AAPM MIDWEST CHAPTER SPRING MEETING ISSUES & REIMBURSEMENT IN PHYSICS



Presentation by James E. Hugh III, MHA, CHBME, ROCC ® Contributions by Linda L. Lively, MHA, CCS-P, RCC, CHBME, ROCC ®

> April 21, 2007 Chicago, IL

Copyright AMAC® 2007

DISCLAIMER

- 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 (while accurate at the time of print) may not be accurate 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 payor) to verify applicable codes and reimbursement levels.
- PLEASE NOTE: All five-digit numeric CPT codes, descriptions, instructions and guidelines are Copyright 2006 of the American Medical Association. To purchase AMA's products please contact the American Medical Association at 800-634-6922. AMAC® assumes no responsibility for the consequences related to the use of information contained in this publication. All codes presented in this presentation are for informational purposes only. Presented is a menu of codes not intended for treatment prescription guidelines. AMAC® realizes there are variations between physicians, clinical staff and hospitals concerning the performance of procedures, depending upon physician technique and/or education/training. All codes and descriptions are excerpted from the AMA CPT-4 Codebook, AMA case studies and the ACR/ASTRO users guide 2005 & 2007. DRG guidelines will determine inpatient reimbursement for Medicare recipients. Only the specific services ordered, performed and documented by the healthcare provider should be billed. Procedures and/or other operative reports should be detailed, dictated, signed and placed in the medical chart.

Agenda



- Physics Billing; Who is responsible?
- Regulations
- Physics plans
- Ancillary physics
- Brachytherapy
- IGRT
- Radiosurgery



PHYSICS RESPONSIBILITY IN BILLING •Department leaders Decision makers and caring Recording and documentation of procedures Systems - charge capture and EMR Education Physics generally has the highest level of education Focus and attention to detail Equipment •Staff Planning Outcomes •Revenue Copyright AMAC® 2007 Oversight

Δ

PHYSICS RESPONSIBILITY IN BILLING

 Major income producers Average 1/3 of revenue generated High costs as well Learning the business model Business education a must Technology Physics services are more important today More expertise •Updates •Where do I find them?



Copyright AMAC® 2007

Transmittals:

• 32 December 19, 2003 When billing for the planning of IMRT treatment services CPT codes 77280 77295, 77300, 77305 -77321, 77336, and 77370 are not to be billed in addition to 77301; however charges for those services should be included in the charge associated with CPT code 77301.

Transmittals:

132 March 30, 2004
 If using CPT code 77301 to report IMRT planning services, do not report CPT 77301

 <u>with the same line item date of service</u> reported for CPT codes 77280 - 77295, 77305 - 77321, or 77336 if these codes are also billed during a patient course of therapy.

Transmittals:

 786 December 16, 2005 When billing for the planning of IMRT treatment services CPT codes 77280-77295, 77305 -77321, 77336, and 77370 are not to be billed in addition to 77301; however charges for those services should be included in the charge associated with CPT code 77301.

Transmittals:

• 804 January 6, 2006 When billing for the planning of IMRT treatment services CPT codes 77280-77295, 77305 -77321, 77336, and 77370 are not to be billed in addition to 77301; however charges for those services should be included in the charge associated with CPT code 77301.

Transmittals:

• 896 March 24, 2006

Do not report CPT codes 77280-77295, 77305-77321, 77331, 77336, and 77370 when these services are directly linked to and performed as part of developing an IMRT plan that is reported using CPT code 77301. When the above-mentioned services are performed as part of developing an IMRT plan, the charges for these services should be included in the charge associated with CPT code 77301, even if the individual services associated with IMRT planning are performed on dates of service other than the date on which CPT code 77301 is reported.

IMRT 77301 Bundling Issue Hospitals

Transmittals:

- Billing for IMRT Planning and Deliver
- (Rev. 1139, Issued: 12-22-06; Effective: 01-01-07; Implementation: 01-02-07)
- Effective for services furnished on or after April 1, 2002, HCPCS • codes G0174 (IMRT delivery) and G0178 (IMRT planning) are no longer valid codes. HCPCS code G0174 has been replaced with CPT codes 77418 and 0073T for IMRT delivery and HCPCS code G0178 with CPT code 77301. Therefore, hospitals must use CPT codes 77418 or 0073T for IMRT delivery and CPT code 77301 for IMRT planning. Any of the CPT codes 77401 through 77416 or 77418 may be reported on the same day as long as the services are furnished at a separate treatment sessions. In these cases, modifier -59 must be appended to the appropriate codes. Additionally, in the context of billing 77301, regardless of the same or different dates of service, CPT codes 77280-77295, 77305-77321, 77331, 77336, and 77370 may only be billed in addition to 77301 if they are not provided as part of developing the IMRT treatment planopyright AMAC® 2007 11

IMRT 77301 Bundling Issue Hospitals Transmittals:

- 77301 Intensity modulated radiotherapy plan, including dosevolume histograms for target and critical structure partial tolerance specifications
- 77418 Intensity modulated treatment delivery, single or multiple fields/arcs, via narrow spatially and temporally modulated beams, binary, dynamic mlc, per treatment session
- 0073T Compensator-based beam modulation treatment delivery of inverse planned treatment using three or more high resolution (milled or cast) compensator convergent beam modulated fields, per treatment session
- 220.2 Additional Billing Instructions for IMRT Planning
- (Rev. 1139, Issued: 12-22-06; Effective: 01-01-07; Implementation: 01-02-07)
- Payment for the services identified by CPT codes 77280 through 77295, 77300, and 77305 through 77321, 77336, and 77370 are included in the APC payment for IMRT planning. Therefore, Copyright AMAC® 2007 these codes should not be billed in addition to the IMRT planning code

12

IMRT 77301 Bundling Issue Hospitals

Transmittals: 1209 March 21, 2007

 3. Clarification to Billing and Payment for Intensity Modulated Radiation Therapy (IMRT)

Planning

- In Transmittal 1139, CR 5438, issued December 22, 2006, we indicated that payment for the services identified by CPT codes 77280 through 77295, 77300, and 77305 through 77321, 77336, and 77370 was included in the APC payment for IMRT planning and therefore, these codes should not be billed in addition to the IMRT planning code.
- We are clarifying our policy in this transmittal. Specifically, payment for the services identified by CPT codes 77280-77295, 77305-77321, 77331, 77336, and 77370 is included in the APC payment for IMRT planning when these services are performed as part of developing an IMRT plan that is reported using CPT code 77301. Under those circumstances, these codes should not be billed in addition to CPT code 77301 for IMRT planning.

Typical Appropriate Clinical Staging

			U		
<u>Monday</u>	<u>Tuesday</u>	<u>Wednesda</u> ัง	<u>Thursday</u>	<u>Friday</u>	
Staging	Physics planning	Verification	Physics	Treatment	
CT – 77014	<u>77301</u> or 77295 or 77305 - 77315 or 77326- 77328	77300 – dose Verification MU or	77370 – Physics Consult	Treatment 77402-77418	
Immobilize 77334	Devices – 77334 MLC, Wedges Compensator	Verification	Final Verification	77280 - isocenter	
Simulation – 77290	77300 - dose Verification MU or	Film Dosimetry 77331 N/C		IGRT Daily CT, Fluoro, MV/KV	
77470 – Special Procedure				Devices – 77334 MLC Wedges Compensator	
77263 – Professional prescription		Copyright AMAC® 2007			14

Think, then Engage!

 Administration Freestanding and Hospital Payors Insurance companies Government Medicaid, Medicare and Tricare (champus) Bureaucrats – What do they understand •How do these regulations start?

AAPM REGULATIONS

•Make your own rules work in the real world

•University

•Well staffed •Real world

Understaffed



Physician Orders Procedures need written directives or orders: Non Physician Performed Services:

- Simulations, Treatments, Physics, Preparation...
- > Therapists, Nurses, Dosimetrists, Physicists
- If the physician is an integral part of the service they do not need to order the

service

Original Orders	New Order Dates & Doctor Initials	Original Orders	New Order Dates & Doctor Initials		
CT for placement of fields		CT for placement of fields			
Simulation		Simulation			
Pre – RT Simulation check		Pre – RT Simulation check			
3-D Treatment Plan		3-D Treatment Plan			
2-D Treatment Plan		2-D Treatment Plan			
IMRT Treatment Plan		IMRT Treatment Plan			
Brachytherapy plan		Brachytherapy plan			
Dose calculations		Dose calculations			
IGRT: Fluoro, CT, U/S, IGRT, KV/MV		□ IGRT: Fluoro, CT, U/S, IGRT, KV/MV			
 Microdosimetry Medical Necessity- Date of measurement - 		 Microdosimetry Medical Necessity- Date of measurement - 			
Continuing Physics Support		Continuing Physics Support			
 Special Physics Consult Reason - 		Special Physics Consult Reason -			
Original Order Date & Signature:	Copyright AMA	.C® 2007 •iginal Order Date & Signature:	18		



77295 - 3D Treatment Planning

"Code utilization: Code 77295 may be billed once per treatment course per treatment area; Precludes the use of 77315 for the same volume; Not appropriate for two dimensional or multiple two dimensional beams eye view plans without 3-D computer generated reconstruction; Dose volume histogram is part of 77295 and is not to be billed separately; Simulation procedures (77280-77290) may be performed if medically necessary to prepare the patient for treatment planning and to insure accurate treatment delivery; The professional component of 76375(now deleted) and 76370 (changed to 77014) should not be reported by the radiation oncologist. The professional component is included in CPT code 77295."

Prescription

Your

for Data

Management

and Financial

Success

"Documentation: A permanent record of computer generated 3-D tumor volume and critical structure or critical area reconstruction and 3-D representation of dose distribution in the form of dose clouds and/or dose volume histograms of volume of interest and dose to critical structures with evidence of review by physician."

Copyright AMAC® 2007



Your

Prescription

for Data Management

and Financial

Success

77295 - 3D Treatment Planning

"Medical Necessity: 3-D simulation is clinically warranted when one or more of the following exits: The volume of interest is irregular and in close proximity to normal structures that must be protected; The volume of interest is such that it can only be defined by MRI, CT, PET or Ultrasound; Multiple conformal portals are necessary to cover the volume of interest with close margins and protect immediate adjacent structures; Beam's eye view of multiple portals must be established for conformal treatment delivery; An immediately adjacent area has been irradiated and abutting irradiating area portals must be established with high precision; 3-D reconstruction of the tumor volume and the critical structure volume in brachytherapy cases is used to develop DVH for the tumor and critical structures." ACR/ASTRO

20

IMRT Planning 77301:

"Intensity modulated radiotherapy plan, including dose-volume histograms for target and critical structure partial tolerance specifications. (Dose plan is optimized using inverse or forward planning technique for modulated beam delivery-e.g., binary, dynamic MLC-to create highly conformal dose distribution. Computer plan distribution must be verified for positional accuracy based on dosimetric verification of the intensity map with verification of treatment set up and interpretation of verification methodology)".



Elements

IMRT DOCUMENTATION

Medical Necessity Physics Planning Verification Physician approval Verification Signed sealed Verification and delivered

Copyright AMAC® 2007



Your

Prescription for Data

Management

and Financial

Success

2 – D Teletherapy Isodose Plan

- 77305 Hand or computer calculated; simple one or two parallel opposed unmodified ports directed to a single area of interest
- 77310 Intermediate three or more treatment ports directed to a single area of interest

 77315 Complex Mantle or inverted Y, tangential ports, the use of wedges, compensators, complex blocking, rotational beam or special consideration; included in 77295 and not separately reportable



Brachytherapy Isodose Plan

- 77326 Simple, single plane, or to 4 sources for conventional; 1 to 8 sources remote afterloading
- 77327 Intermediate multiplane dosage calcs, 5 to 10 sources conventional; 9 to 12 sources remote afterloader

Prescription for Data

Your

Management

and Financial

Success

 77328 - Complex Multiplane isodose plan, volume implant, >10 sources, special spatial reconstruction, conventional; > 12 sources remote afterloader

Brachytherapy procedures – Take the lead!
 Convright AMAGE 2007

PHYSICS CONSULTS (77336 & 77370)

77336 "Continuing medical physics consultation, including assessment of treatment parameters, quality assurance of dose delivery, and review of patient treatment documentation in support of the radiation oncologist, reported per week of therapy"

77370 "Special medical radiation physics consultation"

"The special medical radiation physics consultation code is used when the radiation oncologist makes a direct request to the qualified medical physicist for a special consultative report or for specific physics services on an individual patient. Such a request may be made when the complexity of the treatment plan is of such magnitude that a thorough written analysis is necessary to address a specific problem or when the service to be performed requires the expertise of a qualified medical physicist. The clinical indication that justified the request foropthe aspecial physics consultation should also be documented."

25

Special Medical Physics Consult

Due to the complex nature involving the implantation of radioactive materials into intracavitary areas of the body during high dose rate brachytherapy, Dr. Ray D. Ashon has requested a consultation to evaluate the proper and optimal technique to be used in the selection of radioactive quantities, dose rates, and/or positioning, optimization and design of implantation guidance devices as related to the treatment of cancer of the endometrium. The proper combinations of the above-mentioned have been assessed prior to actual implantation, with the resultant isodose plan and doses to be received representing the optimal methodology for the patient's particular disease, providing an efficacious fulfillment of the prescribed doses.

Continuing Weekly Physics Check

					-	-			-		
Week Number	1	2	3	4	5	6	7	8	9	10	Close
Charge Capture System											
Consult Sheet											
DVH											
Isodose % line											
MU											
Dose											
Daily Total											
Total Dose											
Diodes											
Date											
Dosimetrist Initials											
Physicist Initials											

Created: 10/13/2006 JW E	ditect 10/13	/2006 JW Loc	ked: 10/13/200	36 J.W	0 <u>K</u>
Type: eChart Check 💌					Cancel
Subject					
Last Chart Check: 10/ 5/ This Check Since: 7-7 Diagnoses Checked -	16 17:13 By: I	MR			-
Diagnosis Category	74	Added/Edited	8/18/05	17:15	
Courses Dhecked -					
Course 1 JFS		Added/Edited	8718706	17:17	
Prescriptions Checked-					
Prescription Rt Breast JFS		Approved	8/18/06	17:24	
Tangents Bt breast Boost JFS	жШБ	5040 cGy Approved	© 180.cGy 9/15/06	к 28 13:25	
	e15	1400 cGp	© 200 cGy	к 7	~

TREATMENT DEVICES (77332-77334)

77332 "Treatment devices, design and construction; simple (simple block, simple bolus, breast board)"

77333 "Treatment devices, design and construction; intermediate (multiple blocks, stents, bite blocks, special bolus)"

77334 "Treatment devices, design and construction; complex (irregular blocks, special shields, compensators, wedges (EDW and standard), molds or casts)"

77331 "Special dosimetry (e.g., TLD, microdosimetry) (specify), only when prescribed by the treating physician"

"CPT code 77331 was intended to check the dosimetry at a point in a treatment port that is "outside of" the normal calculational parameters of the treatment planning system and calibration of the treatment device. CPT code 77331 is not intended for routine quality assurance monitoring. In most cases, the treatment units used to deliver the dose in radiotherapy procedures are characterized by the qualified medical physicist during acceptance testing and commissioning activities. Based on the commissioning data, the treatment planning system used to develop dose distributions or dose to a point reflects the particular treatment unit commissioned with these data, and separate dose measurements are not normally considered necessary. When the correct treatment unit parameters are set on the linear accelerator, the dose in the treated volume should be accurately portrayed by the treatment plan generated using these parameters."

Ordered case by case Tailored to the individual Why?, Where? And When?

77321 "Special teletherapy port plan, particles, hemi-body, total body"

"This code is utilized when planning for any special beam consideration is required (e.g., electrons, heavy particles). Some examples include the use of electrons in total skin irradiation, photons for hemibody irradiation, and proton or neutron beam therapy planning. Note that an isodose plan is an integral piece of documentation for work effort on this planning code. If a particle beam is planned for delivery without an isodose plan, then CPT 77300 should be assessed. An isodose plan need not be developed for hemi-body, total body photon or total skin electron plans. The radiation oncologist must document his/her involvement in the planning and selection of the special beam parameters and must make the final selection and initiation of the treatment process. Documentation requires that the special teletherapy port plan be reviewed, signed and dated by the radiation oncologist."

77300 "Basic radiation dosimetry calculation, central axis depth dose, TDF, NSD, gap calculation, off axis factor, tissue inhomogeneity factors, calculation of nonionizing radiation surface and depth dose, as required during course of treatment, only when prescribed by the treating physician". "The typical course of radiation therapy will consist of one to six dosimetry calculations, depending on the complexity of the case. (However, radiation treatments to the head/neck, prostate, and Hodgkin's disease may require eight or more calculations). Frequency in excess of the upper end of this range will require supporting documentation."

The verification of the plan calculations needs to be performed











PORT VERIFICATION FILMS (77417)

77417 - Therapeutic Radiology Port Films

- Q. What is the appropriate way to report the professional component of therapeutic radiology port film(s) as described in CPT code 77417?
- R. "From a CPT coding perspective, it would be appropriate to report the professional component by appending modifier -26 to code 77417. However, some third-party payors (e.g., Medicare) consider reimbursement for port verification films as a technical component only and do not recognize a physician component. The review and interpretation of port films is considered part of the weekly clinical treatment management by the physician. Therefore, it is important to be aware of local third-party payor reporting and reimbursement guidelines when reporting for the review and interpretation (e.g., professional component) of therapeutic radiology port film(s)." AMA 12-1997

ULTRASOUND

76950 - Ultrasonic guidance for placement of radiation therapy fields

Transmittal 105: 2/20/04 76950 - TC Diagnostic Supervision Indicator = 1

To bill globally or for hospital based physicians, the physician needs to be present and submit a report.

IGRT Codes - 77421

"Stereoscopic X-ray guidance for localization of target volume for the delivery of radiation Therapy", AMA 2006 Radiographic X-ray (kilo/megavoltage) is a procedure that can be performed using xray images for guiding the beam to the correct position to treat the tumor. The new code 77421 KV or MV X-Rays replaced the hospital code C9722 and was developed to report stereoscopic guidance to detect deviations between the actual and the planned target position for the delivery of radiation prior 3D or IMRT.
77421

77421 Clinical Vignettes from AMA Insiders View:

A radiation oncologist oversees the patient preparation, including placement of infrared markers. The infrared markers are placed either on the patient to monitor the patient's position or on the treatment couch to localize the position of the couch. Two sets of X rays are acquired to visualize internal anatomy or implanted marker positions immediately prior to treatment. This is done using kV or MV X-ray units that may be a combination of two kV X-ray units and two amorphous silicon flat panel detectors or an X-ray unit attached to the gantry or MV X rays with an electronic portal imaging device (EPID), which takes two orthogonal images.

77421

77421 Clinical Vignettes from AMA Insiders View: (cont)

These two high-resolution X rays are acquired prior to treatment delivery in order to visualize the internal anatomy or implanted markers. The stereoscopic X-ray images are compared with the imported digital reconstructed radiographs (DRRs) from the treatment planning system or generated DRRs from the stored computed tomography treatment planning scan data, which are in the same plane as the X rays taken. The DRRs serve as a reference for identifying rotational or movement discrepancies, positioning, and guidance for the delivery of radiation and enable real-time analysis of the targeted area. Alignment, registration, and fusion of the two images are done manually or automatically using previously implanted markers, direct visualization of the target volume, or surrounding bony anatomy.

77421

77421 Clinical Vignettes from AMA Insiders View: (cont) These procedures are done under the supervision of the radiation oncologist. The rotational errors of the patient setup and the table movement necessary to optimally align the patients target volume at the isocenter at the longitudinal lateral and vertical directions are calculated. The deviations, if present, are determined and corrected by adjusting the patient's treatment position to the treatment target volume isocenter. This is performed by applying the required translational shifts to the treatment couch performed by the therapist and done under physician supervision. The radiation oncologist reviews the images daily and compares with previous shifts. Feedback by the physician is given to the therapists about the adequacy of registrations and, if necessary, about the steps necessary to improve future registrations as well as for required treatment modifications (no daily physical (US), physician in office review on monitor).

77421 AMAC® Example

The following are some examples that may occur in a clinical setting. All the parameters may or may not need to be performed. The importance of the procedure is to identify the location of the tumor by digital images compare those to original images and localize the tumor and position the patient correctly within very small margins (mms).

Clinical example number one: The radiation oncologist oversees the patient preparation, including placement of infrared markers to monitor daily positioning of patient or treatment couch, using fiducial markers with set(s) of KV X-Ray images to localize the target volume prior to treatment (meaningful mm accuracy).

77421 AMAC® Example

Clinical example number two: The radiation oncologist oversees the patient preparation, including placement of patient using infrared markers or other means to monitor daily positioning of patient or treatment couch, using set(s) of KV X-Rays to the target volume prior to treatment. This type of system has the capability to take Fluoroscopy, CT and KV/MV X – Rays (meaningful mm accuracy).

Clinical example number three: The radiation oncologist oversees the patient preparation, including placement of patient using infrared markers or other means to monitor daily positioning of patient or treatment couch, possibly using fiducial markers and then set(s) of MV X-Rays to localize the target volume prior to treatment using EPID type systems (meaningful mm accuracy).

IGRT: Common Questions

- Can we charge a 77014 CT and a 77421 KV/MV X-Ray daily?
 - No, only one may be charged per day. The physician may order both, document both but bill only one.
- Can we charge the new IGRT code and a port film?
 - Only if ordered, and the port film is used for some other reason than tumor localization.
- Can we use this code for radiosurgery?
 - No, CMS and the AMA have made it clear the new code 77421 may not be used for radiosurgery (SRS, SRT or SBRT)



Fluoroscopic will be able to use AMA CPT code "76000 -Fluoroscopy (separate procedure)". This procedure may be billed each day, once per week or as many times as the physician orders the procedures. This code may be billed professionally as well.

IGRT

Your Prescription for Data Management and Financial Success





CT may be charged using AMA CPT code 77014- "Computed tomography guidance for placement of radiation therapy *fields*", for both hospitals and freestanding centers. This code should only be billed technically and should have case-by-case orders for each patient stating why the procedure is needed and the frequency of use.

IGRT: Capabilities & Reimbursement

Technology	Ultrasound	Portal Vision (IGRT only)	Combo	СВСТ
Capability	Ultrasound Guidance	X-ray guidance	X-ray and Fluoro	Volumetric 3D- 3D Matching
Туре	Interfraction	Interfraction	Interfraction Intrafraction	Interfraction
CPT Code	76950	77421	77421 76000	77014
Income	\$73.04 hospital \$47.14 office	\$67.45 hospital \$67 office	Hospital \$67.45 hospital \$79.34 \$67 office \$61.17 office	\$94.53 hospital \$94 office
Profession al Fee?	YES	YES	YES	YES

IGRT Reimbursement

Current Technical Reimbursement Codes	Hospitals	Clinics
CT – 77014	\$94.53	\$122.71
KV/MV – X-ray – 77421	\$67.45	\$110.83
Fluoroscopy – 76000	\$79.34	\$61.17
Ultrasound – 76950	\$73.04	\$47.14
Port Films or Digital 77417	\$43.60	\$20.51

Red = DRA for freestanding CMS will pay lower of the two



The patient was set up according to the laser lights in the desired treatment position. Orthogonal films were obtained using the KV/MV imager for the AP view and the KV/MV imager for the lateral view. The images were then compared to the DRRs from the planning CT, with particular attention given to the location of the:

_implanted fiducial seeds

_____anatomic landmarks After review of the merged images, it was determined that:

Date	Isocenter positioning was acceptable	Isocenter positioning was improved by shifts	Couch Shifts Vertical	Couch Shifts Longitudinal	Couch Shifts Lateral	Couch Shifts Couch Angle	Therapist Review And date	Shifts and Images Reviewed by MD (initials)

<u>The above can be modified for all IGRT,</u> <u>CBCT, KV/MV – X-Ray</u>

Copyright AMAC® 2007

Revenue Contribution of IGRT



-> Standard Payer Mix

Stereotactic Radiotherapy

Radiotherapy with a sharply delineated field, optimistically considered to be equivalent to resecting the irradiated region. Stedman's Medical Dictionary

Stereotactic Radiotherapy means the use of external radiation in conjunction with a stereotactic guidance device to very precisely deliver a therapeutic dose to a tissue volume. *NRC*





Stereotactic RadioSurgery/therapy

Definition Extracranial
 Outside of the cranial cavity.

>Body - The entire body

Definition Radiotherapy/Radiation Oncology "The medical specialty concerned with the use of ionizing radiation in the treatment of disease, the use of radiation in the treatment of neoplasm's".



Stereotactic Radiosurgery/therapy

TREATMENT DELIVERY CODES TECHNICAL

Prescription for Data Management and Financial Success

Your



Stereotactic Radiosurgery/therapy

Cranial, Extracranial & Body

G0173 - single session (Linac based)
Currently no specific body part regulation

Your Prescription for Data Management and Financial Success G0251 - Multi-session Linac (maximum 5 fractions)
 Currently no specific body part regulation

Stereotactic Radiosurgery/therapy >The Cranial, Extracranial & Body

 G0339 - Image-guided robotic linear accelerator-based Stereotactic Radiotherapy, complete course of therapy in one session, or first session of fractionated .
 G0340 - Image-guided robotic linear accelerator-based Stereotactic Radiotherapy, delivery including collimator changes and custom plugging, fractionated treatment, all lesions, per session, second through fifth sessions, maximum five sessions per course of treatment. Hospitals, Currently no specific body part regulation

Part B physician; C = Carriers price the code. Carriers will establish RVUs and payment amounts for these services, generally on an individual case basis following review of documentation, such as an operative report.



Stereotactic Radiosurgery 2007

≻Cranial Only

>77371 - single session Multisource cobalt treatment (G0243 in 2006)

Your Prescription for Data Management and Financial Success

Copyright AMAC® 2007



NEW CODES 2007

 77371 – Radiation treatment delivery, stereotactic radiosurgery (SRS), complete course of treatment of cerebral lesion(s) consisting of 1 session ; multi-source Cobalt 60 based (This replaces G0243 in 2007) Hospitals - \$8,510.16~ Technical only Freestanding - \$1,193~ (low, comment) RVUs – 30.3 (low, comment)



NEW CODES 2007

 77372 - Radiation treatment delivery, stereotactic radiosurgery (SRS), complete course of treatment of cerebral lesion(s) consisting of 1 session linear accelerator based
 Hospital – N/A Use G codes

Technical only Freestanding - \$905~ (low comment)

RVUs - 23.06 (low comment)



Your

NEW CODES 2007

- 77373 Stereotactic body radiation therapy, treatment delivery, per fraction to 1 or more lesions, including image guidance, entire course not to exceed 5 fractions
- Hospitals N/A use G codes
- Technical only Freestanding \$1,688~ (low, comment)
- RVUs 43 (low, comment)
- Replaces code 0082T Class III CPT
 - (emerging technology, services, and procedures)



Your

Stereotactic Radiosurgery/therapy

77336 - Continuing medical physics consultation, including assessment of treatment parameters, quality assurance of dose delivery, and review of patient treatment documentation in support of the radiation oncologist, reported per week of therapy Continuing physics

May be billed once for treatment courses, which are inclusive of only one or two fractions

Technical code only



Stereotactic Reimbursements 2007

A M	Current Technical Reimbursement Codes	Hospitals	Clinics
A	Stereotactic radiosurgery, STD one session – G0173	\$3,895.59	N/A
	Stereotactic radiosurgery, one session cobalt multi-source – 77371	\$8,510.16	\$1,193~
	Stereotactic radiosurgery, STD one session Linac – 77372	N/A	\$904~
	Linear accelerator-based, STD multi session SRS – G0251	\$1,249.18	N/A
Your	Stereotactic body radiotherapy, multi-session Linac – 77373	N/A	\$1,688~
Prescription for Data Management	Image-guided, robotic SRS, 1st treatment – G0339	\$3,895.59	Priced locally
and Financial Success	Image-guided, robotic SRT, treatments 2-5 G0340	\$2,644.95	Priced locally

Copyright AMAC® 2007

Stereotactic Crosswalk 2007

Current Technical Reimbursement Codes	Hospitals	Clinics
Stereotactic radiosurgery, one session – G0173	G0173	77372
Stereotactic radiosurgery, one session cobalt multi-source – 77371	77371	77371
Stereotactic radiosurgery, one session STD Linac – 77372	G0173	77372
STD Linear accelerator-based, multi session SRS – G0251	G0251	77373
Stereotactic body radiotherapy, multi- session Linac STD 77373	G0251	77373
Image-guided, robotic SRS, 1st treatment – G0339	G0339	G0339
Image-guided, robotic SRT, treatments 2-5 G0340	G0340	G0340



Your

Prescription for Data

Management

Success

Stereotactic Radiosurgery/therapy

TREATMENT MANAGEMENT CODES PROFESSIONAL



New Codes 2007

- 77435 Stereotactic body radiation therapy, treatment management, per treatment course, to one or more lesions, including image guidance, entire course not to exceed 5 fractions
- This is for all sites using multi-session method
- Professional \$629.91~ (low, comment)
- RVUs 18.3 (low, comment)
- Replaces code 0083T Class III CPT
 - (emerging technology, services, and procedures)

Prescription for Data Management and Financial Success

Your



Physician and Center Charges Radiation Oncology

>77432 - Stereotactic radiation treatment management of cerebral lesion(s) (complete course of treatment consisting of one session)

Professional only

Your Prescription for Data Management and Financial Success Procedure report required in chart

The verbiage will change to cranial lesions to cover brain and spine



STEREOTACTIC RADIOSURGERY/THERAPY PROCEDURE REPORT

Date of Procedure: Patient Name:

MR#: 11111111

DOB: 13/02/01 Diagnosis: Adenocarcinoma of the lung — stage T2N2M1 — brain, bone. Procedure: has known brain metastasis to his left frontal lobe region. The patient underwent head ring placement under the care of Dr. this , without incident. The patient had known low platelet count mornina. secondary to chemotherapy, but had a platelet transfusion as well as blood transfusion vesterday, which brought is platelet count up to 72,000, measured today. The patient was subsequently had a CT scan for treatment planning purposes. The CT scan was then fused with an MRJ scan obtained last week to again demonstrate the area of metastatic disease. The patient has two other guestionable areas noted in the brain measuring a few millimeters in diameter. These were not targeted at this time as at the moment they represent something probable, hut not definite areas of metastatic disease. MRI fusion was accomplished without problem with a high degree of accuracy. The patient underwent treatment planning with treatment planning system.

The patient. on the afternoon of _____, underwent stereotactic radiosurgery to a dose of 17 Gy at 81% isodose with five arcs of radiation therapy with a 2.75 cm cone utilizing asymmetric jaws to aid the conformality of the distribution. The patient tolerated the radiation without incident. The patient was discharged home and will remain on DRUGS. for at least one week, at which time we will attempt to taper him to a lower dose. I plan to see him one week in follow up and we will contact the patient tomorrow morning to check their status.

Ray D. Ashon, M.D.



Physician Charges Surgeon

≻61793 - Stereotactic radiosurgery (particle beam, gamma ray or linear accelerator), one or more sessions Need operative report

Code 61793 is intended to describe the physician work in treating a single lesion regardless of whether that treatment requires multiple isocenters or multiple sessions. As explained in the April 2004 CPT Assistant, code 61793 may be reported multiple times for multiple lesions using code 61793 alone for the first lesion and code 61793 appended by modifier 59, Distinct procedural service, or 51, Multiple procedures, depending upon payer policy requirements. It is important to note that this code should not be reported more than five times for any session. AMA

Physician Charges Surgeon

- If any lesion requires multiple isocenters and/or requires more complex targeting, then code 61793 should be reported appended by modifier 22, Unusual procedural services. Code 61793 is reported once per lesion treated whether one isocenter is used to treat the lesion or multiple isocenters are used to treat the lesion.
- Any additional sessions for the same lesion's) are inclusive of code 61793. According to the present wording of the code descriptor, it is not appropriate to report code 61793 appended by modifier *58, Staged or related procedure or service by the same physician during the postoperative period*, for any additional sessions.
- Lastly, it is not appropriate to report codes 20660, Application of cranial tongs, caliper, or stereotactic frame, including removal (separate procedure), or add-on code 61795, Stereotactic computer assisted volumetric (navigational) procedure, intracranial, extracranial, or spinal (List separately in addition to code for primary procedure), in addition to code 61793 because each of these two codes are considered inclusive components of code 61793. AMA

Prescription for Data Management and Financial Success

Your



Stereotactic Radiosurgery/therapy

TREATMENT PLANNING CODES

Your Prescription for Data Management and Financial Success

Copyright AMAC® 2007



3-D SRS/SRT Physics planning examples



Your Prescription for Data Management and Financial Success





Copyright AMAC® 2007



3-D SRS/SRT Physics Planning Examples

lethod: Coveraç	je 💷		
Tumor Volum	Prescription Isodose e: 38689 mm^3	9 Pct.: 80	
Tumor Covere	d: 32087 mm^3	Critical Covered: 0 mr Tissue Covered: 1833(
Tumor Pct. Covere	Prescribed I:	so Vol./Tumor Iso Vol.: 1.65	R
		FumorVol*PIV/(TIV)^2: 1.98 Dose/Prescribed Dose: 1.25	
	Close		STice 243



Your Prescription for Data Management and Financial Success



Stereotactic Radiosurgery/therapy

- Multi-source Cobalt
- In patient or out patient
- Outlier payments
- Linear Accelerator
- Single Session (Surgery)
- Fractionated (Therapy)

Your Prescription for Data Management

and Financial Success Multi-leaf Collimation and IMRT





Stereotactic Radiosurgery/therapy

77295 - Three-dimensional computer-generated three dimensional reconstruction of tumor volume and surrounding critical normal tissue structures from direct CT scans and/or MRI data in preparation for non-coplanar or coplanar therapy. The simulation utilizes documented three-dimensional beam's eye view volume-dose displays of multiple or moving beams. Documentation with three-dimensional volume reconstruction and dose distribution is required.

Your Prescription for Data Management and Financial Success One only - do not share with Neurosurgeon

Professional & technical



Stereotactic Radiosurgery/therapy

77301 - Intensity modulated radiotherapy plan, including dosevolume histograms for target and critical structure partial tolerance specifications

> One only - do not share with Neurosurgeon

Professional & technical

This code is under discussion for use in radiosurgery/therapy

Prescription for Data Management and Financial Success

Your


Your Prescription for Data Management and Financial Success

Stereotactic Radiosurgery/therapy

- 77321 Special port plan One per course professional & technical
- The radiation oncologist must document his or her involvement in the planning and selection of the special beam parameters and must make the final selection and initiation of the treatment process. Documentation requires that the special teletherapy port plan be reviewed, signed and dated by the radiation oncologist.

• Used for many years since 1992



77300 – Basic radiation dosimetry calculation, central axis depth dose calculation, TDF, NSD, gap calculation, off axis factor, tissue inhomogeneity factors, calculation of non-ionizing radiation surface and depth dose, as required during course of treatment, only when prescribed by the treating physician > Per arc, lesion, shot, angle or port > Professional & technical

Prescription for Data Management and Financial Success

Your



77334 – Treatment devices, design and construction; complex (irregular blocks, special shields, compensators, wedges, molds or casts)

- Mask, frame, halo, helmet, vest, markers, gantry angles (MLC, cone)
- Professional & technical

Your Prescription for Data Management and Financial Success



77333 – Treatment devices, design and construction; intermediate (multiple blocks, stents, bite blocks, special bolus)

- Custom bite blocks
- Professional & technical

Your Prescription for Data Management and Financial Success

Note: If a custom mask (77334) and bite block (77333) is used two charges technical may be charged and one professional for the design.

Your Prescription for Data Management and Financial Success

Stereotactic Radiosurgery/therapy 77370 – Special medical radiation physics consultation

"code 77370 is used when the complexity of the treatment plan is of such magnitude that a thorough written analysis is necessary to address a specific problem or when the service to be performed requires the expertise of a qualified medical physicist. The clinical indication that justified the request for the special physics consultation should also be documented".



PRE AND SET UP CODES

Your Prescription for Data Management and Financial Success



9924X – Out patient Consult 9925X – In patient Professional and technical facility fee

Your Prescription for Data Management and Financial Success

G0175 - Team conference Technical (hospital only)



77263 – Therapeutic radiology treatment planning; complex

Complex planning requires highly complex blocking, custom shielding blocks, tangential ports, special wedges or compensators, three or more separate treatment areas, rotational or special beam considerations, combination of therapeutic modalities.

Treatment plan (prescription) Professional

Prescription for Data Management and Financial Success

Your

77470 - Special treatment procedure
 Professional & technical
 (Physician no charge same day 77432)



Your Prescription for Data Management and Financial Success

Stereotactic RadioSurgery/therapy

77290 – Therapeutic radiology simulation-aided field setting; complex simulation of tangential portals, three or more treatment areas, rotation or arc therapy, complex blocking, custom shielding blocks, brachytherapy source verification, hyperthermia probe verification, any use of contrast materials.

Professional & technical

First one usually performed just prior to CT and/or MR Second one prior to or day of treatment to verify all parameters (may be 77280 simple as well depending upon documentation)



77014 – CT Guidance for Placement of radiation therapy fields technical

77011 - CT guidance for stereotactic localization technical only

Your Prescription for Data Management and Financial Success The more appropriate code would be 77011



CASE STUDY MULTIFRACTION Brain or Body

Typical case: every provider treats each patient on a case by case basis and the following may vary considerably

Your Prescription for Data Management and Financial Success Hospitals will continue to use G codes and not the new CPT codes for Federal patients

Day 1 – Patient Set-up and CT (CONSULT PREVIOUSLY PERFORMED)

9924X 9925X	PC-TC	Consult and facility fee	Professional and Technical
77334	PC-TC	Treatment Device Complex (mask/vest)	Immobilization
77333	тс	Custom Bite block	Technical only if a custom mask is used as well
77290	PC-TC	Complex Simulation	Professional & Technical
77011 or 77014	тс	CT for placement of fields or stereotactic guidance	Technical only
77263	PC	Physician Treatment Planning Complex	Professional Only
77470	PC-TC	Special Treatment Procedure	Professional & Technical

Day 2 – Planning

77295	PC-TC	3D Plan	Professional & Technical
77321	PC-TC	Special Teletherapy Port Plan	Professional & Technical

Day 3 Verification

77370	тс	Special Physics Consultation	Technical only
77290	PC-TC	Simulation/Set-Up Complex	Professional & Technical
77300	PC-TC	Dose Calculation(s)	Professional & Technical

Day 4 – Single Treatment or First Fraction				
77280 (77290)	РС-ТС	Simple Simulation or Complex	Professional & Technical, if ordered and necessary, modifier required	
77334	PC-TC	Treatment Device Complex (vests, cones, MLCs)	Professional & Technical	
G0339	тс	Treatment Delivery Single fraction, image guided robotic	Technical only, hospitals & freestanding	
77373	тс	Stereotactic body radiation therapy, treatment delivery, one or more treatment areas, per day	Technical only generally for freestanding centers only. Hospitals use G codes	
77334	PC-TC	Per Collimator, MLC or cone	Professional & Technical	
77435	PC	Stereotactic body radiation therapy, treatment management, per day	Professional Only	

Day 5, 6, 7 and 8 – Second and Additional Fractions, up to 5

77290	РС-ТС	Simulation/Set-Up Complex	Professional & Technical
77373	тС	Stereotactic body radiation therapy, treatment delivery, one or more treatment areas, per day	Technical only for freestanding centers per treatment, STD. Hospitals generally use G codes
G0340 G0251	тс	Treatment Delivery	Technical only Fractions G0251 1-5 fractions hospitals only. G0339 1 st fraction then G0340 for 2-5 fractions hospitals and freestanding
77336	тс	Continuing Medical Physics	One or more fractions (i.e. 5 fractions - one, one fraction - 1)



CASE STUDY SINGLE FRACTION BRAIN

Your Prescription for Data Management and Financial Success

Day 1 – (CONSULT PREVIOUSLY PERFORMED)

9924X 9925X	PC-TC	Consult and facility fee	Professional and Technical
77263	РС	Physician Treatment Planning Complex	Professional Only
77014 or 77011	ТС	CT for placement of fields	Technical only
77334	PC-TC	Treatment Device Complex - frame, helmet(s)	Immobilization
77470	PC-TC	Special Treatment Procedure	Professional & Technical
77370	ТС	Special Physics Consultation	Technical only

Day 1 (continued)

77295	PC-TC	3D Plan	Professional & Technical
77321	PC-TC	Special Teletherapy Port Plan	Professional & Technical
77432	РС	Stereotactic Radiosurgery Management. cerebral lesions only	Professional Only
77300	PC-TC	Dose Calculation(s) per shot, MLC, cone(s)	Professional & Technical

Day 1

G0243 (77371)	тС	Multi-source photon stereotactic radiosurgery, delivery including collimator changes and custom plugging, complete course of treatment, all lesions	Technical
G0173 (77372)	тС	Standard linear accelerator based stereotactic radiosurgery, complete course of therapy in one session	Technical, hospitals only
G0339 (77372)	тС	Standard or Robotic linear accelerator based stereotactic radiosurgery, complete course of therapy in one session	Technical (hospitals & freestanding bill for robotic)
77336	тс	Continuing Medical Physics	One or more fractions Technical



Stereotactic Radiotherapy

ISSUES FOR HOSPITALS & FREESTANDING Federal verses non federal payers

Code 61793, 77413, 77414, 77499, "G" Codes Which codes do we bill?

Your Prescription for Data Management and Financial Success Most managed care contracts written as per diem or percentage of billed charges. No code for Non Medicare Payors in 2006



Prescription for Data Management and Financial Success

Your

SRS Frame verses Frameless

Frame based systems

Multisource cobalt

≻Linac

All procedures performed on the same day

Many codes bundled less reimbursement

>Frameless Systems

>All Linac based Systems only

Services performed on different days

More Reimbursement





Multi-source Cobalt \$3,800,000

Your Prescription for Data Management and Financial Success Replacement costs every five years \$600,000 - \$1,000,000

Build out cost substantially less





Typical Accelerator built for SRS/SRT >\$4,000,000

Build out cost more than Multisource cobalt

Your Prescription for Data Management and Financial Success



Robotic Arm Based Accelerator

>\$4,000,000

Your Prescription for Data Management and Financial Success Build out cost more than Multisource cobalt and more than standard Accelerator



Add on Systems to Accelerators
 Cone Systems \$500,000
 MLC Systems \$750,000
 Usually no build out costs

Your Prescription for Data Management and Financial Success



Fiducial Placement Charges 2007

21899 - Unlisted procedure, neck or thorax

✓ 55876 - Placement of interstitial device(s) for radiation therapy guidance (e.g., fiducial markers, dosimeter), prostate (via needle, any approach), single or multiple

(Report supply of device separately)

A4649 Surgical supplies, 99070 – unlisted supplies

✓One of the following 4 options may be utilized to place the fiducial markers under guidance:

✓77012 – CT guidance

Prescription for Data Management and Financial Success

Your

✓77021 – MRI guidance

✓76942 – Ultrasound guidance

✓77002 – Fluoroscopic guidance

ROCC® Information (Radiation Oncology Certified Coder)



AMAC
[®] is pleased to offer the ROCC
[®] Exam to

the Radiation Oncology Community!

Please visit our web-site at:

www.amac-usa.com

for details on the ROCC® Exam and Study Guide. Copyright AMAC® 2007 Our company was founded on the premise that we understand:

your markets, your concerns, your values.

AMAC <u>www.amac-usa.com</u> info.amac@amac-usa.com

770-693-6031