

Technology and Equipment Committee

**Radiation Oncology Services -
Linear Accelerators**

Material Presented by

Cancer Centers of North Carolina



Cancer Centers of North Carolina

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April 12, 2008

RE: Linear accelerator utilization review in response to the Technology & Equipment Committee meeting on April 9, 2008.

Mr. Tom Elkins, Planner
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Tom:

Thank you for allowing such active participation and discussion in the most recent committee meeting. I do believe that it is time to change the utilization formula for assessing linear accelerator need in North Carolina as the technology and delivery of treatment in this specialized field of medicine (Radiation Oncology) has significantly advanced over the past 5 years. Personally, I believe that the most straightforward way to address this change is to use the system that you already have in place, but to change the multipliers associated with various procedures in calculating ESTVs. Again, the purpose of this process is to devise a way that most accurately reflects the utilization (average time that a patient is in a linear accelerator room) of linear accelerators across the state. This calculation is not designed to evaluate the effectiveness, quality or appropriateness of treatment – these indices are best evaluated by certification processes and national medical specialty societies. We should also look to remove some CPT codes and to add others as appropriate to evaluating linear accelerator utilization.

The basic premise of my recommendations is that the standard treatment time slot for a radiation therapy patient is 15 minutes. Based on an 8 hour treatment day (8am – 5pm) this would account for 32 standard (simple through complex) patient treatments delivered on a given linac. The ESTV conversion factors should relate back to time in relation to this accepted standard 15 minute treatment slot. For example, IMRT treatments average about 30 minutes and should be given a utilization factor of 2.0.

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My first recommendation is that the department make clear that the codes for weekly treatment management are not to be used by either hospital-based or freestanding facilities, since this code is redundant in accounting for linac utilization. This includes 77427 and 77432. Second, I would remove the line items for "Limb salvage irradiation" and "Hemibody irradiation" as these are simply complex radiation treatments accounted for by 77412-16. Third, I would add codes that are used for IGRT (image guided radiation therapy) since there is increased time with the patient on the linac table so that imaging and appropriate shifts can be made prior to delivering radiotherapy. Fourth, I would account for simple simulations that are performed on a linear accelerator by having facilities identify that procedure with a modifier. Fifth, I would recommend adding the treatment delivery codes related to SRS (stereotactic radiosurgery) and SRT (stereotactic radiation therapy) since these procedures do require longer blocks of time with the patient in the treatment room. These recommendations are addressed in the attached table.

Thank you for giving this your consideration. Please feel free to call me if you have any questions.

Sincerely,

John F. Reilly, M.D.
Director, Radiation Oncology
Cancer Centers of North Carolina
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Definition	CPT	ESIV Factor
Simple Radiation Treatment	77403-06	1.0
Intermediate Radiation Treatment	77407-11	1.0
Complex Radiation Treatment	77412-16	1.0
IMRT (Intensity Modulated RT)	77418	2.0
Port Films	77417	0.5
Ultrasound Guidance	76950	0.5
Cone Beam CT Guidance	77014	0.5
Stereoscopic X-ray Guidance	77421	0.5
SRS – single fraction, cranial lesion, cobalt-60 (Gamma Knife).	77371	5.0
SRS – single fraction, cranial lesion, linac-based.	77372	4.0
SRT – includes image guidance, any body site, 1 or more lesions, not more than 5 treatments.	77373	3.0
Simple Simulation performed on the linear accelerator (-L).	77280-L	2.0

ISSUES

| BILLING AND CODING |

Stereotactic Radiosurgery and Radiotherapy Coding Essentials

by Cindy C. Parman, CPC, CPC-H, RCC

Stereotactic radiosurgery (SRS) is a form of computer-assisted radiation therapy for the destruction of lesions by high-dose radiation using 3D planning of convergent beam technologies. A high total radiation dose is delivered stereotactically to a small tumor volume through multiple discrete entry portals or arcs in a single fraction or a small number of fractions.

Physician offices and freestanding cancer centers report CPT procedure codes for all services related to SRS management and treatment delivery; however, hospitals are still required to use certain Level II Healthcare Common Procedure Coding System (HCPCS) codes developed by the Centers for Medicare & Medicaid Services (CMS) to define SRS treatment delivery services reported under the Outpatient Prospective Payment System (OPPS). Of note, the computer planning charges are reported with the same code set used for 3D conformal planning.

The stereotactic procedure codes can be categorized as:

1. Treatment delivery (facility) or treatment management (professional)
2. Treatment of cranial lesions or treatment of extracranial areas
3. Single fraction radiosurgery or fractionated stereotactic radiotherapy.

Cobalt-60 Treatment Delivery—Single Session

Procedure code 77371 is defined as: radiation treatment delivery, stereotactic radiosurgery (SRS), complete course of treatment of cranial lesion(s) consisting of one session; multi-source cobalt-60 based. The cobalt-60 technical treatment delivery code is reported regardless of the type of facility. In other words, both hospitals and freestanding cancer centers report the same code for this therapy modality.

Linear Accelerator Treatment Delivery—Single Session

Procedure code 77372 is defined as: radiation treatment delivery, stereotactic radiosurgery (SRS), complete course of treatment of cranial lesion(s) consisting of one session; linear accelerator-based. While freestanding cancer centers and physician offices can charge for this procedure, this code is *not* reimbursed by Medicare under OPPS. Instead, hospitals must report HCPCS Level II code G0173 (stereotactic radiosurgery, complete course of therapy in one session). As indicated in the code definition, the complete course of therapy must be delivered in a single treatment session. In addition, this code is not limited to the treatment of cranial lesions; any single-fraction radiosurgery treatment can be reported to Medicare with this HCPCS Level II code.

Linear Accelerator Treatment Delivery—Fractionated

Fractionated radiosurgery occurs when the total radiation dose is delivered to the patient in five fractions or less. Radiosurgery cannot be coded as a boost to external beam treatment, unless permitted by written payer policy. Procedure code 77373 is defined as stereotactic body radiation therapy, treatment delivery, per fraction to one or more lesions, including image guidance, entire course not to exceed five fractions. Freestanding cancer centers and physician offices can report procedure code 77373 daily for a course of treatment to any body area (including fractionated intracranial radiosurgery) that consists of five hypofractions or less. Hospitals may also charge this procedure code for non-Medicare patients *only*.

Under OPPS, hospitals must use HCPCS Level II G0251 (linear accelerator-based stereotactic radiosurgery, delivery including collima-

tor changes and custom plugging, fractionated treatment, all lesions, per session, maximum five sessions per course of treatment). If the planned course of therapy will exceed five treatment sessions, conventional treatment delivery codes (procedure codes 77402-77416) must be assigned for each treatment day. As a result, it would *not* be appropriate to assign G0251 for the first five treatment days and then assign standard treatment delivery codes for the balance of therapy.

Image-guided Robotic SRS Treatment Delivery

CMS distinguishes linear accelerator-based SRS into two categories: gantry-based systems and image-guided robotic systems (see Transmittal 1139, dated Dec. 22, 2006). As such, the agency has assigned separate HCPCS Level II codes for robotic image-guided SRS delivery. Hospitals must bill HCPCS code G0339 (image-guided robotic linear accelerator-based stereotactic radiosurgery, complete course of therapy in one session or first session of fractionated treatment) for the first session. Hospitals should bill HCPCS code G0340 (image-guided robotic linear accelerator-based stereotactic radiosurgery, delivery including collimator changes and custom plugging, fractionated treatment, all lesions, per session, second through fifth sessions, maximum five sessions per course of therapy) for the second through fifth sessions. These codes are only reported when the equipment used to deliver the radiosurgery meets the CMS definition as outlined in Transmittal 1139. (This transmittal can be found online at: www.cms.hhs.gov/transmittals/downloads/R1139CP.pdf) In addition, these codes are not limited to a particular diagnosis, so local carriers and private payer policies determine reimbursement amounts.

For non-robotic image-guided SRS delivery, hospitals must bill

Table 1. Stereotactic Radiosurgery and Radiotherapy Procedure Codes

Single Fraction Delivery (Technical)	77371	Radiation treatment delivery, stereotactic radiosurgery, complete course of treatment of cranial lesion(s) consisting of 1 session; multi-source cobalt-60 based
	77372	Radiation treatment delivery, stereotactic radiosurgery, complete course of treatment of cranial lesion(s) consisting of 1 session; linear-accelerator-based
	G0173	Stereotactic radiosurgery, complete course of therapy in 1 session
	G0339	Image-guided robotic linear-accelerator-based stereotactic radiosurgery, complete course of therapy in 1 session or first session of fractionated treatment
Professional Management	77432	Stereotactic radiation treatment management of cranial lesion(s) (complete course of treatment consisting of 1 session)
	77435	Stereotactic body radiation therapy, treatment management, per treatment course, to 1 or more lesions, including image guidance, entire course not to exceed 5 fractions
	77373	Stereotactic body radiation therapy, treatment delivery, per fraction to 1 or more lesions, including image guidance, entire course not to exceed 5 fractions
Fractionated Delivery (Technical)	G0251	Linear-accelerator-based stereotactic radiosurgery, delivery including collimator changes and custom plugging, fractionated treatment, all lesions, per session, maximum 5 sessions per course of treatment
	G0339 + G0340	Image-guided robotic linear-accelerator-based stereotactic radiosurgery, complete course of therapy in 1 session or first session of fractionated treatment Image-guided robotic linear-accelerator-based stereotactic radiosurgery, delivery including collimator changes and custom plugging, fractionated treatment, all lesions, per session, second through fifth sessions, maximum 5 sessions per course of therapy
	77435	Stereotactic body radiation therapy, treatment management, per treatment course, to 1 or more lesions, including image guidance, entire course not to exceed 5 fractions

G0173 if the delivery occurs in one session and G0251 for delivery per session if delivery occurs during multiple sessions (not to exceed five sessions).

Professional Treatment Management


Two unique codes are available to report the professional component of stereotactic radiosurgery procedures: 77432 and 77435.

Professional code 77432 is limited to treatments where the total dose is delivered to a cranial lesion in a single fraction of treatment. It is *not* correct to report this code for management of the first treatment of a fractionated course of therapy. Instead, professional code 77435 (stereotactic body radiation therapy, treatment management, per treat-

ment course, to one or more lesions, including image guidance, entire course not to exceed five fractions) is used to charge for fractionated treatment management.

Code 77435 is reported with one unit to report the management of the course of fractionated stereotactic treatment delivery to any body area, including fractionated intracranial radiosurgery. This professional treatment management service includes constant physician attendance during the daily treatments, contemporaneous review of all images taken throughout the course of the treatment to verify target localization, and assessment of tumor tracking and gating applications. If the planned course of therapy will exceed a total of five fractions, code 77435 is not

reported. Non-stereotactic codes 77427 and 77431 are reported when the definition does not meet the criteria to report stereotactic radiosurgery.

When reporting claims information, several procedure codes for stereotactic radiosurgery treatment delivery and management are available. Keep in mind that these codes provide for increased specificity. At the same time, it is important to remember that reimbursement for these technologies is not driven solely by the existence of codes or documentation of medical necessity, but will instead be determined by individual insurance payor policies. 

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