

CPQR REPORT CARD

(2012-2017)



CPQR
Canadian Partnership for
Quality Radiotherapy
PCQR
Partenariat canadien pour
la qualité en radiothérapie

Mandate

To support and promote the universal availability of high quality and safe radiotherapy for all Canadians through system performance initiatives aimed at improving quality and mitigating risk.

In 2016 the Canadian Partnership for Quality Radiotherapy (CPQR) undertook an external evaluation to ensure that it achieved the goals set forth in 2012. The evaluation took place over the first 6 months of 2016 and was conducted by Ference & Company, a company with an established track record for conducting similar evaluations in the Canadian health policy sector. Using information gleaned through a comprehensive review of CPQR documentation, an environmental scan including a comparative analysis of similar programs in other countries, and 43 key informant interviews, Ference & Co reported on the success CPQR had achieved in meeting its intended objectives in a cost

Message from the Chair

Quality assurance and safety have always been a high priority for Canadian radiation treatment programs. However, historically, there was no overarching pan-Canadian harmonization of quality and safety practice, little opportunity to learn from one another and no easy way to translate best-practice from one centre, jurisdiction or province to other parts of the country. CPQR started in 2010 as an idea born of discussions among a few radiation oncologists, medical physicists and radiation therapists, who recognized an important opportunity to enhance quality and safety practice in Canada. These early conversations catalyzed a commitment from the three main professional organizations involved in the delivery of radiation treatment (CARO, COMP and CAMRT) and the Canadian Partnership Against Cancer (CPAC) to form an interdisciplinary patient-centered program focused on quality, safety and system performance improvement.

Over the past six years, CPQR has helped radiation treatment programs across Canada evaluate and improve their quality assurance and safety practices measured against a set of nationally validated key quality indicators (KQIs), ensure that the equipment and technologies used to treat patients are operating properly and efficiently, and that errors, when they do happen, are identified and reported to eliminate propagation across the country. Our nimble approach has also allowed us to be responsive to our patients, establishing a patient engagement framework and set of guidelines that encourages the inclusion of patients within key decision making areas and fosters a sense of partnership within this community.

CPQR initiatives have a measurable impact in each radiation treatment centre across the country, and a positive influence on the care of each patient undergoing radiation treatment.

This work could not have been possible without the initial and sustained involvement of our partners, and the commitment of individual radiation oncologists, medical physicists and radiation therapists from all regions of Canada who undertook this ambitious program of work and gave so generously of their time and energy to make an initial idea a reality.

Looking forward the CPQR successes to date have opened the door to new opportunities. WE are excited to be able to continue this work with the support of the Canadian radiation treatment community, and shape the direction of quality, safety and system performance initiatives in Canada beyond 2017.

Sincerely,
Michael Milosevic
Chair, CPQR

efficient manner. Visit cpqr.ca for a copy of the report.

Evaluation Highlights

Key Findings:

- CPQR has been very successful in accomplishing its objectives and achieving intended results
- CPQR has been very successful in generating a range of impacts in the radiation treatment community
- There is a continued need for CPQR
- CPQR is a cost-efficient initiative

The experience of CPQR is the first successful example in the Canadian health care system where professionals from different disciplines work together as a team to improve the quality and safety of their practice.

- Ference & Company, 2016

Recommendations:

- Continue CPQR programming and services since there is a demonstrated need for interdisciplinary cooperation and partnership to address quality issues
- Develop a sustainability plan to address outstanding identified needs
- Increase staff resources devoted to program delivery

Lessons Learned:

- Multidisciplinary collaborative approach can work well in the Canadian health care system
- Open communication, inclusion, respect for other opinions and perspective are the hallmarks of CPQRs success
- A combination of grassroots and top-down approaches for improving quality and safety in cancer care is most effective
- Being responsive to stakeholder needs helps build trust and increases participation
- Building consensus among key stakeholders is an important part of CPQR
- Stakeholder involvement should happen in early stages of development
- It takes time to complete successful collaborative projects
- Strong leadership and clear goals are necessary for successful implementation
- It is important to have a dedicated staff member to coordinate activities and oversee implementation
- Community spirit, common voice and a team approach can greatly facilitate success
- It is critical to document process and results

- The presence of patients at the decision making table can have a profound effect on professionals

Quality Assurance

In 2011 CPQR first released *Quality Assurance Guidelines for Canadian Radiation Treatment Programs* that outlines the overarching organizational structure and processes that are required to assure high quality

Leveraging Success: Peer Review

In 2010 and 2011 a review of literature demonstrated that independent peer review of radiation treatment plans could help to prevent some error and mistakes and help improve quality of care. CPQR included peer review indicators in its quality assurance guidelines and ensured that peer review indicators were included as part of the Accreditation Canada standards. In 2011, Cancer Care Ontario launched an initiative to increase peer review of plans for patients receiving radical intent radiation treatment across 14 provincial centres. In 2012 CPAC funded the expansion of this initiative across Canada. Today all radiation treatment centres are conducting peer review, and rated the importance of this process as high.

identify areas where local, regional or national activity could support quality and safety initiatives further. 3/4 of all Canadian centres had reported using the QRT guidelines to audit their program. Many centres reported progress with unfulfilled indicators, most commonly KQI#2 related to monitoring adherence to written policies and procedures and #3 related to ensuring documented terms of reference for the Radiation Treatment Quality Assurance Committee.

Most commonly perceived barriers focused around lack of resources to ensure compliance and limitations of a centre to track requested data. Moving forward, CPQR will work to identify potential facilitators to KQI uptake and work with partners to support initiatives to optimize quality improvement at a pan-Canadian level.

The Ference & Co evaluation supports the results of the audit, indicating that CPQR was very successful at increasing efforts by radiation treatment programs to assess and improve safety and quality of their services.

Key Informant Interview Score: 4.3/5.0

and safe radiation treatment, together with key quality indicators for programmatic assessment. Subsequent iterations reflect a comprehensive multi-stakeholder consensus process and pan-Canadian validation. The third version of the guideline, available at cpqr.ca, was released in December 2015 and key elements are being incorporated into national accreditation through the Qmentum program at Accreditation Canada in January 2017.

In 2015 an audit was conducted with all 44 radiation treatment programs in Canada to measure uptake of the guidelines, and pan-Canadian compliance against the Key Quality Indicators (KQI) contained within. Barriers to compliance were tracked in an effort to

KQIs by the numbers

Number of centres who conducted an audit for purposes of program improvement	33
Percentage of centres noting compliance with at least 60% of KQIs	90%
Percentage of centres indicating that resource shortages were limiting their ability to comply with certain indicators	67%

Technical Quality Control

CPQR and partner COMP (the Canadian Organization of Medical Physicists) committed to developing a set of guidelines aimed at providing direction for assuring optimal performance of radiation systems and equipment, working from outdated standards created by the Canadian Association of Provincial Cancer Agencies in the 1990's. In July 2016 it formally released the Technical Quality Control Suite of Guidelines, that includes an overarching guidance document and 15 system or equipment specific test documents. The documents reflect current best practice and were developed through extensive community consultation and field testing to ensure feasibility and real-world applicability.

In 2015 COMP conducted a survey to assess the impact of TQC guidelines on Canadian radiation treatment programs. The survey suggests that even before the full suite of guidelines was available, uptake and utilization was strong. The documents have been downloaded in Canada more than 1400 times, and in other countries more than 500 times. It is expected that the July 2016 release, and subsequent publication of the TQC Suite of Guidelines in the Journal of Applied Clinical Medical Physics (JACMP) will further support uptake and compliance. Moving forward, CPQR will support efforts of COMP to ensure continued guideline relevance which will include regular, periodic review of the tests included in the documents and assessment of new and emerging technologies to determine the need for their inclusion in the suite.

The results of the Ference & Co evaluation suggest that CPQR has been successful in helping radiation treatment programs to conduct regular quality control testing to ensure effective and safe operation of radiotherapy equipment and software. Key informants suggested that CPQR has had success in ensuring that these tests are conducted with a high degree of consistency and that its broad engagement of the medical physics community in both the development and validation of the tests augmented the buy-in and enthusiasm from the community, contributing to improved uptake.

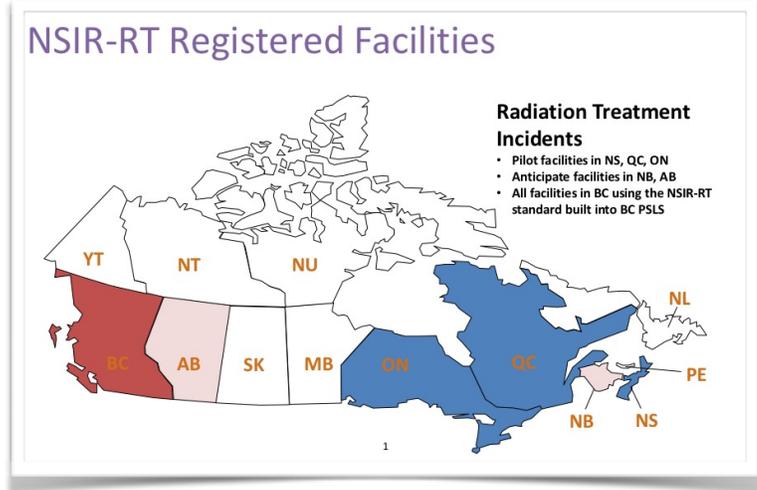
Key Informant Interview Score: 3.7/5.0

Case Study: Linear Accelerators

The Medical Linear Accelerators and Multileaf Collimators (MLA.2016.07.03) TQC was one of the first to be available to the medical physics community. In 2015 38% of centres indicated making changes to their program to improve alignment with the tests included in the MLA document, and 12% of the remaining centres reported already being fully compliant with at least 95% of the test parameters. The third iteration of this guideline has just been released and is available on the CPQR website.

National Incident Reporting

In September 2015 the Canadian Institute for Health Information (CIHI) began BETA testing the new National System for Incident Reporting — Radiation Treatment (NSIR-RT). The system, based on a taxonomy developed by CPQR and validated by the Canadian radiation treatment community, is being used by programs to report local incidents, and track and analyze these against provincial and national data. The pilot has broad Canadian representation, with almost half of all radiation treatment centres participating. Data gathered during the pilot will inform refinements to the taxonomy and identify areas requiring additional support and training.



The Ference & Co evaluation indicated that CPQR has been somewhat successful in supporting radiation treatment programs to report, track and analyze radiation treatment incidents, and to take consistent actions to reduce the level and severity of radiation treatment incidents. Key Informants felt that the development of the common incident taxonomy was the greatest deliverable, and will help support pan-Canadian understanding of radiation treatment incidents and that the robust development and review process will help promote understanding of the taxonomy and improve utilization across the country. Interviewees agreed that the creation of a professional body to analyze and interpret the incidents reported in the system and to report back to the community will be essential if the system is to support incident learning, and that education around data-entry workload may help address perceived barriers to use.

Key Informant Interview Score: 3.1/5.0

Looking beyond 2017, CPQR and CIHI are considering ways to support broader NSIR-RT utilization and uptake. This activity may include:

- Enhance technical functionality to improve compatibility with local and provincial reporting systems
- Enhance “skip logic” processes to facilitate the accuracy and consistency of submitted incident data
- Develop pan-Canadian expertise to support the future needs of a CIHI NSIR-RT advisory committee

Patient Engagement

Patients and the Canadian public are the ultimate beneficiaries of safe and effective radiation treatment. CPQR has incorporated patient involvement at all levels of its work, from steering committee to working

Leveraging Success: The Radiation Therapy Patient Charter

In 2014 at the request of its partner CARO, members of the CPQR Patient Engagement Working Group participated in the development of the Radiation Therapy Patient Charter. The charter defines a minimum set of rights or radiation oncology care from a patient's perspective and can also help radiation treatment programs establish their commitment to patient-centered care, patient engagement and education.

The charter was formally released at the CARO ASM in September 2015, and today work is underway to actively promote its inclusion in patient education materials at radiation treatment centres across Canada.

Guidelines for Canadian Radiation Treatment Programs (PEG.2016.06.01) document was released in 2016. Developed with considerable input from the radiation treatment community, patients, and patient advocacy and education experts, the guideline provides direction for programs looking to ensure appropriate engagement of patients in direct care interactions and broader programmatic planning. The document is available online at cpqr.ca

The Ference & Co evaluation noted that CPQR is an international leader in patient engagement support, and key informants indicated that uptake of the PEG document will help radiation treatment programs across Canada meaningfully engage patients and improve their capacity to better address patient needs and priorities.

Moving forward, CPQR will work with its partners to support broader awareness of quality and safety activities within the patient and public populations.

Key Informant Interview Score: 3.3/5.0

group, and supports their continued, meaningful engagement through in-depth training and informal periodic “patient gab” sessions. Patient volunteers have presented at international conferences, represented CPQR at national symposia and participated as faculty members at radiation treatment continuing-education sessions. In the Ference & Co evaluation, patients reported feeling ownership of CPQR and its initiatives and believe that their involvement has contributed to a more patient-centered perspective on programming and priorities.

In addition to developing an internal process and structure that enables comprehensive patient engagement, the *Patient Engagement*

From the very first Steering Committee meeting I attended I was treated like a colleague, not just a patient. My opinions and ideas are not only listened to but implemented. I feel valued.

Lianne Wilson,
CPQR Patient Representative