INTEGRATING THE HEALTHCARE ENTERPRISE – RADIATION ONCOLOGY (IHE-RO)

CLINICAL IMPACT STATEMENT

Region of Interest Template (ROIT)

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Description:

This profile provides a standard method for distributing naming conventions for anatomical structures and structure sets used in the course of radiation treatment planning. Naming conventions already exist for cooperative group clinical trials, but there is no automatic means to share these conventions for use in clinical treatment planning systems. Consistent naming will ensure ease of communication across institutions and software. Segmentation instructions provide a reminder of the extent of a region of interest to be included to increase consistency among clinicians. Color recommendations are provided to allow easy review across any institution. This profile will not develop the nomenclature standards, but will test adoption of AAPM task group 263 for standardized nomenclature.

Rationale for Profile Creation:

Currently there is no consistent and comprehensive approach to ROI naming. Having universally applied templates available for downloading at each necessary step in the planning process would improve productivity and communication, as clear expectations for each structure will be recognized across institutions. Currently time is being spent manually creating individually-mandated structures and deleting unused structures. Patients being transferred or receiving re-treatment could benefit from the ability to import and export the structure template.

Increasingly, multi-institutional clinical trials and patient registries are imposing requirements for consistent ROI naming to facilitate automated submission, quality assurance, and plan analysis. The use of templates for creating uniformly named ROIs will minimize the effort needed to ensure consistency with these requirements.

Clinical Impact:

Systems adhering to this profile will promote use of universally recognized structure sets, with same name, color, and when appropriate, Hounsfield ranges. This will promote standards of care across the field as well as improved accurate communication between institutions when describing and evaluating plans. Productivity at all stages of planning and evaluation will be improved.

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