Radiation Therapy External Beam Coding & Documentation 2024

Regina Hargrove, MBA, RT(R)(T)| Revenue Cycle Consultant
Leah Harlin, CPC| Director of Coding Services

Radiation Business SOLUTIONS

Disclaimers

01

Every practice is unique, and it is the Client's responsibility to implement these opinions appropriately to Client's specific practice and circumstances. Client is not under the obligation to implement any recommendations made by RBS. Recommendations made by RBS are our opinions only, and Client should consult an attorney regarding the application of these recommendations in Client's specific market and circumstance. RBS is not a law firm and is not providing legal advice to Client.

02

Client agrees to indemnify and hold RBS, its affiliates and owners, and their respective officers, directors, agents, employees and representatives (each an "RBS Indemnified Party") harmless from and against any and all claims, actions, liabilities, losses, costs and expenses of any nature whatsoever, including reasonable attorneys' fees and other costs of investigating and defending any such claim or action ("Losses"), which may be asserted against any of RBS Indemnified Parties, in connection with Client's decision to implement any recommendations made by RBS.

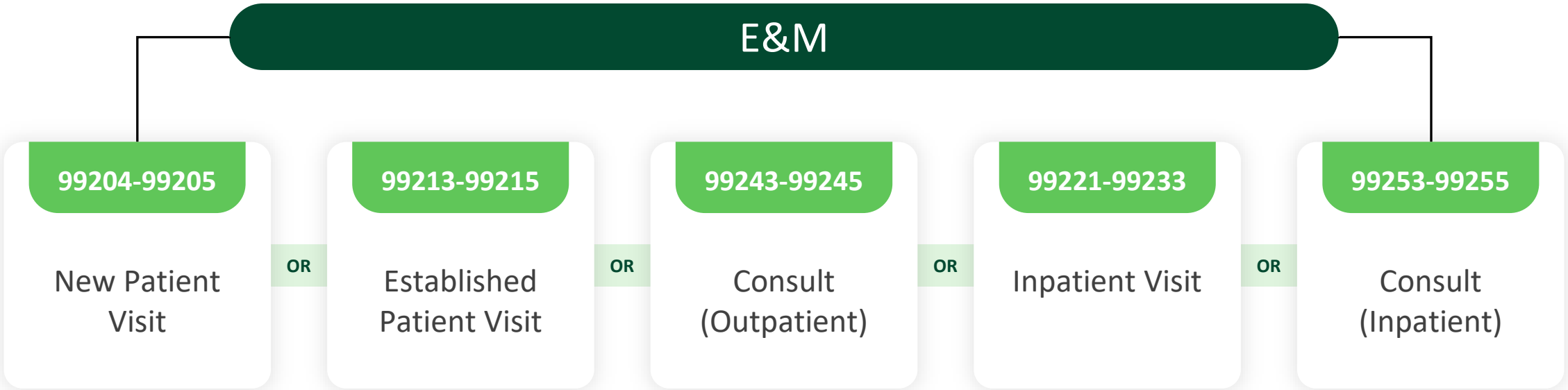
03

Documentation Requirements: Timely Signature and Use of Cloned Notes

- Authenticating orders and procedure notes in a timely manner are required by CMS
- Documents should be signed on the date of the procedure or the following day
- A full physician signature with a date and time stamp are required on every order and procedure note
- Clinical staff should not proceed with any intervention without a signed physician order

- CMS frowns upon the use of cloned notes, copied and paste notes, check boxes and fill in the blank notes that are generic in nature
- Physician documentation must be patient specific and tumor specific
- A document must not read identically from patient to patient
- These rules apply to procedure notes and medical necessity

Step 1: Decision to Treat



Simulation Overview

Step 2: Simulation

Simulation Orders

Simulation

77290
3 Treatment areas
Complex blocking
Contrast
Special plans

OR

77285
2 Treatment areas

OR

77280
1 Treatment area

OR

No Charge
IMRT

Immobilization

77332
Breastboard
Wingboard
Any indexed device

OR

77333
Bite block

OR

77334
Vacloc
Aquaplast mask
Moldcare cushion
Any custom device

Simulation Orders

Documentation requirements

- Specifications for patient positioning
- Immobilization devices ordered
- Type(s) of imaging and use of contrast
- Anatomy and implanted objects to identify

This document must be signed by the physician prior to any simulation work being performed.

Initial Simulation Procedure Note

Documentation requirements

- Specifications for patient positioning used in setup
- Immobilization created and documented including billable and non-billable devices
- Type(s) of imaging obtained and contrast administered (if applicable)
- Anatomy and implanted objects identified

Initial Simulation

Non-IMRT		IMRT
77290	77334	77334
OR		OR
77290	77334x2	77334x2
OR		OR
77290	77332	77332
OR		OR
77290	77333	77333
OR		OR
77290		NONE
OR RARELY		
77280 OR 77285		N/A

Radiation Business SOLUTIONS

Additional Clinical Scenarios for Simulation

Commonly Asked Questions

- Simulation for multiple sites
- Same day simulation and treatment
- Clinical setup (electrons)
- Simulation with 3D plan (can be billed on same DOS)

Step 3: Clinical Treatment Plan (CTP)

77263

Complex blocking/tangential ports/special wedges or compensators/3 or more treatment areas/special beam considerations/multiple treatment modalities

OR

77262

3 or more converging ports/two treatment sites/multiple blocks/special time dose constraints

OR

77261

Single port/simple parallel opposed ports with simple/no blocking

Criteria for Each Level of Clinical Treatment

CPT CODE	DESCRIPTOR	CRITERIA FOR LEVEL	
77261	Therapeutic radiology treatment planning; simple	**The criteria below should be met:**	
		Special tests	None.
		Modality	External beam.
		Treatment time/dose	Standard fractionated (once per day) treatment. Normal tissues may be included, and normal tissue tolerance may be exceeded if patient survival is presumed to be limited.*
		Ports	Single area of interest in a single port or simple parallel opposed ports.
		Devices	None, or single set of any type of pre-made or generic devices. Immobilization devices not designed for a specific patient, e.g., belly boards, breast boards, etc.
77262	Therapeutic radiology treatment planning; intermediate	**In addition to the criterial from 77261, at least one additional criterion below should be met:**	
		Special tests interpreted necessary to define tumor volume for treatment purposes	Routine diagnosis CT, MRI, ultrasound or nuclear imaging.
		Modality	External beam.
		Treatment time/dose	Special time-dose considerations (e.g., hyperfractionated) treatment. Treatment should be calculated to dose within a volume.
		Ports	Three or more converging ports, two separate treatment areas, or multiple blocks.
		Devices	Multiple sets of pre-made or manufactured generic treatment devices.
77263	Therapeutic radiology treatment planning; complex	**At least one of the criteria below must be met:**	
		Special tests interpreted necessary to define tumor volume for treatment purposes	CT, MRI, angiography, PET scan, molecular imaging, selected/requested to assist in the radiation oncologist's planning process.
		Modality	External beam as a primary modality (with or without electron boost) in conjunction with another modality (e.g., brachytherapy**, hyperthermia, concurrent chemotherapy). 3D conformal therapy, intensity-modulated radiation therapy (IMRT), mixed beam or particle therapy***, SRS, SBRT.
		Treatment time/dose	Standard or nonstandard fractionation. The number of critical/sensitive organs will not determine complexity, but dose levels should not reach or exceed normal tissue tolerance if survival reasonably anticipated into a period of risk. Calculated doses must be to a volume.
		Ports	Three or more separate treatment fields and/or rotational arcs. Tangential and/or oblique fields****.
		Devices	Blocks/immobilization devices must be customized and must be required for appropriate clinical management. Custom blocks fabricated for palliative ports only with supporting written justification and clinical appropriateness.

Documentation Requirements

In addition, it is a great idea to add orders and medical necessity to consolidate documentation. Check boxes for these items are not adequate to document for medical necessity. RBS suggests the following also be included since they are often forgotten, which can create confusion with the payer if/when an appeal is necessary:

- Medical necessity statement – (IMRT, SBRT, IGRT, etc.)
- Ordering of Special Medical Physics Consults (77370)
- Ordering of Special Dosimetry (77331)
- Special Treatment Procedure (77470)

Documentation Requirements

- Curative or palliative intent
- Any testing that has not been completed and that needs to be considered either for determination of extent of disease or for delineation of tumor/critical structures
- Best modality(s) to successfully treat the patient
- Beam configuration and energy
- Treatment dose and fractionation
- Treatment ports/fields and necessary treatment devices
- Utilization of image guidance including type and frequency

Key Takeaways

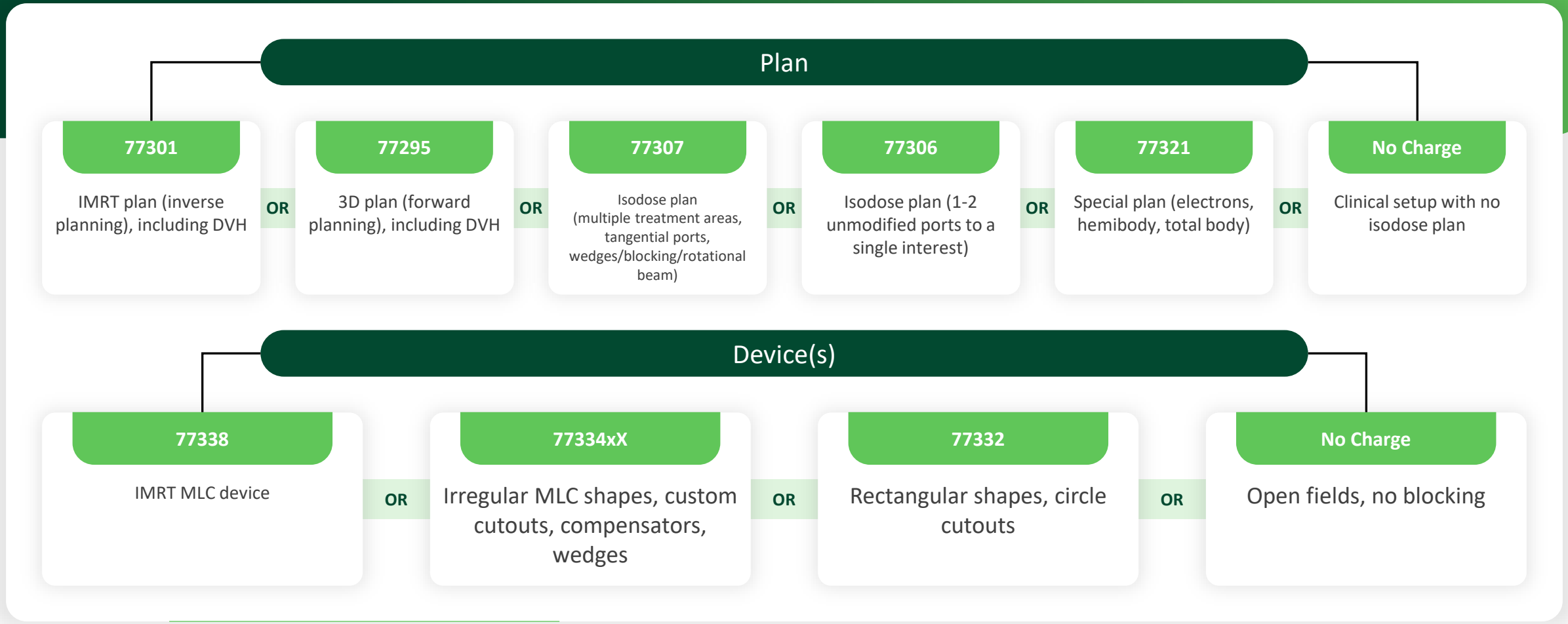
Clinical Treatment Plan

- The CTP can be done before or after the simulation
- All orders should be completed and signed prior to staff performing any procedures
- Physician documentation must be signed in a timely manner
- Medical necessity is required for IMRT, IGRT, SRS, SBRT, RMM and Brachytherapy

Simulation

- All simulations including RMM and verification sims need an order and a procedure note
- RMM is billed on the same DOS as the plan
- immobilization devices are billed with the simulation

Step 4: Planning Codes



Planning Codes, cont'd

Dose Calculations

77300 x X

Dose calculations
(3D, IMRT, no plan)

OR

No Charge

Isodose plans,
special plans

Respiratory Motion Management Simulation

+77293

Breast/lung/
upper abdomen
IF APPLICABLE

2D PLANS

Documentation Requirements

- Beam’s eye view and field detail sheets for each field
- QA sheets
- Must be approved by dosimetrist and physician
- Set a date of service rule for planning services

3D PLANS

Documentation Requirements

- Beam's eye view and field detail sheets for each field
- QA sheets
- Must be approved by dosimetrist and physician
- Set a date of service rule for planning services

Plus

- Dose volume histogram
- 3D reconstruction
- Independent calculation sheets

IMRT Plans

Documentation Requirements

- Beam's eye view and field detail sheets for each field
- QA sheets
- Must be approved by dosimetrist and physician
- Set a date of service rule for planning services
- Dose volume histogram
- 3D reconstruction
- Independent calculation sheets

Plus

- 3D comparison (when applicable)

Respiratory Motion Management Simulation

Documentation requirements

- 3 phases of imaging (inspiration, expiration, neutral breath)
- Chest and abdominal tumors (lung is most common)
- Detail of initial setup and each phase of imaging
- Statement of medical necessity

Respiratory Motion Management Simulation

3D/IMRT Plans

+77293 billed on same DOS as plan

Step 5: Verification Simulation

77280

Simple simulation

OR

No Charge

IMRT

Verification Simulation

Documentation requirements

- Specifications for patient positioning used
- Immobilization used
- Machine the simulation was performed on
- Setup differences from the initial simulation

Step 6: Daily Treatment Delivery

77401 - Radiation treatment delivery, superficial and/or ortho voltage, per day

Do not report any of the following codes with 77401 throughout the entire course of therapy:

- 77261, 77262, 77263 – Clinical Treatment Planning
- 77332, 77333, 77334 – Treatment Devices
- 77306, 77307, 77316, 77317, 77318 – Isodose Planning
- 77336, 77370 – Weekly & Special Medical Physics Consult
- 77427, 77431, 77432, 77435, 77470, 77499 – Treatment Management Codes
- 77373, 77402, 77407, 77412, 77417, 0394T, 0395T - Treatment Delivery Codes

E/M services may be billed. Simulations (77280, 77290) may be reported at the beginning of treatment and at any significant changes.
Dose calcs may be reported per site (77300).

Step 6: Daily Treatment, cont.

Hospital Outpatient

77402	OR	77407	OR	77412	OR	77385	OR	77386
Single treatment area, 1-2 ports, and 2 or less simple blocks		2 treatment areas, 3+ ports for a single area, or 3 or more simple blocks		3+ treatment areas, custom blocks, tangential ports, wedges, rotating beams, electron, or 3D		IMRT breast/prostate		IMRT any other site

Step 6: Daily Treatment, cont.

Freestanding Center

G6004	OR	G6005	OR	G6008	OR	G6009
Single treatment area, 1-2 ports, and 2 or less simple blocks; 6-10 MeV		Single treatment area, 1-2 ports, and 2 or less simple blocks; 11-19 MeV		2 treatment areas, 3+ ports for a single area, or 3 or more simple blocks; 6-10 MeV		2 treatment areas, 3+ ports for a single area, or 3 or more simple blocks; 11-19 MeV

G6012	OR	G6013	OR	G6015	OR	G6016
3+ treatment areas, custom blocks, tangential ports, wedges, rotating beams, electron, or 3D; 6-10 MeV		3+ treatment areas, custom blocks, tangential ports, wedges, rotating beams, electron, or 3D; 11-19 MeV		IMRT collimator-based		IMRT compensator-based

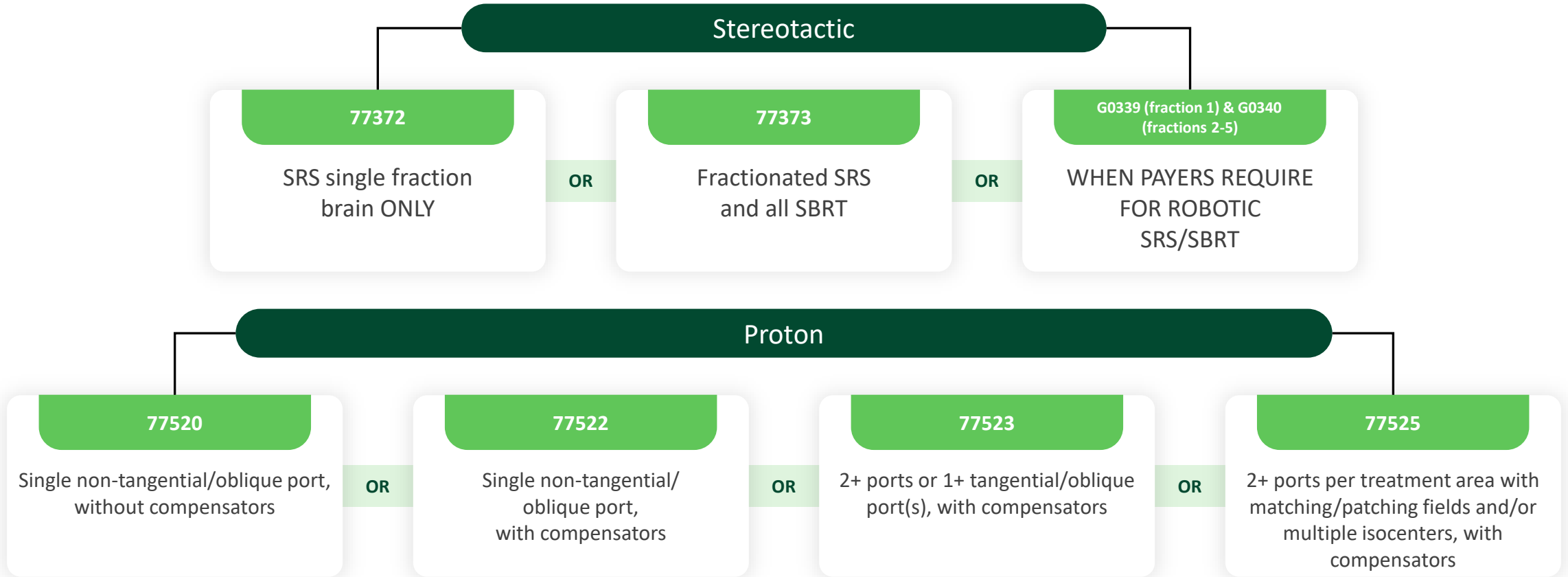
OTHER POSSIBILITIES: G6003 / G6007 / G6011 (up to 5 MeV) OR G6006 / G6010 / G6014 (20+ MeV)

ASTRO Comparison HCPCS to CPT

TIER	<5 MV	6-10 MV	11-19 MV	>20 MV
Simple	G6003	G6004	G6005	G6006
Intermediate	G6007	G6008	G6009	G6010
Complex	G6011	G6012	G6013	G6014

CPT© CODE	DESCRIPTION	CRITERIA FOR LEVEL
77401	Radiation treatment delivery, superficial and/or ortho voltage, per day (Do not report 77401 in conjunction with 77373)	Radiation treatment delivery <1MeV.
77402	Radiation treatment delivery, ≥1 MeV, simple (Do not report 77402 in conjunction with 77373) (77403, 77404, 77406 have been deleted. To report use 77402)	**All of the following criteria are met (and none of the complex or intermediate criteria are met):** Single treatment area. One or two ports. Two or fewer simple blocks.
77407	Radiation treatment delivery, ≥1 MeV, intermediate (Do not report 77407 in conjunction with 77373) (77408, 77409, 77411 have been deleted. To report use 77407)	**All of the following criteria are met (and none of the complex criteria are met):** Two separate treatment areas. Three or more ports on a single treatment area. Three or more simple blocks.
77412	Radiation treatment delivery, ≥1 MeV, complex (Do not report 77412 in conjunction with 77373) (77413, 77414, 77416 have been deleted. To report use 77412)	**Any one of the following criteria are met:** **Three or more separate treatment areas.** **Custom blocking. Tangential ports, Electron beam, Wedges, Rotational beam.** **Field-in-field or other tissue compensation that does not meet IMRT guidelines.**

Step 6: Daily Treatment, cont.



Stereotactic Radiation Therapy

Stereotactic radiation therapy is defined as the use of external beam radiation therapy using stereotactic guidance to deliver very precise doses of radiation to a defined tissue volume

There are 5 general techniques for delivering stereotactic radiation therapy

- Gamma Knife (Radiosurgery, SRS))
- Conventional XRT (SRS, SBRT)
- Proton therapy [SRS, SBRT]
- CyberKnife
- SCINTIX (BgRT)

Stereotactic Procedures (cranial, single fraction)

- Stereotactic radiosurgery (SRS) is a method of delivering high doses of ionizing radiation to a small target within the cranium (skull)
- The technique differs from conventional, fractionated radiotherapy, which involves exposing large areas of intracranial tissue to relatively broad fields of radiation over a number of sessions
- The precision and accuracy of these treatments often involve multimodality imaging such as MRI and CT
- Treatment accuracy and precision can deliver the prescribed dose to within 1mm of the intended target

Stereotactic Procedures (cranial, single fraction)

- When the treatment is delivered to the contents of the cranial vault, brain, and if the treatment consists of one fraction, it is considered a single SRS treatment
- Technical payment will be limited to a single fraction reimbursement 77371 or 77372 or G0339. A procedure note is required.
- Professional payment will be 77432 and a physician management note is required (similar to OTV note). This note should be done on the same DOS as the procedure.

Stereotactic Procedures (cranial, 2-5 fractions)

- When the treatment is delivered to the contents of the cranial vault, brain, and if the treatment exceeds one fraction (2-5) it is considered SBRT
- More than 5 fractions is conventional treatment
- SBRT is considered within the domain of the radiation oncologist
- Technical payment will be reimbursed as 77373 per fraction delivered (HOPPS) and a daily physician procedure note is required
- Professional payment will be 77435 X 1 and a physician management note is required (similar to OTV note). This note can be done on any DOS that a treatment is delivered.

Stereotactic procedures (extracranial)

- Stereotactic Body Radiation Therapy (SBRT) is utilized as the technique of stereotactically treating small localized lesions outside of the cranial vault, anywhere within the body
- Check your LCD for specific rules related to payment for SBRT based on ICD-10

SRS/SBRT Medical Necessity

- Boost or salvage for lesions < 5 cm
- Karnofsky > 40 (or expected to return to 70 or greater with treatment)
- Limit to 3 primary brain lesions (unless enrolled in an IRB approved trial)
- Relapse in previously irradiated cranial or spinal field
- See your carrier policy for additional information

Step 7: Guidance/Imaging

Freestanding & Professional Component

77014	OR	G6002	OR	G6001	OR	77417	OR	G6017
Daily CT guidance (tech and pro)		Daily stereoscopic x-ray (kV/MV) guidance (tech and pro)		Daily US guidance (tech and pro)		Weekly port films (tech only) The work performed by the physician is included in weekly OTV charge		Intra-fraction tracking (breast/lung/ upper abdomen)

Hospital Outpatient

77387

Daily guidance, any method, including intra-fraction tracking

Image Guidance in Radiation Therapy

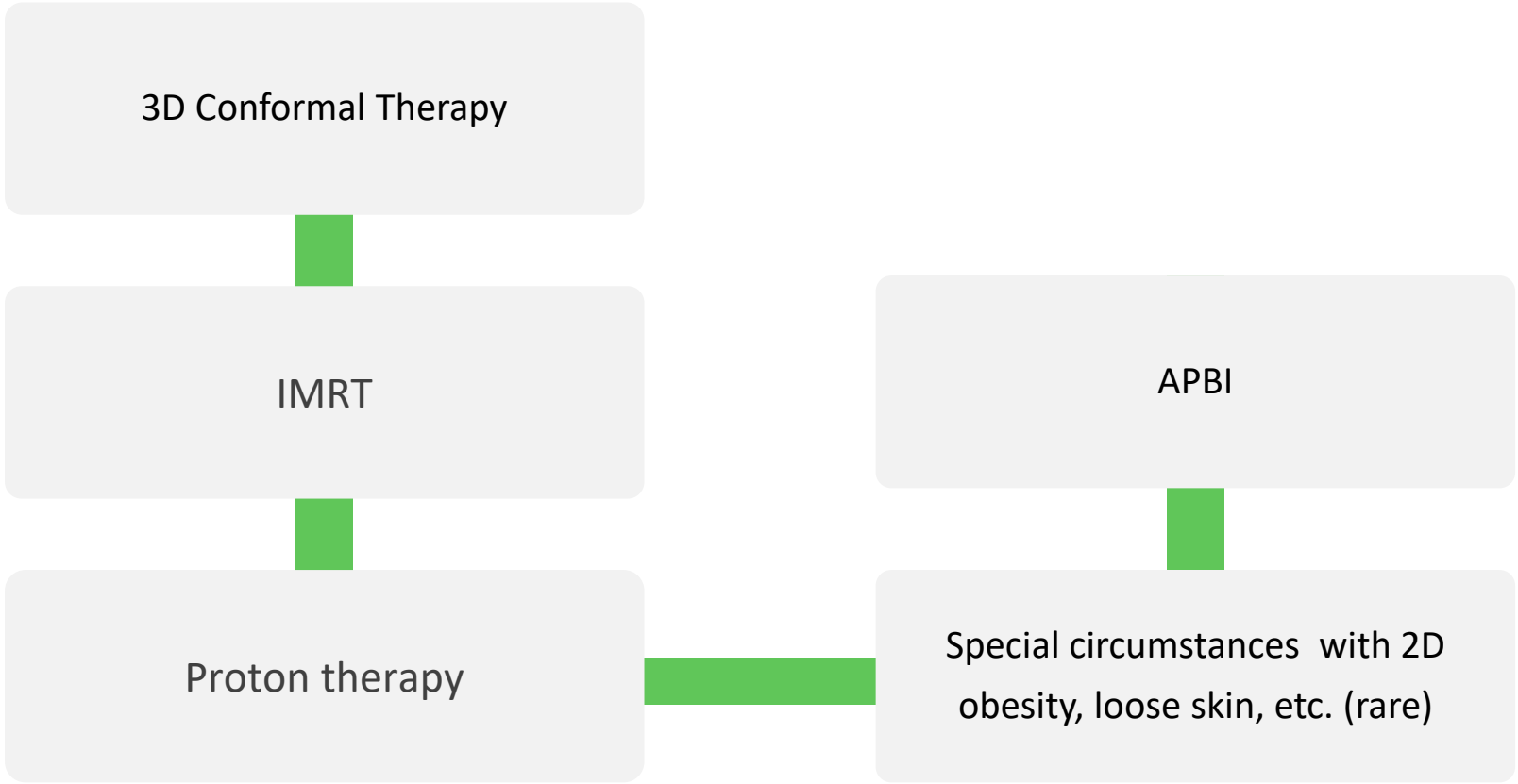
Ultrasound, Stereoscopic X-Ray, CT Guidance or MRI

Utilization on patients where critical structures are adjacent to treatment area

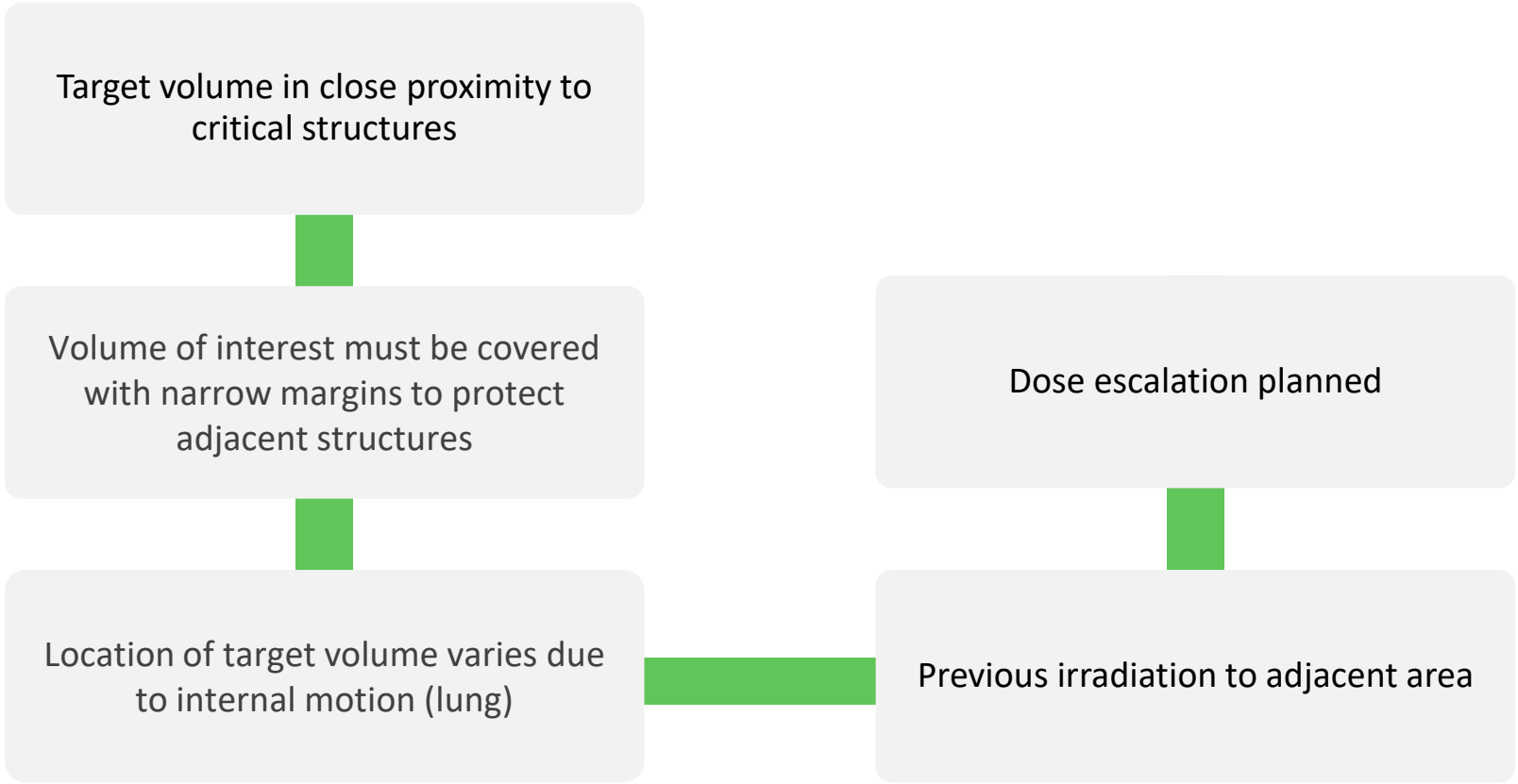
Completed by trained radiation therapist under the supervision of the radiation oncologist

- Shifts may be required that are outside of standard tolerances

Utilization of Image Guidance



Clinical Indications for IGRT & Medical Necessity



Radiation Business SOLUTIONS

.

CT Guidance

- 77014 – CT Guidance
- Historically utilized for acquisition of CT data set during simulation process
- CT images acquired, fusion of images is performed (registration), manual or automated adjustments to patient positioning is performed to ensure treatment positioning is accurate
- Professional component under MPFS continues to be paid

Stereoscopic X-Ray Guidance

- G6002 - Stereoscopic x-ray guidance for localization of target volume for the delivery of radiation therapy.
  - kV or MV
- Imaging, localization and correction of target volume placement prior to treatment delivery
- 3D or IMRT
- Orthogonal images with fiducial markers OR bony anatomy with fusion of images
- MPFS – professional and technical payment
- HOPPS – Packaged into treatment delivery

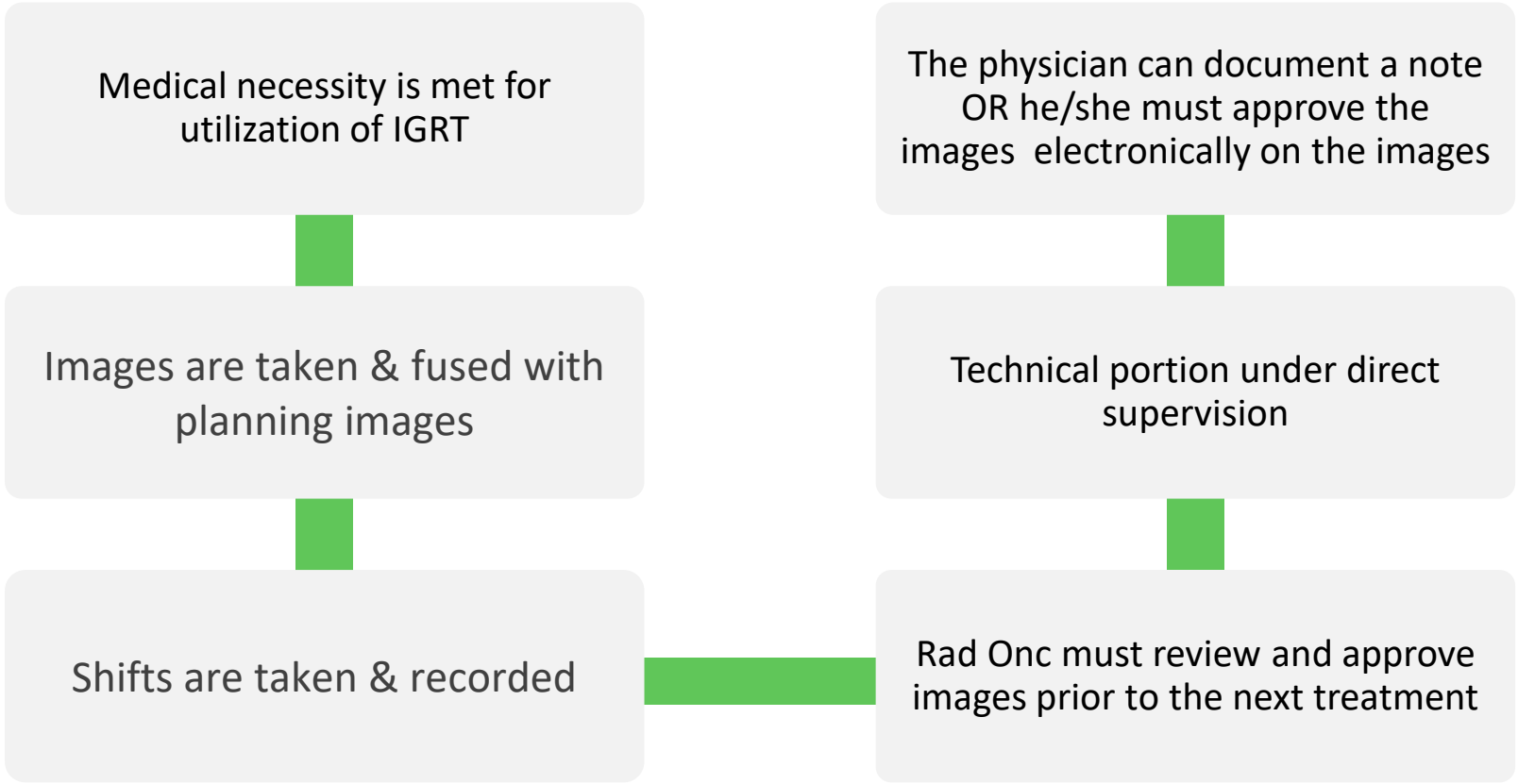
Intrafraction Tracking

G6017 – Intra-fraction location and tracking of target or patient motion (via 3D positional tracking or surface tracking) during delivery of radiation therapy for each fraction of treatment

No wRVU's assigned under MPFS (should bill as some non-Medicare payers will reimburse)

Packaged under HOPPS

Professional IGRT Documentation



Step 8: On Treatment Visits (OTV)

77427	OR	77431	OR	77432	OR	77435
Physician on-treat visit, per 5 treatments		Physician on-treat visit, 1-2 fractions total		Physician on-treat visit, SRS single fraction		Physician on-treat visit, SRS multiple fractions & all SBRT cases

Documentation Requirements

Assessment of treatment to date

- Coordination care/treatment
- Evaluation of patient's response to treatment – Continue Treatment, Stop Treatment, Hold treatment

Review

- Current fractionation and dose delivered to date
- Dosimetry
- Lab Tests
- Patient Treatment set-up
- X-rays (portal images since last visit)

Orders made for additional services

Step 9: Physics Checks

77336

Weekly physics check

Continuing Medical Physics (77336)

Technical only service	Reported once per five fractions (fraction blocks are determined by the calendar dates of service)	Reported once at the end of treatment if 3 to 4 additional fractions are delivered	Do not report after the final fraction date of service

Documentation Requirements

Medical necessity

The tasks provided by the physicist are essential in ensuring that the physician's prescription is being followed accurately during the course of radiation therapy.

Required items

- Current fractionation and dose delivered to date
- Assessment of treatment parameters
- Comparison of treatment delivered to treatment planned

This is a QA time sensitive overview of the patient's treatment and important to the overall radiation treatment (no do-overs!)

Step 10: Special Codes

77331	77370	77470
Special dosimetry	Special physics consult	Special treatment procedure

Special Dosimetry

Documentation Requirements

- Must be billed during treatment delivery
- Physician order listing the specific item(s) being measured
- Report prepared by dosimetry outlining the requested information
- Review and signature of both the physicist and physician

Special Medical Radiation Physics Consultation (77370)

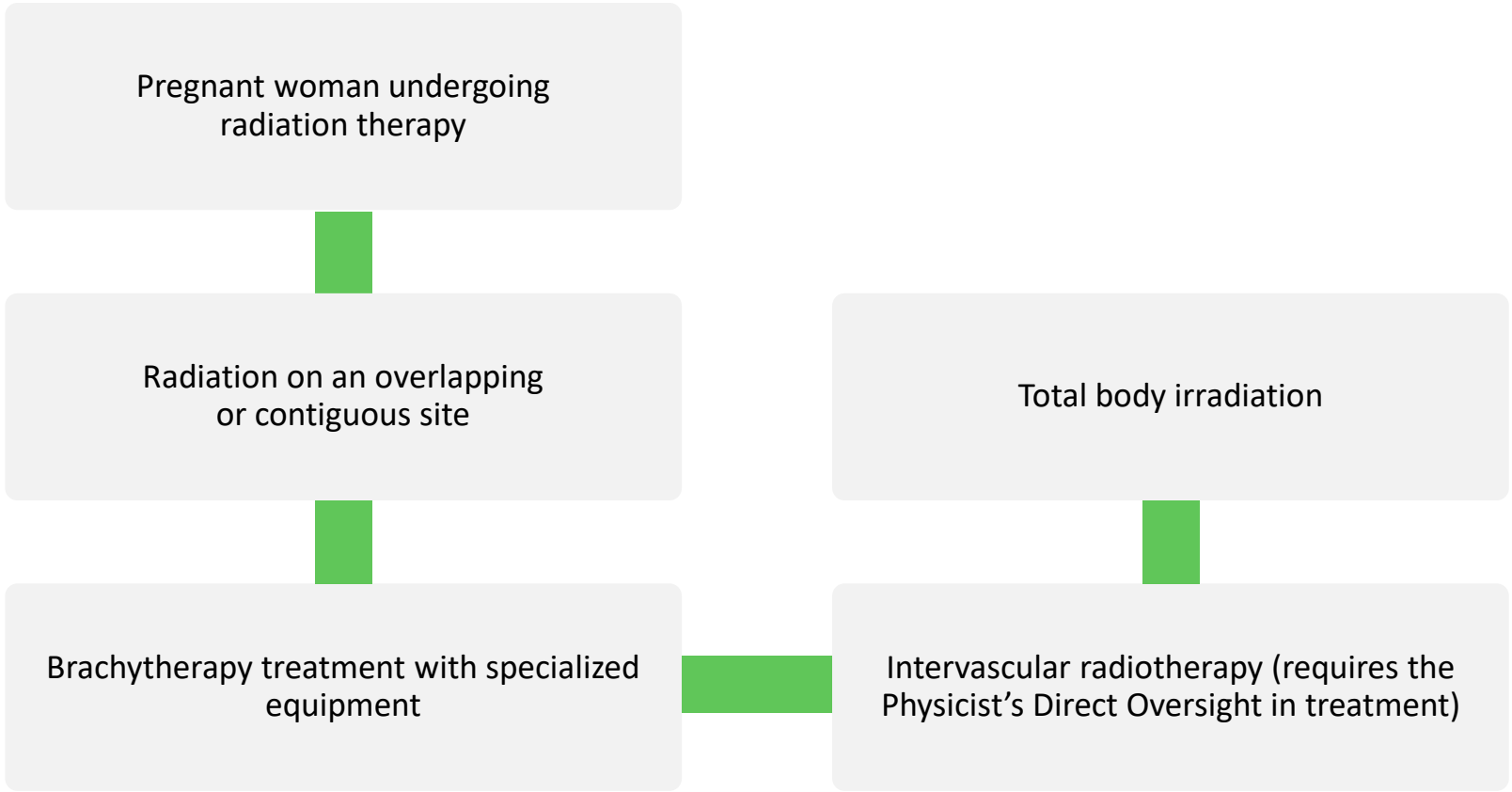
A specific procedure carried out by the medical physicist at the request of the Radiation Oncologist in a written order

Physicist analyzes a specific problem and renders his/her expertise in a written report (cannot be a canned report)

Physicist sends report to Radiation Oncologist, and both must sign the document

Technical only, billed one time per course of treatment

Examples of Treatments Using 77370



Special Treatment Procedure (77470)

Historically, the Single Most Overused Code in Radiation Treatment

- The special treatment procedure CPT code (77470) represents additional work and effort required by the physician and/or staff and the justification requires support via the medical record.
- Documentation of the use of a specific treatment technique or, for example, concurrent chemotherapy would not alone support the necessity for the special treatment procedure, i.e. no check boxes.
- Additional information providing the rationale for what specifically requires extra time and effort when utilizing a specific treatment technique or concurrent chemotherapy would need to be included in the documentation.

Radiation Business SOLUTIONS

Special Treatment Procedure (77470)

- A separate note labeled “Special Treatment Procedure (77470)” should be documented
- A specific section within the Clinical Treatment Plan document or a separate document is required
- A template with check boxes does not constitute adequate documentation

Radiation Business SOLUTIONS

Special Treatment Procedure Examples (77470)

- Patient is being treated near a previously treated tumor and the physician must spend extra time in the planning process; not just physicist work, but physician work
- Concurrent chemo when higher toxicity is concerning (must report the precise cross-toxicity problems that are potentially concerning and the problems that could result).
- Hyper-fractionated treatment
- Patient has a pacemaker and requires daily monitoring (EKG)
- Situations where external beam radiation therapy and brachytherapy are combined
- Pediatric patients requires daily anesthesia and daily physician supervision

Concurrent Chemo (77470)

- The toxicity, if evident or not, should be mentioned in the weekly OTV notes
- Concurrent chemotherapy, not 30 days before or 30 days after, but concurrent cytotoxic agents with the radiation treatments could meet the requirements
- Herceptin® and hormonal therapy do not typically add additional work effort and are therefore not considered sufficient to qualify for reimbursement under this code
- **Concurrent chemo is not an “automatic” reason to bill this code**

Radiation Business SOLUTIONS

Step 11: Boost Plans (IMRT), must have written physician order

IMRT Boost Plan

77338

77300 x #

IMRT Replan (new data set)

77301 – medical necessity required

77338

77300 x #

Add 77334 if applicable for new immobilization

Add 77293 if applicable

Radiation Business SOLUTIONS

Boost Plans (3D), must have written physician order

3D Boost Plan (new data set)

77290 • 77334 OR 77332 • 77295 • 77334xX • 77300xX • 77280
Add 77293 if applicable

3D Boost Plan (original data set, photon plan)

77307 • 77334xX • 77280

3D Boost Plan (original data set, electron plan)

77321 • 77334xX • 77280

Clinical Setup

77334xX OR 77332xX • 77300xX

Radiation Business SOLUTIONS

Step 12: End of Treatment

EOT

Physician EOT
Summary

Questions & Answers

Leah M. Harlin, CPC
Director of Coding Services
leah.harlin@RadiationBusiness.com

Regina Hargrove, MBA, RT(R)(T)
Revenue Cycle Consultant
regina@radiationbusiness.com

Radiation Business SOLUTIONS