

# Scoring Metrics: 1 (low) to 5 (high)

- **Applicability/Reach:** How broad is the reach of this use case to routine clinical use?
- **Safety:** What is the value or impact of the use case in terms of improved or enhanced patient safety?
- **Technical Ease of Implementation:** How easy is the use case to implement?
- **Industry Alignment:** How well does the use case align with strategic initiatives in the industry? (e.g. ASTRO initiatives and guidelines)

# Exchange of Brachytherapy Data - Summary

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# Overview of the Use Case

This profile defines the data to be transferred, accepted and displayed for several kinds of brachytherapy treatment plans using both low dose and high dose rate radioactive sources. This includes treatment planning, charting and treatment history data.

# The Problem

Brachytherapy data exchange between planning, delivery and information systems is not well defined.

- Brachy treatments do not generally follow the information workflow of external beam therapy (TPS □ OIS □ TDS □ OIS) and therefore are not electronically documented as well as external beam.
- Planning and reviewing combined brachy and external beam plans is often difficult.

# The Solution

- Create profiles for brachy, similar to BRTO and ARTI for external beam, that define the data objects and workflow for exchanging brachy data.
- Evaluate the potential for a TDW type profile for brachy treatments.

# The Benefit

- Clinicians will be able to view brachy and external beam plans and treatment histories in a combined data set.
- Digital transfer of data sets should reduce reliance on paper copies of brachy data

# Issues for Discussion

- Can existing external beam profiles used for exchanging treatment information be extended to brachy data or should new profiles be created for brachy data?

# Scoring Metric: Applicability / Reach

- Many clinics use brachy therapy as part of their treatment options and would benefit from the increased digitalization of the planning and delivery process.



# Scoring Metric: Safety

- Removing paper based errors from the brachy planning, charting and delivery process would improve overall patient safety.

# Scoring Metric: Technical Ease of Implementation

- This may be challenging for the vendor community to implement:
  - Most OIS charting systems are tailored for external beam and do not represent brachy treatments with sufficient charting elements.
  - Most HDR delivery systems are not designed to retrieve treatment information from the OIS.

# Scoring Metric: Industry Alignment

- TBD – yet to be tested