

What happens when you add a magnet to a radiotherapy Linac? Prioritising patient-centred care in a rapidly evolving treatment modality

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Introduction

The Statewide Magnetic Resonance integrated Linac (MR Linac) program offers state of the art treatment for radiotherapy patients across Victoria.

This advanced radiotherapy technology combines Magnetic Resonance Imaging (MRI) with the delivery of radiotherapy treatment and has the potential to advance treatment for complex cancers.

The enhanced visual acuity of the MRI, ability to monitor motion in real time during treatment delivery and daily plan adaptation provides opportunities to optimize patient care and improve clinical outcomes. With this in mind, we have had to re-think our approach to patient care and education on both a staff and consumer level.

Objectives

To provide an overview of the learnings, changes, challenges and solutions for optimising patient-centred care in the development of a new clinical service.

Description

A multidisciplinary team review of clinical guidelines, education materials and processes was completed. The following considerations were identified by the multidisciplinary team:

- MRI safety, emergency procedures and screening - Identification and management of implants, transdermal patches, blood glucose monitoring devices
- Identification, assessment and management of claustrophobia, anxiety, comfort and patient co-morbidities
- Side effect management
- Educational resources for staff and consumers

We identified that educational resources were insufficient to support both patients and clinical staff in relation to preparation for patient planning (simulation), treatment and what to expect during MR Linac appointments.



MRI Screening Assessment form & MR Linac Patient information brochure

Outcomes

The following resources have been updated, adapted and implemented to support patients and staff

- Radiotherapy specific MRI screening tools and patient information/education resources
- MRI safety educational resources
- Guidelines for managing implants, transdermal patches, blood glucose monitoring devices
- Processes to identify and manage patient anxiety, claustrophobia, comfort and co-morbidities
- MR Linac/treatment specific educational resources for patients
- Changes to patient review schedules



Conclusion

Integrating a state-of-the-art statewide radiotherapy service that utilizes the latest MRI digital technology has been an exciting venture for both patients and staff.

Assessing our current patient care pathways to identify gaps in guidelines, educational practices and resources has brought with it challenges as well as major rewards and learnings. Collectively, the team has accessed information and solutions with a strong focus on patient-centred care as the primary driver in our service development. Future directions will incorporate patient feedback to further enhance service delivery.

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