

### “How are you today?”: Partnering with Patient Volunteers to Enhance Documentation in Radiation Therapy Practice



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**Purpose:** Person centred care (PCC) is fundamental to the provision of quality care. Inherent in PCC is the need to embed the voice of the person in all aspects of care by sharing their voice with the healthcare team through clear and consistent documentation. Recognizing this importance, the Radiation Therapy Department sought to improve documentation by Radiation Therapists (MRT (T)) through the adoption of SBAR: a validated tool for structured communication in health care. While SBAR had been introduced to radiation therapists it was not widely used in practice. A novel training approach was developed to reintroduce SBAR, adhere to the principles of PCC and support patients in the role as educators.

**Methods:** The documentation committee designed a training session to facilitate knowledge to practice transfer by providing MRT(T)s the opportunity to build confidence with and an appreciation of SBAR in a simulated environment. Central to the experiential learning design was the adoption of patient ‘actors’ into the training sessions. While providing relevant theoretical information on SBAR, the focus of the sessions was the interaction, including documentation, between the patient ‘actors’ and the MRT(T)s. Through a series of simulated role plays, the MRT(T)s were provided with peer and patient ‘actor’ feedback on verbal and written documentation. Patient ‘actors’, as participants in the documentation process, provided feedback based on their perception of how the documentation represented their voice. Facilitators from the working group were present to guide the participants through each scenario, assist with utilizing the framework and promote reflection by participants. Evaluation was conducted through pre, post and six week post surveys. The pre-session survey was framed to gain insight into therapists’ self-reported knowledge of SBAR and use in practice. Post session evaluations included questions directed at therapists’ confidence to use the SBAR tool and their commitment to implement the tool into practice.

**Results:** Nineteen training sessions were conducted with 111 MRT(T)s, 14 facilitators and 13 patient volunteers. Scheduling challenges were overcome by the support of administration, peer MRT(T)s and volunteer services coordinators. Design of the sessions was purposeful to foster a supportive learning environment and addressed concerns of potential unease of MRT(T)s with the incorporation of patients as active participants in the training. Having patients as participants created an authentic simulation of patient/therapist interaction and offered MRT(T)s the opportunity to receive feedback on the effectiveness and style of their communication.

**Conclusions:** Comparison of surveys resulted in a 50% increase in MRT (T) confidence with SBAR use. This increase in confidence in ability to use SBAR was maintained in the 6 week post mark. Commitment to use SBAR in practice post session was 90% with 85 % of respondents at 6 weeks stating they had applied SBAR in their documentation. The survey comments support for the interactive, collaborative and practical nature of the sessions with the majority valuing the contribution of the patient volunteers. By situating the training in a simulation environment, the MRT(T)s were provided with practice opportunities and received immediate feedback from multiple sources. Furthermore, by involving patient volunteers, the sessions provided the opportunity to embed patient voice into the training process.

### Harnessing Interprofessional Expertise and Patient Lived Experience: Developing a Care Pathway for Gynecological Cancer Patients Receiving Interstitial Brachytherapy



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**Purpose:** To communicate the development of the interstitial brachytherapy care pathway for gynecological cancer patients.

**Methods:** Interstitial brachytherapy involves a multi-step, multi-day interprofessional workflow including needle insertion under anesthetic, imaging, treatment planning and delivery. While the advent of magnetic resonance imaging (MRI) integration into our practice has added greater precision in delineating targets and organs at risk, it has also resulted in greater complexity in the overall process. Both patients and staff have identified a knowledge gap in patients “knowing the next step” during their treatment, and both have voiced the need for the creation of a care pathway to ensure a clearer understanding of each step. A needs assessment was performed including chart audits of previous interstitial brachytherapy patients (n = 24). Pre-treatment worry and preparedness measures were collected from patients using the Cancer Treatment Scale (CaTS) survey. Successive Plan-Do-Study-Act (PDSA) cycles utilizing patient, family and interprofessional feedback informed the development of the patient care pathway.

**Results:** The needs assessment findings showed that our patients’ informational needs are not being met. 40% of patients reported moderate to high anxiety or well-being scores before treatment. The CaTS surveys revealed that 50% of patients would like more information regarding their treatment. In response to these findings, the care pathway tool was created and further revised incorporating feedback from patients, families and frontline staff. Future interstitial brachytherapy patients stand to benefit greatly from this pathway tool as it should help to address the previously identified gap in knowledge. The next challenge is to make the pathway’s informational content available on an online platform in tandem with relevant clinical appointments, thereby supplementing our written material and direct patient teaching with a modern educational approach.

**Conclusions:** The creation of a patient care pathway and increasing the knowledge of each step in the process has the potential to positively change the degree to which patients feel prepared for the complexity of interstitial brachytherapy treatments. A clear understanding of the steps involved should help to reduce pre-treatment worry and improve the brachytherapy patient experience. More broadly, the collaborative nature of the development of this care pathway demonstrates how interprofessional expertise along with patient and family input can be leveraged to drive the creation of a patient tool that can improve the health care experience.

### Development and Implementation of an Online Educational Module for the Deep Inspiration Breath-Hold Technique



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**Purpose:** To develop an online educational module for patients undergoing breast radiotherapy treatments using the Deep Inspiration Breath-Hold (DIBH) technique. The goal was to assist the patient with breathing control by developing new pedagogical approaches and interactive training materials that augment understanding, increase patient satisfaction, decrease anxiety, and enhance the overall treatment delivery efficiency.

**Methods:** The current procedure in our clinic is to ask the patient to attend a breathing control training session and to get familiar to the visual/audio breathing control equipment before the CT simulation appointment. However, with the level of stress and fatigue typical to cancer patients and the waiting time of several weeks between the training and start of treatment, patients tend to forget, or selectively remember important parts of the information conveyed during the training session. Ideally, the patient should be given the opportunity to prepare in advance of the training session and be able to review the highlights of the DIBH technique after the training session and before their actual treatment. Our approach was to develop an online educational material using still images, animations and simple text with suitable levels of interactivity and opportunities for guided discovery and self-pacing. To this end, a professional animator attended a live patient-training session in order to gather the information needed to produce the animations. These images and associated text were compiled as a pamphlet as well as a more comprehensive and dynamic on-line module. The online module consists of an animated movie and a series of still images as a step-by-step guide

that takes the patient through a breath-hold breathing practice and describes the entire radiotherapy treatment workflow. The team consisted of 1 radiation oncologist, 3 medical physicists, 2 radiation technologists, 1 health educator and 1 patient representative. Objective assessment preceding implementation of the education materials was conducted via transition-phase questionnaires, so as to identify (1) the needs/priorities and the type of information for patient education material from the perspective of the patient; (2) assess patient satisfaction, comprehension and level of treatment-related anxiety. Objective evaluation and assessments were implemented via post-implementation questionnaires and patient teach-back sessions, so as to (1) collect patient feedback on the implemented education material; (2) assess patient satisfaction, comprehension and level of treatment-related anxiety.

**Results:** The population that is seen in our clinic is multicultural, multilingual, with different levels of literacy, education and stress. The highly visual nature of multimedia-based imagery, as well as its potential for interactivity makes teaching clearer. The patients that receive the pamphlet and access the online module prior to the teaching session are more informed and prepared for their treatments. The challenges we have experienced are with those patients who are not habitually using a computer/internet or have no time to consult the online module.

**Conclusions:** Providing pertinent support for patients undergoing cancer treatment through patient education actively involves the patient in their treatment, fosters team building amongst different professions and has the overall benefit of a better treatment.

### A Radiation Therapist-Led Educational Intervention for Patients Receiving Radiotherapy For Gastro-Intestinal and Lung Cancer



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**Purpose:** Patients about to undergo radiotherapy experience significant anxiety and often have a limited knowledge of radiotherapy at the time of consent for treatment. This lack of knowledge and anxiety can make it difficult to make informed decisions. There is limited, but promising, evidence that a Radiation Therapist (RT)-led educational intervention may be beneficial for patients. However, this has only been evaluated in breast cancer patients. This study investigated whether a single RT-led educational intervention was associated with a decrease in patient anxiety and increased knowledge about radiotherapy.

**Methods:** A prospective randomized-controlled trial was used to compare patient anxiety and knowledge of radiotherapy for those that received standard-of-care education versus those that received education via a RT-led education session. This educational session was conducted by a RT prior to CT simulation and included information about: radiotherapy procedures, treatment planning and delivery process, sensory experiences during treatment, radiation side effects, and basic radiation principles. Patients were considered eligible if they were receiving radical radiation therapy for lung or gastrointestinal cancers. Patients were randomized to receive either standard of care or the educational intervention. For both groups, radiotherapy knowledge and anxiety was captured using validated questionnaires at baseline, prior to CT simulation and prior to the first fraction. The validated questionnaires included the Hospital Anxiety and Depression Scale (HADS), Cancer Treatment Scale (CaTS) and the Knowledge of Radiation Therapy Scale (K-RT).

**Results:** 70 patients provided written informed consent. Thirty-two were randomized to the standard of care arm and 38 were randomized to the intervention arm. Six patients withdrew from the study. The majority of patients were 60-79yrs, had a partner and a university-level education. Accrual was evenly distributed across the genders, and eligible disease sites. The majority of patients (73%) had little or no prior knowledge of radiotherapy. At baseline, there were no statistically significant differences between the cohorts regarding demographics, CaTS responses or K-RT responses. According to the HADS scale, patients reported substantial rates of baseline anxiety (18%). At CT simulation, significantly more patients in the intervention group reported feeling "well prepared for the planning procedure" (58% vs. 21%;

p 0.048), and felt that they "knew what was going to happen at the planning appointment" (61% vs. 16%; p 0.003). Just before the first treatment fraction, significantly more patients in the standard group agreed that they would find it helpful to receive more information about "possible side-effects of treatment" (50% vs. 29%; p 0.05) and "things they should do before treatment" (44% vs. 30%; p 0.0005). The intervention had no effect on patients' anxiety levels.

**Conclusions:** A single RT-led educational intervention was associated with a substantial increase in patient knowledge about radiotherapy. Performing that specialist intervention before the CT simulation, ameliorated patients' concerns much earlier in the process compared to standard education timelines. This has the potential to improve patients' experiences and overall satisfaction with the care provided while undergoing radiotherapy.

### Inspiring Change in Radiation Therapy Patient Education

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**Purpose:** To redevelop and harmonize radiation treatment education using a patient centered care approach, for the province of Alberta.

**Methods:** Utilize a multidisciplinary team, including patients and family members, to develop a comprehensive toolkit (video, class, booklet) of education materials for patients undergoing radiation treatment. Empower patients to take an active role in their care by applying a self-management approach and HealthChange<sup>®</sup> Methodology to each of the educational tools.

**Results:** Empowering patients to take an active role in their care by providing information in different ways, can improve their experience with the health-care system. Embracing the advantages of each educational approach (video, class, booklet), allows for enhanced care and knowledge translation. Providing consistent and comprehensive information about radiation treatment helps to provide equality in care throughout the province. Lack of time, energy, and the requirement of travel can present challenges for patients to participate in education sessions. Providing timely, appropriate, and versatile treatment information to a diverse patient population is difficult. Inspiring health change behaviors from informational videos, a class, and a booklet is a novel approach for Alberta.

**Conclusions:** Consistent, comprehensive, and versatile educational toolkit for patients undergoing radiation treatment. Improved web presence and access to radiation treatment information. Helpful tips and tools for patients to self-manage, and take a more active role in their health care.

### Progress Towards a Person-Centered Model of Care for Radiation Therapy

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**Purpose:** Our institution is developing a workflow to partner patients with a primary Radiation Therapist (RT) who performs all key procedures (e.g. simulation, planning, delivery, etc) over their radiotherapy course. Proof-of-concept was previously demonstrated in a small clinical pilot, suggesting improved continuity of care and patient satisfaction. The aim of this project was to determine clinical feasibility and stakeholder satisfaction in expanding this person-centered model of care over several treatment units and disease sites.

**Methods:** Using a 'plan-do-study-act' framework, this quality improvement initiative was piloted on four treatment linacs with 16 RTs, focusing on new patients with breast, upper gastrointestinal and head and neck cancers. Patients were triaged to this model based on disease site, technique complexity or an assumed need for additional supportive care – then partnered with a 'primary' RT at their first department visit. This RT aimed to perform the following point-of-care activities for their patients (schedule permitting): all education sessions (including new pre-simulation sessions and a 2-week