Implementation of Radiation Therapist Credentialling to safely reduce Radiation Oncologist attendance in stereotactic treatment delivery

Melanie Bauer[1], Nadine Hong[1], Marita Lawlor[1], Farshad Foroudi[1], Mori Wada[1], Richard Khor[1], Sweet Ping Ng[1]

[1]Department of Radiation Oncology, Austin Health – Olivia Newton-John Cancer Wellness and Research Centre, Heidelberg, Victoria, Australia

ISRS 2026 SYDNEY, AUSTRALIA 31ST MAY - 3RD JUNE

BACKGROUND

Stereotactic radiotherapy requires precise image guidance and clinical decision-making, traditionally supported by Radiation Oncologist (RO) attendance at each treatment fraction.

Increasing case volumes and expanding indications have made routine RO attendance resource-intensive.

With defined governance, training, and escalation pathways, Radiation Therapist (RT) stereotactic treatment credentialling supports RTs to undertake stereotactic image review and decision-making while ensuring safety and multidisciplinary oversight.

Figure 1: Reduction in RO time

RESULTS

A total of 340 stereotactic patients were treated between July 2024, and December 2025 (see Figure 4). RO attendance was needed for 46 hours of treatment time compared to 919.5 total treatment hours delivered, representing a 95% reduction and 873.5 hours saved (see Figure 1).

AIMS

- Establish a competency-based framework enabling RT led IGRT decision-making within defined clinical protocols, to safely reduce RO attendance during stereotactic treatment delivery maintaining clinical governance.
- Evaluate the impact on RO workload and treatment efficiency using a risk-stratified model.

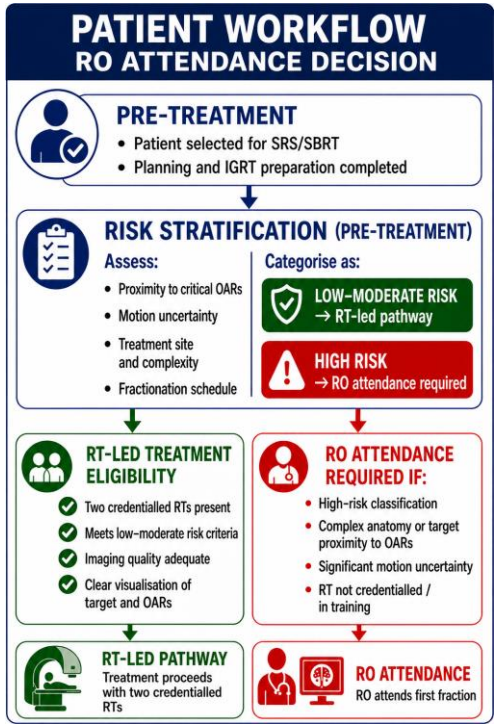

Figure 2: Patient workflow for RO attendance

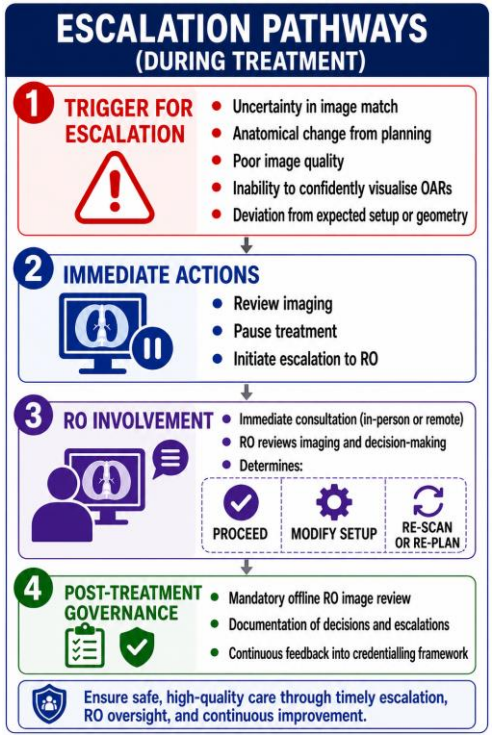

Figure 3: Escalation Pathways

METHOD

The stereotactic RT credentialling program was implemented in 2021, incorporating structured education, competency-based assessment, and supervised clinical training. RTs have been credentialled to assess stereotactic imaging and decide treatment suitability within defined protocols.

A risk-stratified model guided RO attendance based on OAR proximity, motion uncertainty, treatment site, and fractionation. Low-to-moderate risk cases were managed by credentialled RTs, with escalation pathways, as shown in Figure 3.

CONCLUSION

RT credentialling provides a scalable approach to RT-led stereotactic IGRT. This model enables a safe reduction in RO attendance during treatment delivery while maintaining governance, safety, sustainable workforce development and clinical decision-making integrity.

Figure 4: Key Metrics Summary

REFERENCES

1. Austin Health. Stereotactic Treatment Credentialling Program. Internal policy document, 2020.
2. Austin Health. Radiation Oncologist Review of Stereotactic Imaging. Internal guideline, 2024. Data source: Retrospective review, Austin Health (July 2024–December 2025).