SAFETY BULLETIN

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

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Reusable guide tubes for brachytherapy

Target Audience: Healthcare professionals (medical physicists, radiation therapists, radiation oncologists) involved in the preparation, delivery and administration of brachytherapy; leaders of radiation oncology departments; professional practice leaders.

Key Issue: Potential variation in the length of reusable transfer guide tubes involved in the delivery of HDR brachytherapy may lead to incorrect positioning of the HDR source during treatment.

Background Information

A cancer centre in Canada identified a difference in the length of a reusable transfer guide tube for HDR treatment from the length indicated on the manufacturer label. The incident was submitted to the National System for Incident Reporting – Radiation Treatment (NSIR-RT). CPQR was notified by the originating province, and agreed that the incident warranted dissemination to cancer programs across the country.

Incorrect length of the transfer guide tube may result in a patient receiving treatment with the HDR source in an incorrect position. This may result in a variation in dosing from what was prescribed and may adversely affect a patient's outcome. While the investigation into this incident is ongoing, and additional details may not be available for some time, CPQR is providing the following recommendations to help programs determine whether such incidents are possible within their centre.

Healthcare Professionals are advised to:

- Measure all transfer guide tubes
- Ensure that their medical physics checks align with the tests included in the Technical Quality Control Guideline for Brachytherapy Remote Afterloaders or equivalent.
- Report any similar incidents to their hospital incident reporting program and administration as per their hospital's policy. CPQR also encourages reporting to NSIR-RT.
- Report any variation in expected transfer guide tube length to the manufacturer.