

Delta^{4PT} 3D volumetric verification system

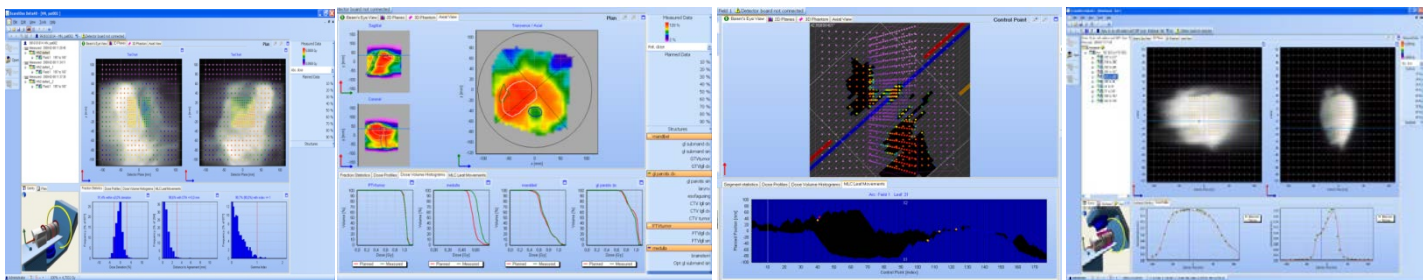
Reimbursement data for 2012

How does the Delta^{4PT} system benefit the patient?

The SmartArc[®] therapeutic treatment modality is a very sophisticated, new treatment approach that requires an equally complex approach to pretreatment patient verification and QA. Comprehensive quality assurance and verification must be volumetric in nature, including total coverage of the cross-section of the beam at all gantry angles throughout the arc and multiple points of measurement in the isocentric treatment target area. The Delta^{4PT} 3D volumetric verification system accomplishes this quickly and perfectly by measuring the dose with a dense grid of detectors, particularly in the region close to the isocenter, across two orthogonally-oriented detector planes in a fixed geometry, thus eliminating any missing information or errors that would otherwise occur through the combining of multiple measurements taken in a 2D plane. Delta^{4PT} has the highest concentration of diode detectors in the central region and can, therefore, yield the best, most accurate measurements and dose view at the central axis. As well, the pinpoint accuracy of Delta^{4PT}'s 1069 diodes avoids directional dependency and dose reporting errors due to dose volume averaging effects such as those produced by tools that use ionization chambers as their means of measurement.

How are the correct procedures documented and captured for this service?

The Delta^{4PT} 3D volumetric verification system procedure has previously been utilized for IMRT and Arc therapy verifications in the past. Currently Delta^{4PT} can utilize the dose per sub-arcs with Pinnacle³ version 9 when using SmartArc[®], another form of IMRT. This new type of verification was not possible with prior versions of Pinnacle as the planning systems did not provide sub-arc level information. Now with that information available from the Pinnacle³ version 9, users can verify the accuracy of dose delivery and the clinical relevance thereof for points along the arc. Dose can be calculated in Pinnacle³ for each of the control points and grouped together into sub-arcs with an upward maximum limit of 10 sub-arcs and then measured and compared at the same sub-arc level in Delta^{4PT}. Prior to this sub-arc level information being available, measurement and billing for the analysis of multiple sub-arcs was not possible. This was also true when IMRT was first utilized commercially in the year 2000. The physics world took a few years to develop a meaningful system of verification during the first period of introduction of IMRT in 2000.



The pictures left to right, (1), measured data, analysis of deviations and gamma index displayed, (2), D4DVH[™] for assessing clinical relevance, (3), 4D tools with time resolution and delivery sequence, (4) angle increments of control point doses in sub-arcs.

What Reimbursement CPT code(s) may be used for the Delta^{4PT} verification system?

The actual QA procedure is bundled into the main planning procedure, AMA CPT code 77301, "IMRT physics plan". The verification of the sub-arcs is achieved through CPT code 77300. We recommend dose calculations up to a maximum of 10 per SmartArc® or IMRT plan consistent with other systems. Absent the level of sub-arc analysis afforded by Delta4, the maximum amount of dose calculation one could charge would be one per arc plan.

The hospital payment for the verification is the following:

CPT Code	Description	Hospital APC payment	Hospital average non-Medicare payment
77300	Dose calculation	\$107.33	\$200 - \$300

The amounts listed below are for professional, technical and global payments and charges.

CPT Codes	Description	Average Medicare allowable Professional	Average Medicare allowable Technical	Average Medicare allowable Global	Average Commercial Charge Professional	Average Commercial Charge Technical	Average Commercial Charge Global
77300	Dose calculation	\$30.63	\$37.10	\$67.73	\$75 - \$150	\$200 - \$300	\$275 - \$450

WARNING: Reimbursement policies vary widely from insurer to insurer and reimbursement policies of the same insurer may vary in different sections of the United States. As reimbursement policies are subject to change, AMAC[®] will endeavor, on a periodic basis, to review and revise, as necessary, all pertinent reimbursement information. Therefore, the information contained herein may not be accurate as at the time of use. Prior to submission of a claim for reimbursement, the user should contact the insurer (i.e., Medicare, Medicaid or private payer) to verify applicable codes, reimbursement levels and coverage issues. All dollar amounts listed in this document are subject to geographical change and/or specific DRGs.

PLEASE NOTE:

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