
Cancer Quality Council of Ontario Programmatic Review
June 15, 2017

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Context – Y2K+

- Increasing burden of cancer and recurring HHR pressures.
- Failure of other strategies
- Various international initiatives related to new models of care
- Emergence of collaborative health care as gold standard
- Ballooning health care costs
- Punishing pace of technological innovation
Convergence of ideas - 2003

MOHLTC calls for:

• “non-traditional” solutions
• New, more collaborative workforce
• Increased flexibility and fluidity within the interprofessional team

“...get the right care at the right time in the right setting from the right provider…..”

HealthForceOntario
Making Ontario the Employer of Choice in Health Care

OHQC
Overview

• 12-year “team driven” project
• ~ $4M from the Ministry of Health and Long Term Care since 2004
• Focused on identifying new ways of working in radiation treatment programs to
  • Improving access to services
  • Decreasing wait times
  • Improving the health of Ontarians
• Clinical Specialist Radiation Therapist (CSRT) is the title given to advanced practice radiation therapists by the Ministry for the purposes of the pilot projects
Approach

- Plan
- Do
- Study
- Act

Plan 2004 - 2006

Original State
- Structures
- Processes
- Outcomes

New state?
- Faster
- Increased capacity
- Better quality
- More cost effective
- Healthier Ontarians
- Happy staff
- Other?

Intervention
Radiation Therapy

- Decision to treat
- Planning imaging
- Target delineation
- Plan creation
- Plan QA
- Plan approval
- Daily treatment
- Weekly review
- Follow up/Community

CSRT Sustainability Project
Radiation Therapy HCPs

Patient

Others

Medical Physicist

Radiation Therapist

Radiation Oncologist
What is a CSRT?

A Clinical Specialist Radiation Therapist is a registered medical radiation technologist in the specialty of radiation therapy who brings advanced clinical, technical and professional radiation therapy competencies to the existing inter-professional health care team.
Do 2007 - 2010

Original State
- Structures
- Processes
- Outcomes

Intervention

New state?
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- Other?
## Do 2007 - 2010

### CSRT Implementation Over Time (2007 – 2015)

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Do 2007 - 2010

CSRT Performance
- Consensus/concordance studies
- Competency assessment
- Safety data
- Development of new services
- Academic production
Study 2008 - 2016

Original State
- Structures
- Processes
- Outcomes

Intervention

New state?
- Faster
- Increased capacity
- Better quality
- More cost effective
- Healthier Ontarians
- Happy staff
- Other?
Will it:

i) **Quantity**
- Save the system money or allow for increased patient capacity with the same money?
- Allow patients to enter/move through the system more quickly?
- Reduce the cost of HHR required to meet existing patient demands and/or optimize the use of HHR?

ii) **Quality**
- Improve patient experience, outcomes and/or provider experiences? (e.g. new services, streamlining, etc.)

iii) **Innovation and Knowledge Translation**
- Bring the promise of improved patient treatment, care and/or outcomes? (e.g. new technique, adoption of new technology, etc.)
## Study 2008 - 2016

### 2016 Results

<table>
<thead>
<tr>
<th>CSRT Grouped by experience</th>
<th>Additional patients seen per month (Direct Impact) per CSRT</th>
<th>RO hours saved per month (Indirect Impact) per CSRT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior CSRTs (7) (8+ years experience)</td>
<td>Ave. = 14.2 new pts/mo Range 2 – 21 n = 5/7</td>
<td>Ave. = 23 hrs/mo Range 13 – 66 n = 7/7</td>
</tr>
<tr>
<td>Junior CSRTs (10*) (3+ years experience)</td>
<td>Ave. = 17 new pts/mo Range 3 – 36 n = 5/9</td>
<td>Ave. = 15.4 hrs/mo Range 2 – 37 n = 6/9</td>
</tr>
<tr>
<td>New CSRTs (7) (2+ years experience)</td>
<td>Ave. = 5.5 new pts/mo Range 3 – 8 n = 2/7</td>
<td>Ave. = 24 hrs/mo Range 16 – 39 n = 4/7</td>
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<tr>
<td><strong>AVERAGE</strong></td>
<td>12 new patients/month</td>
<td>21 hours/month</td>
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</tbody>
</table>

*One CSRT on maternity leave.*
Will it:

i) Quantity
   • Save the system money or allow for increased patient capacity with the same money?
   • Allow patients to enter/move through the system more quickly?
   • Reduce the cost of HHR required to meet existing patient demands and/or optimize the use of HHR?

ii) Quality
   • Improve patient experience, outcomes and/or provider experiences? (e.g. new services, streamlining, etc.)

iii) Innovation and Knowledge Translation
   • Bring the promise of improved patient treatment, care and/or outcomes? (e.g. new technique, adoption of new technology, etc.)
Patient Satisfaction – Average Scores

1 = strongly agree; 5 = strongly disagree

n = 269
## Study 2008 - 2016

### Direct Supervisor Feedback – Semi-structured interview (2014)

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Quality, program innovation, service improvement</th>
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<tbody>
<tr>
<td></td>
<td>Stakeholder outcomes (team members, patients)</td>
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<tr>
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<td>Access to care and wait times</td>
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<td>Financial</td>
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<tr>
<td>Challenges</td>
<td>Team acceptance and integration</td>
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<td>Defining scope of work and managing stakeholders’ expectations</td>
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<td>Financial pressures</td>
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Radiation Therapists’ Satisfaction – Average Scores

1 = strongly disagree; 4 = strongly agree

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<tr>
<th>Aspect</th>
<th>New CSRTs</th>
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<td>Overall satisfaction</td>
<td>3.5</td>
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<tr>
<td>Improve career opportunities</td>
<td>2.7</td>
<td>2.6</td>
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<tr>
<td>Improve wages</td>
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<tr>
<td>Improve ability to specialize</td>
<td>3.2</td>
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n = 372
Will it:

i) **Quantity**
   - Save the system money or allow for increased patient capacity with the same money?
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iii) **Innovation and Knowledge Translation**
   - Bring the promise of improved patient treatment, care and/or outcomes? (e.g. new technique, adoption of new technology, etc.)

**Study 2008 - 2016**
Study 2008 - 2016

Knowledge Dissemination and Innovation Self-Reported Data

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<tr>
<th>Activity/Initiative</th>
<th>Number of activities/initiatives - ALL CSRTs</th>
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<td>2008</td>
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<tr>
<td>Presentations</td>
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<td>Total Activities/ Initiatives</td>
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Study 2008 - 2016

- National awards (CAMRT)
  - Best abstract
  - Best scientific manuscript
  - Young achiever
- Provincial awards (RTi3, CCO, etc.)
  - Best quality initiative
  - Top rated abstract
- Journal editorial boards, reviewers
- Conference contributions
- Posters, presentations, publications
- Grant capture
Study 2008 - 2016

Updated State
- Structures
- Processes
- Outcomes

Intervention

New state?
- Faster
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- Other?
Study 2008 - 2016

Models of Care Evaluation Framework

**MOC Goals**

1. Develop and implement best practice models of care to promote value for money
2. Identify and address regulatory, funding and policy barriers to enable new models of care
3. Enhance the ability to accurately predict HHR demand while incorporating changes in model of care

**Short-term Outcomes**

- Guidelines are received and understood
- New models are accepted by clinicians and patients of the pilots and programs
- Regulatory and policy barriers to new models of care are identified

**Intermediate Outcomes**

- Concordance with guidelines is improved
- New models improve or maintain patient/family experience
- Care is provided in the most appropriate setting
- Care is provided by the most appropriate health care provider
- New models are embedded in organizations
- Regulatory and policy barriers to new models of care are addressed locally

**Long-term Outcomes**

- New models improve or maintain patient outcomes
- Care is better coordinated
- New models demonstrate service efficiencies resulting in cost reduction
- New models demonstrate better value for money
- Provider satisfaction with role is improved or maintained
- HHR use is optimized
- New models result in system changes
- New models and funding mechanisms aligned

**Impact**

- Cancer care is patient and family-centred
- Contribute to more integrated cancer care
- Contribute to cancer care system sustainability

Developed by CCO Models of Care Program and Evaluation Unit
Beginning with the end in mind
Planning pilot projects and other programmatic research for successful scaling up

WHO, 2011

12 key elements required for successful pilot projects.
Study 2008 - 2016

Remaining challenges

1. Prepare promote and facilitate necessary changes – policy, regulations, standards, etc.
2. Investigate other sources of funding beyond pilot.
3. Reach consensus on what “full scale” implementation looks like.
4. Pilot testing within existing resource constraints.
Act - ongoing

- Working with CAMRT to implement APRT certification process (pilot scheduled to end June 2017)
- Continued monitoring and tracking of CSRT activities
- Dissemination of results – presentations, manuscripts, workshops, guidelines, white papers
- Identifying opportunities to speak to loco-regional and national policy
- Advocacy work – CSRT CoP
Challenges - ongoing

- Sustainable funding
- Establishing scope of practice and expected standards
- Regulatory issues
- Transferability and generalizability
- Influencing policy loco-regionally
- Awareness
Acknowledgements

CSRTs
Supervisors

Inaugural Team
Pam Catton
Laura Zychla
Amanda Bolderston
Donna Lewis
Marcia Smoke
Julie Wenz

Cancer Care Ontario
Carina Simniceanu
Elizabeth Lockhart
Kate Bak
Michelle Ang
Eric Gutierrez
Padraig Warde
Anthony Whitton

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Sponsoring Cancer Centres

Ministry of Health and Long Term Care
Lynne Nagata

Ontario