

AbstractID: 8798 Title: Automatic analysis and presentation of DVH data based on custom constraints - a treatment planning report card

Purpose: To automatically compare dose volume histograms (DVHs) against a set of predetermined goals and constraints to facilitate pre-treatment plan review.

Materials and Methods: The internal scripting language of the treatment planning system (Pinnacle³, Philips Medical Systems, Milpitas CA) is used to prepare DVH data for evaluation against a set of constraints identified by ROI name. These settings can specify maximum percent volume by dose, maximum dose for a percent volume, or a maximum point dose. The results are displayed in a dialog box and can also be saved or printed for inclusion in the plan documentation.

Results: This program functions as planned, and completes its execution quickly. The dosimetrist's workflow is affected only marginally.

Conclusions: The extra information provided by this analysis has been valuable to the staff responsible for plan review.

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