Radiotherapy incident management at the McGill University Health Centre: standardization, workflow, and collaboration

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Safety Incident Learning System (SaILS)

• Most Canadian radiotherapy centres currently utilize unstandardized internal systems for incident reporting
• Goal: Standardize incident reporting in radiotherapy and ensure consistent reporting in order to facilitate collaborative learning, prevent incident recurrence, and ultimately improve patient safety
• The Canadian Partnership for Quality Radiotherapy, in collaboration with the Canadian Institute for Health Information, is developing the National System for Incident Reporting – Radiation Therapy (NSIR-RT)
• NSIR-RT includes an incident reporting taxonomy specific to radiotherapy incidents
• We are adopting the NSIR-RT taxonomy for use at the MUHC via an online, database-driven, incident management system: the Safety Incident Learning System (SaILS)

• SaILS has been redesigned to integrate the NSIR-RT taxonomy into our workflow
• Our workflow includes an NSIR-RT compatible, paper form to capture preliminary discussion about incidents that may be otherwise lost in an online-only system

Workflow

- Incident
- Online Incident Tracking
- Analysis & Learning
- Transcribe to SaILS
- Investigation
- Discussion & Ameliorating Actions

Collaboration

- SaILS has been adapted from a workflow and code-base originally conceived and developed at The Ottawa Hospital Cancer Centre
- The new, NSIR-RT-compatible, SaILS will be available as open-source software for other Canadian centres to use
- By integrating SaILS into our clinic we can aid in validating the NSIR-RT taxonomy and ensure its completeness for robust yet concise incident reporting
- A suite of statistical tools are currently being integrated into SaILS to facilitate incident learning and identify issues in the radiotherapy workflow
- A batch upload feature will be integrated into SaILS to easily allow upload of anonymized incident data to the national radiotherapy incident database
- Expansion of statistical analysis tools at a national level, with a broader pool of incident data, will improve the statistical significance of results and trends from which all participating institutions may benefit

Acknowledgements

Canadian Partnership for Quality Radiotherapy
Natural Sciences and Engineering Research Council of Canada CREATE Program (Grant #432290)
The Ottawa Hospital Cancer Centre