional gatherings. These communication strategies in combination with the current momentum in the Project combine to favorably impact on the long term sustainability of the CSRT role in the Ontario cancer care system.

A/ BACKGROUND

Ontario's heath care system faces many challenges, including increasing costs, an aging population, shortage of health professionals, the introduction of expensive new treatments and technologies, and growing complexity of care. In the coming years, 44% of men and 39% of women are expected to develop cancer. Cancer Care Ontario (CCO) estimates that by 2017, each day 228 Ontarians will be diagnosed with cancer, and 406,000 people will be living with cancer.[1] In this context, the demand for innovative clinical practitioners and flexible and responsive interprofessional teams has never been stronger.

In response to system demands – and recognizing the value of interprofessional practice[2] – the Ministry began exploring non-traditional and creative solutions to recurring issues in radiation therapy.[3] These efforts ultimately led to the development of the CSRT role and the CSRT Demonstration Project. The CSRT role provided an opportunity to think creatively about traditional and new ways of working, within the context of an interdisciplinary team environment. The work of the CSRT Demonstration Project confirms CCO's commitment to drive quality, accountability and innovation throughout Ontario's Cancer system.

A detailed background and timeline for the series of projects can be found in Appendix A. The new roles initiative included a demonstration project that introduced and evaluated the CSRT role in a number of different health care institutions across the province. Up to ten full-time equivalent (FTE) CSRTs were supported in this project which ended March 31, 2010. The results of the final phase of the CSRT Demonstration Project were reported in May 2010 showing the overall positive impact that the pilot CSRT positions were having in their respective programs and services. In concert with the submission of the final results, CCO also recommended a final "Sustainability Phase" of this health service development work. In March of 2011, the CSRT Sustainability Project received funding for its three-year plan to permanently integrate the CSRT role into Ontario's cancer care system.

CSRT Projects – Project Phases

- Advanced Practice Radiation Therapy (APRT) Development Project (2004-2006)
- CSRT Demonstration Project – Phase I (March 1, 2007 to March 31, 2008)
- CSRT Demonstration Project – Phase I Extension (April 1, 2008 to March 31, 2009)
- CSRT Demonstration Project – Phase II Expansion (August 1, 2008 to March 31, 2010)
- CSRT Demonstration Project – Phase IE[2] (April 1, 2009 to March 31, 2010)
- **CSRT Sustainability Project – April 1, 2010 to March 31, 2013 (In Progress)**

The CSRT Sustainability Project has several key elements:

[1] CCO, Ontario Cancer Plan: 2008-2011.
[2] Institute of Medicine, Crossing the Quality Chiasm: A New Health System for the 21st Century. Washington, D.C.: National Academies Press, 2001.
[3] Goodyear, J. Innovative Solutions: New and Expanded Roles in the Healthcare System. Presentation at CCO Advanced Practice Workshop. Toronto, Ontario, March 26, 2004 (March 26, 2004).

1. Extending agreements with each employment site for the original (up to) nine FTE CSRTs that outlines requirements and responsibilities of each site as a partner in the Project and overseeing the ongoing data collection as CSRTs transition to full scope;
2. Creating and overseeing the "Integration Support Team" which will assist with the integration of original and new CSRTs into cancer care teams;
3. Supporting the hiring of (up to) nine FTE additional CSRTs through various activities related to education, communication, preparation, supporting selection processes and ongoing assistance with position implementation and assessment;
4. Formalizing the CSRT Role by continuing to collect evidence documenting impact of original and new positions and working with relevant organizations to formalize the CSRT role;
5. Developing comprehensive "models of care" for radiation medicine which capture the contributions of the CSRT and consider other roles that may be introduced to maximize system efficiencies; and
6. Conducting knowledge creation and dissemination activities including employer surveys to contribute to labour market knowledge for use in health human resource forecasting and planning.

In general, CCO believes that the CSRT can be a valued and high-performing member of the interprofessional team, contributing to the provision of high quality, cost effective radiation therapy and care to the people of Ontario while serving as leaders in the advancement of the overall science and practice of radiation therapy. It believes these measures will go a great distance to affecting long-term sustainability of the CSRT role in Ontario and beyond.

B/ KEY ELEMENTS

1.0 Original CSRTs

Two key elements of the current funding agreement include:

1. Extending agreements with each employment site that outlines requirements and responsibilities of each site as a participant in the Project; and
2. Overseeing ongoing data collection as CSRTs transition to full scope of practice.

There are currently seven CSRTs in place across the province. 5 CSRTs, from first phase of the Demonstration Project, have been in place since 2007 at the 2 main cancer centres in the GTA – Odette Cancer Centre (at Sunnybrook Health Sciences Centre) and Princess Margaret Hospital (part of the University Health Network). 2 additional CSRTs come into the project during the second phase in 2009 at the Juravinski Cancer Centre in Hamilton. These seven CSRTs continue to work with their teams and programs to find the right fit for this new health care provider role inside the interprofessional team. In some cases, existing activities were discontinued or modified, and in some cases, additional activities were undertaken to augment the existing practice of the CSRTs. The majority of new activities are related to innovation and knowledge translation as the CSRTs' expertise in driving and leading the adoption of new techniques and technologies is harnessed.

There are currently 7 "active" pilot CSRT positions:

PHASE I	
1.	Palliative Radiation Therapy CSRT – Princess Margaret Hospital, Toronto ("PMH")
2.	Target Visualization and Delineation CSRT, Head and Neck Site Group – PMH
3.	Palliative Radiation Therapy CSRT – Odette Cancer Centre, Toronto ("OCC")
4.	Patient Assessment and Symptom Management CSRT, Breast Site Group – PMH
5.	Skin Cancer CSRT – OCC
PHASE II	
6.	Metastatic Bone Cancer CSRT - Juravinski Cancer Centre, Hamilton ("JCC")
7.	Head and Neck Cancer CSRT - JCC

A more detailed description of each position is provided in Appendix B.

At the time of this report:

- The Palliative CSRT at the OCC was on maternity leave for the duration of the 2011/12 reporting period. She has now returned and has resumed duties and data collection in the Rapid Response Palliative Program.
- The Palliative position at the Ottawa Hospital was cancelled in June 2010. Exploration regarding the position revealed that the position, as it was described at the time, could not achieve the improvements originally envisioned. As such, the position was discontinued. The Ottawa Hospital continues to work on modifications that will align this position more clearly with the identified needs in the program for the next round of Request for Proposals in 2012.
- The current CSRT in the Skin Cancer position at OCC will be retiring in May 2012. A replacement has been hired and a 6-month training program is currently underway. The new incumbent will assume responsibilities to the Project.

- Two of the 7 existing positions have been made permanent in their radiation therapy departments – the Palliative CSRT and the Skin Cancer CSRT at Odette Cancer Centre (OCC) – and work continues to recognize and formalize the remaining 5 positions in their home centres. The final approved job description for the CSRT positions at OCC can be found in Appendix C.

1.1 CSRT Data

As discussed in more detail in the Models of Care (MOC) section below, the CSRT Sustainability Project has been working to increase alignment with the MOC initiative at CCO. With similar goals and equally similar strategies, the alignment makes good sense to ensure consistent and standardized approaches to developing new ways of working. In order to facilitate this merging of initiatives, the CSRT Sustainability Project has modified how it is collecting and reporting on data. In previous reports, discrete indicators were reported per CSRT pilot position. For this report, and moving forward, the Project will report findings under the headings of Quantity (capacity building), Quality and Innovation/Knowledge Translation. The categories reflect CCO's belief that these areas of impact are of greatest importance when considering a change in practice.

i) Quantity
Does the new model save the system money or allow for increased patient capacity with the same money?
Does the new model allow patients to enter/move through the system more quickly?
Does the new model reduce the cost of human resources required to meet existing patient demands and/or optimize the use of human resources?
(while maintaining patient and provider experiences as well as patient outcomes)

ii) Quality
Does the new model improve patient experience, outcomes and/or provider experiences? (e.g. new services, process streamlining, standard setting, etc.)

iii) Innovation and Knowledge Translation
Does the new model bring the promise of improved patient treatment, care and/or outcomes? (e.g. new technique, adoption of new technology, etc.)

i) Quantity

Capacity building has been a top priority of the CSRT Projects. Various metrics have been used to quantify the impact of the individual CSRTs on their respective program or service and efforts to summarize impact of the role in general has been challenging. The CSRT positions currently appear to fall into 2 categories – those who are engaged in direct patient care and those who do the majority of their work behind the scenes. For those engaged in direct patient care, it is easier to identify and assess their impact on the capacity of the program. But for those positions that focus on more technical activities, this task has proven more difficult. In addition to this distinction, each of the

pilot positions has a unique job description that outlines how much of their time is expected to be contributed to the various elements of their position. The breakdown will be affected by department goals and objectives and the group/program that the CSRT is a part of. This is detailed in more detail below (under "CSRT Competency Profile and Job Composition")

The table below shows the number of additional new patients that can enter the system as a result of having a CSRT working in the program for the CSRTs who work directly with patients alongside the radiation oncologist and the interdisciplinary team. There are other ways that the CSRTs contribute to the system, but this increase in capacity is a critical focus under the heading of quantity. The variability that is evident relates to the difference in job description and resulting contribution to "clinical" activities (compared to research, education, etc.)

QUANTITY – DIRECT		
Bone Mets CSRT, JCC	• Additional patients seen if CSRT is present in clinic	• ~12 patients/month
	• Unscheduled referrals accepted and managed by CSRT outside of regularly scheduled clinics	• ~8 patients/month
Palliative CSRT, PMH	• Additional patients handled in rapid response clinic if CSRT present	• ~8 – 12 patients/month
Skin Cancer CSRT, OCC	• Increase number of new patients in each weekly clinic when CSRT is present	• ~8 patients/month
	• Potential to add more patients through independent clinic in Veterans wing of hospital	• ~1 patient/month (will be increased in future)
Breast CSRT, PMH	• Additional new patients seen if CSRT present in clinic	• ~8 patients/month
Palliative CSRT, OCC	• Additional referrals accepted with CSRT part of the rapid response team	• ~12 patients/month
	• "CSRT-only" Bone Metastases Clinic	• ~10 patients/month

As mentioned, there are some CSRT positions that focus on activities and functions that are behind the scenes, not at the front line interfacing directly with the patients. The impact of these positions is harder to firmly measure as the activities result in time savings for the radiation oncologists and other team members, but how that surplus time used is difficult to quantify. There are also activities that all CSRTs undertake that have a less clearly identifiable impact on the program or service they work in. These activities usually involve the assumption of some function normally completed by a radiation oncologist which is usually scheduled outside of a dedicated clinic. These activities often involve paging the oncologist to leave what he/she is doing to come to the simulator, treatment unit or planning area. This process has a negative impact on the patient experience as well as on the effective use of department resources while the unit and staff are in a holding pattern waiting for the physician to arrive. The table below summarizes some of these activities and the indirect time savings that result from the CSRT assuming these activities from the radiation oncologist.

QUANTITY – INDIRECT		
Bone Mets CSRT, JCC	• Completion of virtual simulation independent of Radiation Oncologist (20 min/simulation x 40 simulations/month)	• ~ 20 hours/month
Target Visualization CSRT, PMH	• Time saved by assuming responsibility of contouring – ~13*/week x 55 minutes/patient (previously reported)	• ~ 50 hours/month
H&N CSRT, JCC	• Bolus marking in place of Radiation Oncologist - ~ 3 patients/week at 15 minutes/patient	• ~4 hours/month
Palliative CSRT, PMH	• Discharge plans for patients completing treatment - ~24 patients/month x 15 minutes/patient	• ~6 hours/month
Breast CSRT, PMH	• Unscheduled assessments possible due to CSRTs increased flexibility	• ~12 patients/month
Palliative CSRT, OCC	• Placing of treatment volumes and treatment fields for rapid response patients	• ~20 hours/month

The Project will be focusing intensely on these data over the next year to attempt to quantify the indirect impact of these activities on programs and departments.

ii) Quality

The CSRTs continue to build their practice around quality initiatives. In general, these activities relate to

- improving the patient experience – reduction in inappropriate referrals, addition of new patient services, activities focused on streamlining workflow, etc.
- improving patient outcomes – introduction/enhancement of quality assurance processes, development/introduction of treatment/care standards, etc.
- improving the provider experience – activities focused on streamlining workflow, introduction of practice standards or policies, etc.

On top of their regular clinical work, the CSRTs have documented an impressive number of activities and initiatives that contribute to improvements in one or more of these areas.

Impact of Activity/Initiative	Number of activities/initiatives
Improving patient experience	9
Improving patient outcomes	8
Improving provider experience	5

It is notable that in several instances, the work being done is at a program- or province-wide level – for example, leading the development of provincial standards for head & neck nomenclature and clinical volume setting. This clearly recognizes the expertise that the CSRTs are bringing to their areas of specialization.

A more detailed summary of the Quality initiatives being undertaken by the CSRTs can be found in Appendix D.

iii) Innovation and Knowledge Translation

With advanced knowledge, skills and judgment in their area of specialization, the CSRTs are perfectly poised to lead and direct initiatives that create new ways of thinking about radiation therapy as well as to adopt new techniques and approaches that are being discovered and reported by others. In this regard, the CSRTs are engaged in a number of projects in their respective departments ranging from the creation and management of an "outcomes database" for patients receiving intensive chemo-radiation for a variety of head and neck cancers, to the assessment of the use of cardiac ultrasound in establishing the suitability of left-sided breast cancer patients for special cardiac-sparing treatment techniques. Each of these initiatives brings with it a promise of improved patient care, experience and/or outcomes and as such are critical to departments dedicated to delivering the highest quality care to their patients. These activities are outlined in detail in Appendix E (and summarized in the table below). Once again, it is important to note that each CSRT position has a unique job description that dictates the time they are expected to commit to the various aspects of the position requirements (see Section 1.2). This will impact the degree to which they focus on this aspect of the job.

Activity/Initiative	Number of activities/initiatives
New original research (as leader or part of interdisciplinary team)	4
Assessment of current model of care and development of revised/new approaches to deal with gaps/overlaps	4
Creation of new learning materials for patients/providers	2

1.2 CSRT Competency Profile and Job Composition

In order to permanently integrate the CSRT positions into their respective programs and departments, clear job descriptions and expectations must be developed and made available. Several activities were undertaken this year to that end.

Work was completed in 2011/2012 to build the competency profile that describes the scope of practice for CSRTs. Starting with the Draft Competency Profile, developed during the Demonstration Phase of the Project, a methodical validation process was undertaken to assess each element as follows:

1. Is the CSRT currently practicing (or working towards) this competency?
2. Does the CSRT believe that this competency should be part of the final description of CSRT practice?

Data from this exercise showed that 100% of the CSRTs surveyed indicated that they were practicing 16 of the 25 competencies (64%). 6/25 (25%) of the competencies were being practiced by 5 or 6 of the seven CSRTs. 3 competencies were being practiced by fewer than 5 CSRTs.

After data was collected, a full-day consensus meeting was held to discuss and make decisions on differences, to modify language where necessary to more clearly capture

the essence of each competency and address any gaps identified. The final proposed Profile, containing 15 competencies, was submitted to the Project Oversight Committee and was ratified as final earlier this year. Work is currently underway to review the presentation of the competencies in the document ensure it is clear, understandable and usable such that it will be interpreted in the most consistent fashion for future CSRT positions.

The current Competency Profile can be found in Appendix F.

In addition to describing the scope of practice for CSRTs, it is important to understand how they use their time. It has been long recognized that each position varies from the next with respect to the emphasis that is placed on clinical, research and teaching activities. It has been further recognized that the breakdown of work responsibilities will change frequently in response to shifting programmatic pressures. To more clearly understand the variation amongst positions, the CSRTs were asked to document what an average work week might look like under the following headings:

1. **Clinical** – any patient related activities - planning, consults, set up consults, telephone calls, on treatment reviews, FUs, online support groups, dictation, documentation, etc.
2. **Innovation** – data collection/analysis, clinical trials, document writing, etc
3. **Admin/QA** - documentation, meetings, committees, QA activities
4. **Referrals** - triaging, the handling and sorting of new patient referrals to appropriate clinics, to specific physicians, services, etc.
5. **Teaching** – education and evaluation on any level.

Percentage of Total Workload					
	Clinical	Innovation	Admin/QA	Referrals	Teaching
Bone Mets CSRT, JCC	35	15	25	25	
Breast CSRT, PMH	50	25	20		5
Skin CSRT, OCC	50	15	10	15	5
TV&D CSRT, PMH	80	10	5		5
H&N CSRT, JCC	25	45	20		10
Palliative CSRT, OCC	50	25	12	8	5
Palliative CSRT, PMH	80		15		5

These efforts, to concretely describe complete and formal CSRT positions in their clinical context, are ongoing.

2.0 Integration Support Team

Of paramount importance to the success of this Project is the articulation clear standards and processes as well as the alignment of any positions with the objectives and principles of the Project and with the strategic directions of CCO. In order to nurture this new initiative during the critical initial years of transitioning to province-wide adoption, a small integration support team has been established to provide expert consultation to the treatment centres as they implement the new role. Comprised of a Project Manager, Project Coordinator and the Manager, Radiation Treatment Programs, the Integration

Support Team (IST) is utilizing tools and processes developed during the CSRT Demonstration Project to facilitate a number of key outcomes, including:

- Disseminating key outcomes of the CSRT Demonstration Project across the province;
- Providing assistance to centres for internal needs assessment, the translation of needs into measurable objectives for a new position, the creation of the job description, preparation of the business case (including specific metrics to track success);
- Ensuring accountability and consistency of implementation through selection of incumbents and design of on-site education and training program; and
- Overseeing the monitoring and measuring of activities and outcomes.

Implementation activities are well underway. Below is a summary of the timelines for IST activities including an indication of what has been completed to date:

Activity	Target/Completion Date
Conduct provincial site visits	September 2011 √
Issue Request for Proposal (RFP)	October 2011 √
Develop business cases for CSRT positions	December 2011 √
Assess proposals and evaluate professional portfolios	April - May 2012 √
Submit CSRT Final Report 2011/2012	May 15th, 2012 √
Implement (up to) nine new CSRT positions	July 2012
Education and training support	Begins: July 2012
Data collection regarding key outcomes of position implementation	July 2012 – June 2013
Submit CSRT Final Report 2012/2013	August 30th, 2013

The Project is also working with CCO to ensure that its regional cancer programs are held accountable for their role in ensuring the sustainability of the CSRT role in Ontario. Strategies currently being developed/implemented include:

- Requirements of the clear identification of a sustainability plan in the position proposal
- Implementation of an “escalation process” to follow when challenges are encountered at the local site, including the engagement of project representatives in the resolution
- Possible addition of a status report on locally implemented CSRTs at the quarterly meeting between CCO senior administration and Regional Vice-Presidents.

3.0 Implementation of (up to) 9 new CSRT positions

As noted above, a majority of the work of the IST has been directed at the processes and activities related to the creation and selection of the new CSRT positions in the

province. Beginning almost immediately after approval of funding, the Team began developing the processes, documentation and timelines required to meet Project timelines. A breakdown of the activities and associated deadlines can be found in Appendix G.

On March 30th, 2012, the Project Oversight Committee announced 7 successful new CSRT pilot positions at the following sites:

- Brachytherapy CSRT – Odette Cancer Centre, Toronto
- Brachytherapy CSRT – Princess Margaret Hospital, Toronto
- Breast Cancer CSRT – Juravinski Cancer Centre, Hamilton
- Palliative Care CSRT – Carlo Fidani Peel Regional Cancer Centre, Credit Valley
- Radiation Therapy Planning Image Definition and Contouring CSRT – London Regional Cancer Program, London
- Stereotactic Body Radiation Therapy CSRT – Odette Cancer Centre, Toronto
- Thoracic High Dose Rate Brachytherapy CSRT – Juravinski Cancer Centre, Hamilton

In addition to 7 proposals that met the Selection Committee's criteria, several additional proposals were identified as requiring minimal work to meet the standard. The Project Oversight Committee provided feedback to the authors of these proposals and asked that they consider these revisions and submit a revised proposal for an additional round of competition for the final 2 funded positions. On May 15th, the successful applicants were announced:

- Palliative Care CSRT – Stronach Cancer Centre, Newmarket, ON
- Palliative Care CSRT – Kingston Regional Cancer Centre, Kingston, ON

With a compressed timeline following the submission deadline, it is expected that these "second round" CSRT positions can be up and running within weeks of the original seven positions identified above allowing them to form a full cohort of 9 new CSRTs.

At the time of this report, the centralized review of the professional portfolios is underway. This represents the first stage of the 2-part "prior learning and recognition" (PLAR) process developed by the Project during its Development Phase. Once the central review is complete, successful radiation therapists will be notified and permitted to proceed to the second phase of the process – the interview and practical assessment. These activities will be scheduled at the local site and conducted by the relevant multidisciplinary team. It is expected that all decisions will be made by mid-June with the successful applicants taking their posts by July 2nd, 2012.

For a detailed breakdown of timelines for both the initial and the second round of RFPs, see Appendix G.

4.0 Formalization of the CSRT Role

The CSRT Sustainability Project continues its collaborations with both the Canadian Association of Medical Radiation Technologists (CAMRT) - the national professional

certification body, and the College of Medical Radiation Technologists of Ontario (CMRTO) - the provincial regulatory body for radiation therapists.

Work is ongoing with the College of Medical Radiation Technologists of Ontario (CMRTO). Effective September 1, 2011, amendments to the Medical Radiation Technology Act came into force. These amendments provide a new scope of practice statement and additional authorized acts for medical radiation technologists. The CMRTO issued revised Standards of Practice to reflect the amendments to the MRT Act, which also came into effect on September 1, 2011. The CSRT Task Force has reviewed the supporting documentation for the CSRTs in order to ensure that the information contained is current under the new scope of practice statement, authorized acts and Standards of Practice. We have also commenced work with the Registrar of the CMRTO to review the draft practice standards for CSRTs to ensure congruency with the CMRTO Standards of Practice.

One of the key foci of formalizing the CSRT role is ensuring consistency and standards across the CSRT positions in Ontario. As such, it is important to have a clear and consistent description of what a CSRT "does" or can be expect to do. Discussion with CMRTO and CAMRT are underway to formally describe the domain of practice for CSRTs and to, in time, create an effective method of assessing performance against the finalized scope of practice. This will go some distance to solidifying the concept of CSRTs in the Ontario cancer care system and help to monitor performance and impact on public safety.

5.0 Models of Care

Increasing cancer burden, fiscal constraint, anticipated human resource challenges and changing patient expectations - on top of a continual increase in the complexity of care - make it increasingly difficult to sustain current models of care delivery. Implementing innovative models of care was highlighted as a priority in the 2011-2015 Ontario Cancer Plan at CCO and work has begun.

The Models of Care (MOC) program has a vision of a sustainable, integrated, patient-centred model of cancer care. The goals of the MOC Program are to:

1. Implement new models of cancer care delivery;
2. Ensure that payment and accountability mechanisms are aligned with best practice models of care; and
3. Enhance the ability to accurately predict health human resources demand while incorporating changes in models of care.

At its core, the MOC Program is informed by the need to implement new and innovative, best-practice, patient-centred, multi-disciplinary models of cancer care that build on the principles of Excellent Care for All Act (ECFAA) and the Ontario Cancer Plan.

Much of the work in the CSRT Sustainability Project in 2011/12 was invested in bringing its existing work under the auspices of the MOC initiative. This included an assessment of foci, metrics and categories of impact. The MOC Program Manager now sits on the CSRT Project Oversight Committee and continues to work with the Project Manager of

the CSRT Sustainability Project to further streamline and align activities (as per Goal #1).

With respect to Goal # 2, over the last two years, CCO, representatives of physician business groups, stakeholders and subject matter experts worked on developing a data-driven approach to predict annual new oncologist requirements. This is now a regular process. New position requirements will be submitted to MOHLTC as a part of the annual CCO business plan. A methodology was also developed to allocate these new positions regionally in a transparent and data-driven process. It is hoped in the coming two years, that this process will be more widely analyzed and refined such that it will be able to identify human resource (HR) needs and align HR planning to overall system planning. The ultimate goal of this modeling exercise is to further understand the processes and systems that comprise the current radiotherapy enterprise and to identify and quantify the impact of the CSRT at the relevant points in the system, so that decisions around placement and utilization of this new professional are informed, consistent and transparent.

6.0 Knowledge Creation and Dissemination

As previously reported, the CSRTs continue to make significant contributions to the knowledge base of not only radiation therapy practice, but to the overall practice of radiation medicine. The level of scholarly contribution continues to escalate – one of the most rapid areas of growth for the senior CSRTs. Not only are CSRTs actively engaging in research and knowledge creation activities at their local site, they are also undertaking more widespread knowledge dissemination activities – fundamental to translating new knowledge into practice in other jurisdictions.

Activity/Initiative		Number of activities/initiatives
Presentations	• Peer reviewed podium	4
	• Peer reviewed poster	2
	• Invited podium	3
	• Intra-departmental	2
	• Interdepartmental	1
Peer-reviewed publications	• Manuscripts	2 (+1 submitted)
	• Abstracts	2
Student Teaching		19

The IST has also formed a core “writing group” that will lead the preparation of manuscripts in peer-reviewed journals so that results of the work and lessons learned during the process can be shared with other jurisdictions. A summary of the manuscripts identified for preparation is provided in Appendix G.

In addition to the various initiatives that CSRTs are undertaking at their local sites, the Project has also been asked to serve as the focus of an upcoming radiation therapy conference – the RTi3 Conference. This annual conference is organized and held in Toronto and is garnering international attention and interest. As such, themes that are translatable beyond Ontario are chosen each year to attract radiation therapists from

outside the immediate jurisdiction and to maximize the opportunity to showcase the ground breaking work done in Ontario. The Project Manager and the CSRTs will be actively engaged in planning and running several presentations and workshops for this conference to showcase the groundbreaking work being done with new models of care in radiation treatment.

Academic activity is an important aspect of maximizing the contribution of the CSRT role to enhancing the quality and efficiency of the work being done in the radiation therapy programs. This constant increase in their academic production illustrates how the CSRTs continue to integrate into and contribute to the multidisciplinary team and the creation of new knowledge.

A full listing of the CSRTs' academic contributions is in Appendix I.

The 2011 Labour Market Survey was completed in June 2011 with the full report being submitted to the Ministry on July 27th, 2011. The Executive Summary of this report is included in Appendix J.

C/ DISCUSSION

Analysis of feedback from CSRTs, Managers and Direct Supervisors for last year's report provided much food for thought for 2011/12. With the genesis of the Integration Support Team (IST), priorities needed to be set to continue addressing the challenges and opportunities identified in the analyses. The major themes identified were:

- Lack of clarity during role development
- Team acceptance
- Funding
- Standardized "development" plan, including education
- Consistent assessment of CSRTs

One of the most important strategies adopted by the IST in order to make headway in some of these areas was knowledge sharing. In the Fall of 2011, the IST attended 11 of the 14 cancer centres to educate the local administration on the Project, its overall goals and its objectives for the next several years. In addition to this personalized communication strategy, routine information emails are circulated and interested parties are encouraged to visit and use the website (www.ontarioradiationtherapy.ca).

It is felt that several of the initiatives outlined in earlier sections of this report will go some distance to alleviating some of the earlier challenges identified by stakeholders. The finalization of the Competency Profile is a first, critical step towards the formalization of CSRTs in Ontario and potentially beyond. With this work will come an identification of educational requirements necessary to fulfill the expectations of a CSRT position to its full scope.

There is still much work to be done to reach the important milestone of the identification of standard and accepted educational preparation and consistent assessment of advanced practice. In the meantime, a practice of information sharing amongst employment sites is going some distance to assisting departments with identifying suitable educational approaches and opportunities. In the next several months, the IST will also be working continue to foster the mentorship opportunities between existing and new sites. Both the manager group and the CSRTs will benefit from development of a mentorship framework for information sharing and discussion. It can be difficult to be a new, developing CSRT so it is hoped that with peer support for both managers and CSRTs some of the stress associated with this will be alleviated.

While the Project has some standardized metrics that the CSRTs use to collect consistent data, the IST will be evaluating some of the tools to ensure that they are still relevant and useful. One of the tools that will be reviewed is the competency assessment tool used by direct supervisors to assess the performance of the CSRTs in their pilot positions. While it was adopted from a widely used resident assessment tool, its interpretation by individual supervisors has come into question. Therefore, augmenting the instructions associated with the tool may be required to help add consistency to how CSRTs performance is assessed against what is expected of them.

Finally, identifying sustainable mechanisms of funding the CSRT positions beyond the life of the Project has been challenging. However, several steps have been taken to help departments understand how and where funding can be found. Embedded in the province-wide educational materials from visits to centres in Fall, 2011 were some ideas

and discussion about various funding strategies and opportunities for centres to consider going forward. This provided food for thought for departments to explore ideas for accessing dollars that may not have been previously considered. In addition, as part of the Request for Proposals process, departments were required to document a sustainability plan for their proposed positions beyond the life of the current Project and to obtain sign-off by local administrators of these funding strategies. It is hopeful that these various approaches will instill a sense of accountability for these positions beyond the life of the Project.

Coordination, consistency and standardization appear to be the issues most critical to ensuring the ongoing success of the CSRT role in Ontario. The IST continues to work to address the various issues identified by stakeholders based on their experience over the last number of years with CSRT pilot positions.

CONCLUSIONS

The CSRT Sustainability Project is pleased to report that deliverables continue to be met on time and in some cases under budget. Substantial excitement has been demonstrated province-wide with the support for the additional 9 positions and the successful centres are working diligently to adhere to the timelines set out by the Project. With onsite recruitment efforts underway in parallel with the centralized prior learning assessment and recognition process, it is anticipated that the 9 new CSRTs will be in place in early to mid-July.

The original CSRTs continue to break new ground and discover new ways of contributing to the radiation treatment jurisdiction. The Project continues to distill the information that is being collected so that the impact of the CSRT positions can be uniformly characterized and communicated. It is hoped that clear and crystallized messaging about the value of the CSRT position can be developed such that all Ontario-based radiation treatment programs can envision how and where the CSRT can best be utilized in response to their local and unique needs. While capacity building is a priority, the various programs and services that house these CSRTs continue to report on the other benefits they experience with the addition of the CSRT to the team – namely improved patient and provider experience and the acceleration of new knowledge into practice. With the CSRTs at the interface of the rapidly evolving radiation therapy technology and the patient, they are unique and perfectly poised to contribute to the application of new approaches to each patient individually. And as such, their academic and scholarly contribution to the knowledge base for radiation medicine continues to escalate with an impressive list of peer-reviewed activities being undertaken over this past year.

And as the CSRT initiative grows, it becomes important to streamline and connect those experiencing the opportunities and challenges associated with developing and implementing new health care provider roles. Mentorship and communities of practice become imperative at this juncture and the Project continues to work on the facilitation of these activities so that managers, supervisors and CSRTs can work together to maximize the impact of their own specific position as well as contribute to the success and permanence of the CSRT role overall. Evidence collected points to both the quantitative and qualitative benefits of the CSRT role and its sustainability and expansion will remain at the fore of the work of the Project over the next several years.