Practice guidelines for the care of patients undergoing radiation therapy
In line with the significant advances in technology and treatments for cancer over the last two decades, radiation oncology nursing has emerged as a specialised area of nursing practice in its own right. To date, advancement of the specialty has been led by experienced nurses seeking to provide quality patient care, predominantly in specialised radiation oncology settings.

Radiation therapy is generally delivered in the context of the ambulatory setting, however there will always be a number of patients who may require admission during their course of radiation therapy, especially if undergoing combined modality treatments. These patients are being cared for in the oncology and medical wards in our public and private hospitals. Until now, few resources have been available to standardise the quality of patient care across radiation oncology departments and inpatient care settings.

These ‘practice guidelines for care of patients undergoing radiation therapy’ have been developed in consultation with expert radiation therapy nurses from the Cancer Nurses Society of Australia, drawing on their clinical experience and knowledge to identify the key elements of patient care and service delivery to guide care that is critical to promoting the best possible patient outcomes.

This comprehensive guide to practice provides an invaluable resource to assist nurses in both the inpatient and outpatient setting to provide consistent, safe, appropriate care for patients undergoing radiation therapy, and guidance for evaluating care delivery. It can also be used in orientation programs for nurses new to radiation oncology and for managers seeking to guide service improvement in their units.

The guidelines have been developed to provide a framework that supports quality patient care and outcomes, whatever the care context. Nurses caring for radiation oncology patients across Australia will welcome these very clear guidelines.

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Principles underpinning the care of patients undergoing radiation therapy

**Principle 1:** Care delivery is tailored to the specific needs and preferences of each individual

**Principle 2:** A consistent approach is used for patient assessment and symptom management

**Principle 3:** The information and education needs of patients and their carer’s are identified and met

**Principle 4:** Healthcare professionals are skilled in identifying the potential effects of radiation therapy and the impact of treatment

**Principle 5:** Optimal patient outcomes are achieved through effective multidisciplinary teamwork

**Principle 6:** Patients and their carers have the opportunity to participate in all aspects of care
Practice guidelines for care of patients undergoing radiation therapy

The aim of these practice guidelines is to support healthcare professionals deliver optimal care to patients undergoing radiation therapy.

The intent of these consensus-based guidelines is to inform care delivery and promote consistent practice, irrespective of the service delivery setting.

These guidelines provide a framework for local adaptation, recognising that implementation will vary based on service models and resources. Adoption of these guidelines should be flexible, and based on individual needs and local circumstances.

These guidelines were informed by:
A review of current literature.
Focus group discussions with expert nursing clinicians.
A Delphi process to gain consensus from a panel of expert nurse clinicians.

These guidelines consist of:
Six practice principles that provide overarching statements for care of patients undergoing radiation therapy.
A series of practice elements for each principle articulating specific aspects of service delivery required to achieve the principles.
Supporting statements for each principle to provide clinicians with guidance on applying the best practice principles.
Principle 1: Care delivery is tailored to the specific needs and preferences of each individual

(Definition: Patient centred care is the provision of care that is respectful of, and responsive to, individual patient preferences, needs and values, ensuring that patient values guide all clinical decisions\(^1\))

1.1 Healthcare professionals work closely with patients and carers to address the complex lifestyle, self-care, and treatment demands that may affect patients’ response to diagnosis and treatment recommendations.

1.1.1 When a patient is not confident with the language or has an impaired ability to communicate, an interpreter or communication aid is used.

1.1.2 Care is patient-centred, multidimensional and comprehensive taking into consideration the individuals:
- Language – need for an interpreter
- Culture – awareness required when breaking bad news, disclosing a diagnosis and making decisions about treatment
- Social context
- Response to treatment
- Life experience
- Coping skills

1.2 Healthcare professionals create a care plan with patients and carers to meet cultural or personal preferences. Specific considerations include patient preference in relation to religious beliefs, breaking bad news, disclosing a new or changed diagnosis and making decisions about treatment.

1.2.1 The care plan will be flexible to meet the changing needs of the individual patient across the course of radiation therapy.

1.2.2 A comprehensive plan of care should incorporate:
- Goals of the patient and family
- Integration of the multidisciplinary team
- Assessment findings
- Treatment site/s
- Total dose and fractionation
- Treatment intent
- Strategy for early identification and treatment of potential side effects
- Cumulative effect of treatment
- Specific management strategies
- An escalation plan

1.3 Supportive care screening for patient’s needs occurs at the time of diagnosis, during early management and at key points throughout the cancer journey, using a validated screening tool.

\(^1\)Institute of Medicine (IOM)
Principle 2: A consistent approach is used for patient assessment and symptom management

2.1 A comprehensive assessment should be conducted and documented at baseline (first contact) and when there is a change in patient status.

2.1.1 The comprehensive assessment includes but is not limited to site specific assessment related to the radiation therapy treatment area.

2.1.2 A comprehensive assessment should include:
- Physical assessment (skin integrity, continence, cognitive and motor function, nutritional status, medical risk and deterioration, pain, symptoms)
- Psychosocial (social, cultural, sexual)
- Psychological (emotional, spiritual, mental)
- Current medications/allergies
- Falls risk, pressure injury risk and current infectious status
- Implanted devices
- Relevant past history
- Co-morbidities
- Advance Care Directive

2.1.3 Assessment of patients undergoing radiation therapy should also include:
- Radiation therapy treatment site
- Treatment intent
- Stage in prescribed treatment course
- Potential side effects of accumulated dose and fractionation
- Patients’ response to interventions

2.1.4 A comprehensive assessment should capture patients’ voices, exploring patients’ and families’:
- Beliefs and attitudes about the illness and treatment
- Knowledge about the illness and intent of treatment
- Expectations of treatment outcomes
- Understanding of potential side effects of treatment
- Understanding of their role
- Expectations of the treatment team

2.2 Assessment of patients undergoing radiation therapy should be conducted using a consistent assessment tool.

2.2.1 Each patient assessment is conducted using the same, valid, reliable assessment tool.

2.2.2 The assessment tool should be:
- Validated (empirically proven to accurately assess radiation therapy patients)
- Evidence based
- Structured to identify the severity of symptoms of treatment-related side effects
- Structured to identify the distress associated with symptoms of treatment side effects
- Used for each patient assessment
- A universal grading tool

2.2.3 Healthcare professionals are trained to use the assessment tool to ensure consistent use, interpretation and recording.

2.3 A comprehensive, individually tailored plan of care is formulated and documented within 24 hours of first contact.

2.3.1 The care record communicates timely patient specific information about the potential side effects of radiation therapy, the recommended interventions and the impact on the individual patient.

2.3.2 Documentation of the care of patients undergoing radiation therapy should include:
- Treatment site/s
- Treatment intent (e.g. curative, palliative)
- Treatment dose
- Potential side effects
- Symptom management goals
- Symptom and side effect escalation plan

2.3.3 A standard/evidence based escalation plan of recommended interventions for all potential radiation therapy side effects is accessible to healthcare professionals.
2.4 The same assessment strategy should be used across both inpatient and outpatient departments.

2.4.1 Common assessment tool/s are used by healthcare professionals across both inpatient and outpatient departments and findings are documented in a consistent and systematic way in a single care record.

2.4.2 The same medical record should be used to record patient assessment and care in both the inpatient and outpatient departments to:
   - Communicate to all health professionals involved in the patient’s care
   - Assist the team to make effective clinical decisions

2.4.3 During a hospital admission the following assessments are considered, documented and communicated at every change of shift:
   - Patients’ experience of treatment and care
   - Patients’ reaction to radiation therapy treatment
   - Any symptoms or side effects related to treatment
   - Recommended management strategies
   - Number of fractions (treatments) the patient has completed e.g. 12 out of 20

2.5 Healthcare organisations’ policies and procedures for clinical handover are used to standardise processes and information delivery to ensure consistent, timely and relevant communication at transfer of responsibility for patient care.

2.5.1 Clinical handover of some or all aspects of care for a patient to another person or professional group requires standardised processes and information sets.

2.5.2 Clinical handover must be appropriate to the clinical context in which handover occurs.
Principle 3: The information and education needs of patients and their carers are identified and met

3.1 Prior to commencing radiation therapy, an education session should be conducted to assess individual needs and requirements and provide patients and carers with written and verbal information regarding their individual treatment and care plan.

3.1.1 Patient information should:
- Be available in options that cater to the needs of culturally diverse groups
- Cater to limitations in communication e.g. blindness, deafness, cognitive dysfunction
- Use consistent language
- Be available at multiple points during patients’ treatment and recovery
- Be offered in such a way that patients can choose when to receive and/or review the information

3.1.2 Approaches to providing information and education to patients include:
- Education sessions with nursing staff prior to starting treatment
- Education sessions with nursing staff during treatment course
- Education session with nursing staff at the end of treatment
- Use of screening tools to identify areas of unmet supportive care need
- Family conferences

3.2 Healthcare professionals will tailor information and education to the needs and wishes of patients, with respect to their health situation, their readiness for information and their pre-existing knowledge.

3.2.1 Patient information should be tailored to the individual and include:
- Treatment site/s
- Treatment intent
- Potential side effects
- Symptom management
- Targeted interventions
- Patient role in care
- Discussions with medical specialists, nurses and allied health professionals
- Provision of site specific radiation therapy information resources

3.3 All healthcare professionals involved in care delivery use the same information resources to ensure consistent information to patients and carers, prior to, during and after radiation therapy.

3.3.1 Individualised patient treatment information should be readily accessible to all healthcare professionals involved in patients’ care.

3.3.2 Healthcare professionals communicate timely information with the patient and carer about treatment and management options during and after treatment.

3.4 Documentation in the care plan reflects the information and education delivered and the agreed plan of care.
Principle 4: Healthcare professionals are skilled in identifying the potential effects of radiation therapy and the impact of treatment on patients

4.1.1 Healthcare professionals must have the competencies to assess and manage patients undergoing radiation therapy including:
- Knowledge and skills in interviewing techniques
- Ability to physically assess and manage radiation therapy related side effects.
- Knowledge of referral pathways, protocols and other mechanisms to link patients with supportive care services specific to their needs

4.2 Healthcare organisations provide staff with the opportunity for ongoing professional development and education specific to radiation therapy.

4.2.1 Opportunity for ongoing professional development and education specific to radiation therapy should:
- Incorporate standardised education material
- Include an agreed approach to identifying and recognising treatment related consequences for patients undergoing radiation therapy
- Be available to all members of the multidisciplinary team.

4.2.2 All healthcare professionals involved in the care of patients undergoing radiation therapy have the opportunity to attend a structured orientation program within the radiation therapy department.
- Good communication across inpatient and outpatient departments.

4.3 Governance teams within organisations establish a systematic strategic model to support the healthcare professionals caring for patients undergoing radiation therapy that includes:
- Access to online radiation therapy resources
- Sufficient information technology access to online resources
- A radiation oncology expert in the outpatient setting ‘on-call’ to provide phone support to the inpatient teams in real time during radiation therapy department opening hours

4.4 The radiation therapy department implements a strategy to ensure communication of best practice to all healthcare professionals involved in patient care before, during and after radiation therapy.

4.4.1 All healthcare professionals involved in the patients’ care have access to resources to provide education specific to radiation therapy including approaches to identifying and recognising treatment related consequences.

4.4.2 Mechanisms to support continuity and coordination of care include:
- Systems for information transfer across and within services
- Sharing of information from multiple providers across different information systems
- Common information systems to facilitate streamlined transfer of clinical information
- Common information systems to access information.

4.5 The radiation therapy department has a responsibility to establish and maintain local communication pathways between care settings for ‘out of hours’ access to expert radiation therapy advice.
**Principle 5:** Optimal patient outcomes are achieved through effective multidisciplinary teamwork

5.1 A multidisciplinary team will manage the patient throughout the entire treatment continuum.

5.1.1 The overarching approach to cancer care should be multidisciplinary in order to:
- Improve quality of life
- Improve patient outcomes
- Improve delivery of best practice care
- Facilitate provision of information and support

5.1.2 Each patient should have a dedicated multidisciplinary team throughout the treatment journey.
- A team member should be designated to manage the care process at different points in the pathway, including the development and communication of a care plan

5.1.3 Patients and staff understand the roles and have the contact details for all healthcare professionals in the dedicated multidisciplinary team.

5.1.4 Multidisciplinary team members work collaboratively to promote safe and effective strategies for assessing, managing and minimising the impact of treatment and side effects on patients and their carers.

5.2 Patients and carers should have access to supportive care services based on identified needs including:
- Symptom management
- Self-care issues
- Treatment demands
- Psychosocial support needs
- Spiritual and religious needs

5.2.1 The whole multidisciplinary team share responsibility for supportive care through:
- Clear roles and responsibilities for each team member
- Broad multidisciplinary treatment planning and management processes to incorporate supportive care
- Clear documentation of the outcomes of supportive care screening and subsequent interventions
- Ensuring supportive care needs are communicated clearly.

5.3 Executive teams within healthcare organisations will ensure the generalist and specialist workforce caring for patients treated with radiation therapy are skilled to provide appropriate levels of supportive care including:
- Screening to identify individual supportive care needs
- Facilitating referrals to supportive care services
- Care planning and coordination
- Collaborating across disciplines and specialties

5.3.1 Resources that can be used to respond to patient needs are identified across sectors and appropriate referral pathways established.

5.4 Multidisciplinary team meetings are a formalised process for establishing agreed goals and outcomes tailored to individual patient needs and preferences and documented in the care plan.

5.4.1 Multidisciplinary team meetings should be formalised processes and have agreement on:
- Frequency
- Duration
- Attendees
- Agenda
- Timely documentation and communication of outcomes to all team members

5.4.2 Multidisciplinary team meetings are attended by a representative of all healthcare disciplines caring for the patient.
**Principle 6:** Patients and their carers have the opportunity to participate in all aspects of care

6.1 Executive teams within healthcare organisations adopt a model of care that encourages patient empowerment, self-determination, and participation in decision-making.

6.2 Healthcare professionals promote a collaborative environment where patients and carers actively participate in their own care and are able to identify times at which they need assistance from the health care team.

6.2.1 Healthcare professionals seek to clarify the hopes, wishes, preferences, needs, and concerns of patients and their carers.

6.3 Healthcare professionals work in partnership with patients and carers to ensure care is tailored to best meet the individual patients’ needs and preferences.

6.3.1 Engage patients and their families as partners in their care planning to:
- Identify goals and suitable strategies for symptom management
- Participate in treatment decisions
- Ensure a comprehensive approach to the plan of care