



# CODING GUIDELINES

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## Radiation Therapy

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CCI or NCCI (National Correct Coding Initiative) is an initiative taken by CMS. Per the CMS website, “The CMS developed the National Correct Coding Initiative (NCCI) to promote national correct coding methodologies and to control improper coding leading to inappropriate payment in Part B claims. The CMS developed its coding policies based on coding conventions defined in the American Medical Association’s CPT Manual, national and local policies and edits, coding guidelines developed by national societies, analysis of standard medical and surgical practices, and a review of current coding practices.” “The purpose of the NCCI Procedure-to-Procedure (PTP) edits is to prevent improper payment when incorrect code combinations are reported.” “The purpose of the NCCI MUE program is to prevent improper payments when services are reported with incorrect units of service.”

The CCI and MUE edits are readily available on the CMS website so that providers and hospitals can stay informed and continually update their billing and coding practices to avoid any unnecessary denials.

eviCore adheres to the CMS CCI and MUE edits to control improper coding leading to inappropriate payment of claims. Since these edits are easily accessible on the CMS website, they are not covered in the eviCore coding guidelines.

# eviCore Radiation Therapy Coding Guidelines

These guidelines summarize definitions and appropriate use of several CPT® codes. These guidelines are not meant to be all-inclusive, but are meant to be used in conjunction with the other coding resources and AMA Current Procedural Terminology (CPT) code book. The last section of the guidelines lists standard groups of codes that may be reimbursed for specific clinical cases. The presence of a code in a group does not guarantee approval of a claim for that code. Approval is based on clinically appropriate use of the code.

## I. Individual Code Definitions

CPT® codes 77370 and 77470 are used to report the additional time and effort required when a medical physicist and radiation oncologist must plan for and deliver treatment under unusual clinical circumstances. Neither code should be billed routinely in connection with usual and customary services. Exceptions or additions to this guide will be made on a case-by-case basis with appropriate documentation.

### A. 77470

The radiation oncologist bills 77470 when the complexity of the radiation therapy treatment plan is such that additional time and effort are required to deliver treatment effectively. Patient-specific documentation is required to substantiate the medical necessity of this code.

77470 may be medically necessary in treatment plans for which one or more of the following techniques are utilized.<sup>1,2,3,4</sup>

1. Concurrent chemotherapy (not 30 days before or 30 days after, but concurrent with the radiation treatments – Herceptin®, Temodar®, and hormonal therapy do not typically add additional work effort and are therefore not considered sufficient to qualify for reimbursement under this code)
2. Brachytherapy
3. Total body irradiation (TBI)
4. Hemi-body radiation
5. Per oral
6. Endocavitary irradiation
7. Pediatric patient requiring daily anesthesia and daily physician supervision
8. Hyperthermia
9. Cases requiring reconstruction of previous treatment plans; or combined dose effects of brachytherapy and external beam treatment
10. Selective Internal Radiation Therapy (SIRT)
11. Radioimmunotherapy when combined with external beam treatment
12. Twice a day treatment (BID)

Procedures for which 77470 should not be billed include the following:

1. Contouring for three-dimensional conformal radiation therapy (3D-CRT)
2. Contouring for intensity modulated radiation therapy (IMRT), even when multiple image sets are referenced
3. Reviewing a multi-phase plan when the physicist has done the work of summing the plans.
4. The work required for the 4DCT performed during simulation for treatment utilizing respiratory gating

Routine use of 77470 for standard breast cancer planning or standard prostate IMRT planning is not reimbursable.

Routine use of 77470 for SRS/SBRT is not reimbursable

CPT® code 77470 is reported once per course of therapy.<sup>2</sup>

#### B. 77370

CPT® code 77370 is very similar to 77470 in that it documents additional work that is not routinely required for a radiation therapy episode of care. Billing for this code is also limited to unusual clinical situations, and is only appropriate for work performed by a board certified medical physicist. 77370 should not be applied to situations in which the physicist is performing quality assurance services. This code includes a technical component only.<sup>1</sup>

77370 may be medically necessary for treatment plans in which one or more of the following techniques or factors are present.<sup>2,5,6</sup>

1. Complex interrelationships of electron and photon ports. This code will not be reimbursed for an EBRT boost for breast cancer
2. Brachytherapy
3. Analysis of special devices and blocking to protect critical organs for treatment delivery that is not routinely required
4. Analysis of treatment areas that are abutting or overlapping with a previously treated area
5. Analysis of potential complications that a pregnant patient may experience as a result of treatment delivery
6. Fusion of three-dimensional image sets from multiple modalities, e.g., computerized tomography (CT), positron emission tomography (PET) and magnetic resonance imaging (MRI) (77370 should not separately be reported with IMRT planning code 77301, even when image fusion is done. The work effort for 77301 includes fusion of image sets)
7. Patient with a pacemaker/defibrillator/prosthesis within close proximity to treatment fields
8. Patient-specific treatment circumstances that require corrective measures to solve a discrepancy, correct a treatment error and ensure proper completion of treatment

9. Fusion and blending of multiple treatment plans including previously completed treatments for a specific patient circumstance
10. Radioimmunotherapy (for patients previously treated with external beam and an evaluation of a critical organ dose is required)
11. SIRT

Procedures for which 77370 should not be billed include the following:

1. Verification of dose distribution and monitor units/dose accuracy for 3D/IMRT plans  
Electron cutout measurements/dose measurements
2. In-vivo dosimetry
3. The work required for the 4DCT performed during simulation for treatment utilizing respiratory gating

CPT® code 77370 is not routinely reported for SRS/SBRT.

CPT® code 77370 is reported once per course of therapy.

Use of this code requires a physician's request detailing what analysis should be performed, together with a custom report from the physicist specifically addressing items in the physician's request. Check-off sheets and repetitive templates are insufficient to serve as documentation of a customized special physics request.

Exceptions to this policy will be made on a case-by-case basis with appropriate supporting documentation. Evidence to substantiate an exception should be submitted when authorization is requested.

#### C. 77300

CPT® code 77300, basic radiation dosimetry calculation, is billed for a mathematical computation of the radiation dose at a particular point, a calculation related to source decay, or another independent calculation. Calculations are required for both external beam radiation therapy and brachytherapy and must be prescribed by the treating physician. Calculations are typically charged at a rate of one unit of CPT® code 77300 for each unique verification calculation (generally one per port, arc, path or gantry angle). If treating breasts using multiple segments within each field (field in field), eviCore will approve up to 4 segments (4 units of 77300) per gantry angle for each unique field (see #11). The use of multiple segments for other treatment areas would be considered on a case-by-case basis. There must be a second algorithmic calculation that is separate and distinct from the isodose plan. The organs of interest or regions of interest are not reported as basic calculations but are considered to be included in the isodose plan.<sup>7</sup> As of January 1, 2015, new CPT codes 77306, 77307, 77316, 77317 and 77318 along with 77321 include the work associated with the basic dosimetry calculation(s). As of January 1, 2016, new CPT codes 77767, 77768, 77770, 77771, 77772, 0394T

and 0395T as well as code 77295 include the work associated with the basic dosimetry calculation(s). The edit involving 77295 and 77300 was deleted in the July 1, 2016 version of the National Correct Coding Initiative (NCCI). The deletion is retroactive to January 1, 2016, the implementation date of the edit. Code 77300 should still not be reported with the other listed codes.<sup>7,8</sup>

77300 may be medically necessary for the following.<sup>9,10,11</sup>

1. Central axis depth dose
2. Time dose fractionation (TDF)
3. Nominal standard dose (NSD)
4. Gap calculation
5. Off axis factor
6. Tissue inhomogeneity factors
7. Calculation of non-ionizing radiation surface or depth dose
8. Assay to verify activity of an isotope and to determine the exact quantity to be administered
9. Calculation of the changes in source activity prior to each brachytherapy treatment (decay factor)
10. Calculation of thermal dose prior to each hyperthermia treatment
11. Verification for treatment of unique open or unique blocked fields or segments. Mirror image fields or segments at the same source axis difference (SAD) or source to skin difference (SSD) do not qualify for more than one calculation per unique field or segment.
12. Certain treatment techniques such as SBRT or SRS have a maximum of 10 units that can be billed

Procedures that exclude 77300 include the following.<sup>9,12</sup>

1. Gamma function quality assurance services
2. Verification of seed placement
3. Tracking cord dose
4. Tracking max dose
5. Multiple points of calculation within an isodose plan
6. Recalculation of previously determined dose points
7. Diode readings and variance calculations

Exceptions to this policy will be made on a case-by-case basis with appropriate documentation.

#### D. 77331

Special Dosimetry Code: 77331<sup>9,13</sup> is used to document a dose at given point within a treatment field using special radiation equipment. The following rules apply:

1. If medically necessary, a measurement of a specific point is only reported once (per gantry angle) unless there are changes in the treatment affecting the measured point

2. Routine dosimetry measurements on all patients or fields are not allowed and are considered not medically necessary
3. The code may be used for unique considerations:
  - a. Measuring a dose at abutting or overlapping fields
  - b. Calibrating an electron mold
  - c. Confirming dose in a uniquely small field
  - d. Selected brachytherapy procedures
  - e. Documentation of dose under bolus
  - f. Measurement of critical organ dose such as eye (lens) when medically necessary

This measurement is intended to verify dose that is not part of the normal calculation of a treatment planning system or a treatment device calibration. It is not intended as a routine check or quality assurance for IMRT or other treatment plans.

The use of CPT® 77331 requires a specific physician order and evidence that the result was reviewed and signed by the physician within 24 hours. The ordering of more than six measurements will require specific documentation of an unusual medical necessity in a given case.

E. 77293<sup>14,15</sup>

Respiratory motion management simulation (List separately in addition to code for primary procedure) (Use 77293 in conjunction with 77295, 77301).

Code 77293 applies to a 4D CT data acquisition noting that a 4D scan is free-breathing. In these patients, the treatment area is not a static target, but rather the treatment area moves with continuous respiration, and therefore requires the acquisition of multiple data sets showing the respiratory motion. Because multiple scans are produced and fused with motion respiratory tracking, respiratory motion management provides precise mapping of the field and portal design defining the respiratory movement of the target tissue and the possible organs at risk. This code is not reported for CT registrations performed during inspiration, expiration and at rest. If the only breathing motion performed during simulation is DIBH (or any type of voluntary breath hold), this would not be reported with code 77293.

The work involved in +77293 includes physicians, therapists, dosimetrists and physicists and has both a professional and a technical component. The work is performed both in the simulator and in dosimetry. The add-on code +77293 is part of the simulation and isodose planning process, not part of treatment delivery. Additional codes such as 77470 and 77370 should not be reported for the same work process.

Complete documentation is essential when reporting an add-on code. Documentation should include both the medical necessity of reporting

CPT® code +77293 as well as that the work the code describes was done. The documentation needs to be more extensive than just part of the simulation note since it is part of the isodose planning process. Physicians should work with their staff to ensure that proper documentation has been completed.

F. Teletherapy isodose plan complex 77307 and 3D treatment plan 77295.

It is appropriate to do a CT simulation, and contour the target and clinical structures for the purpose of creating blocks for either complex plans or 3D plans. 3D plans differ in that the process includes an analysis of dose options and variations within contoured structures, which have been reconstructed in 3D. This dose and volume analysis can be documented in the medical record either in standard x and y axis format as a dose volume histogram (DVH), or in a more pictorial format as “dose clouds”. This analysis of dose and volume is what differentiates a complex plan from a 3D plan, and there must be medical necessity for doing this analysis. With today’s technology and with CT simulation, which is almost universal, it is a short path to go from contouring structures and rendering a 3D construction, to completing a dose-volume analysis. While it may seem like an arbitrary break point in terms of coding 77307 and 77295, the AMA for the time being still makes this distinction. To use whole brain RT for metastatic disease as an example, when we do a CT simulation, contour structures to draw blocks, use two (2) predetermined lateral fields and otherwise un-modulated 4 or 6 MV energies, a complex treatment plan is the correct billing code. We are left to decide whether a couple of segments (field-in-field) to “smooth out” hotspots is of any clinically meaningful significance and therefore justifies billing 3D. The current NCCTG N107C trial allows but does not require segments for the WBRT. eviCore does not consider segments medically necessary for the majority of WBRT cases, and therefore does not generally approve 3D treatment planning.

G. Computed tomography guidance for placement of radiation therapy fields (77014)<sup>16</sup>

Providers may not report CT guidance (77014) separately when reporting simulation services represented by codes 77280-77290 as CT guidance is now packaged into the simulation codes for both hospitals and freestanding centers. The same rule also applies to 3D conformal planning code 77295. Code 77014 is still the correct CPT code to report image guidance with kV or MV CT imaging in the Medicare Physician Fee Schedule (MPFS) setting.

H. IMRT planning code 77301<sup>17</sup>

Effective January 1, 2017, CMS issued updated guidance on the CPT codes that may be reported with 77301 *IMRT Treatment Planning* for developing an IMRT treatment plan. Payment for the services identified by CPT codes 77014, 77280, 77285, 77290, 77295, 77306, 77307, 77321, and 77331 are included in the payment for CPT code 77301 (IMRT planning). These codes should not be reported in addition to CPT code 77301 when provided prior to or as part of the development of the IMRT plan.

CPT code 77280 *Simulation aided field setting* should not be reported for verification of the treatment field during the entire course of IMRT.

CPT Code 77370 *Special Medical Radiation Physics Consultation* cannot be used for a QA or development of the treatment plan, including image fusion. There may be certain clinical scenarios where the physician will need a special physics consult AFTER the development of the plan.

I. Stereotactic Radiosurgery (SRS) <sup>18</sup>

SRS codes are reported when all lesions are treated in a single session as a complete course of treatment. It is not appropriate to treat multiple lesions as sequential single fraction SRS. If more than one fraction is required then the FSRT codes should be reported up to a maximum of 5 fractions. All imaging is included in the SRS treatment delivery and physician management codes and not separately reported.

J. Stereotactic Body Radiation Therapy (SBRT) and Fractionated Stereotactic Radiotherapy (FSRT) <sup>18</sup>

SBRT and FSRT codes should only be reported when the entire episode of care does not exceed 5 fractions, and when SBRT or FSRT is performed as a complete course of therapy. It is not appropriate to report SBRT or FSRT codes as a boost or in conjunction with any other treatment technique. All imaging is included in the SBRT and FSRT treatment delivery and physician management codes and not separately reported.

K. Continuing Medical Physics Code 77336<sup>19</sup>

Weekly physics, code 77336, is reported with external beam radiation therapy or brachytherapy once per 5-fraction period, regardless of the actual time period in which services are provided. If the course combines EBRT and brachytherapy, each encounter will count as a fraction for the 5-fraction period, regardless of the duration between those fractions or the modality. Code 77336 may be billed once for a complete course of therapy only consisting of one or two fractions. Code 77336 is not reported when there is only a single fraction in the brachytherapy course, such as a prostate seed implant.

L. Radiation Treatment Delivery, Superficial and/or Orthovoltage, per day (77401) <sup>20</sup>

Beginning January 1, 2015, CPT code 77401 was revised to include codes 77261-77263, 77332-77334, 77306-77307, 77316-77318, 77336, 77427, 77431, 77432, 77435, 77469, 77470 and 77499. These codes cannot be reported separately with treatment delivery code 77401.

## **II. Frequently Requested Techniques and Associated CPT Codes**

**The presence of a code in a group does not guarantee approval of a claim for that code. Approval is based on clinically appropriate use of the code.**

Electrons: 77261-77263, 77280-77290, 77321, 77331, 77332-77334, 77336, 77412, 77427

Complex: 77261-77263, 77280-77290, 77306-77307, 77331, 77332-77334, 77336, 77402, 77407, 77412, 77417, 77427

3D/3D TomoDirect: 77014, 77261-77263, 77280-77290, 77293, 77295, 77300, 77331, 77332-77334, 77336, 77387, 77402, 77407, 77412, 77417, 77427, G6001, G6002, G6017

IMRT: 77014, 77261-77263, 77293, 77300, 77301, 77332-77334, 77336, 77338, 77385, 77386, 77387, 77417, 77427, G6001, G6002, G6017

SRS: 77261-77263, 77280-77290, 77295, 77300, 77301, 77332-77334, 77336, 77338, 77371, 77372, 77432, G0339

FSRT/SBRT: 77261-77263, 77280-77290, 77295, 77300, 77301, 77332-77334, 77336, 77338, 77373, 77435, G0339, G0340

LDR: 77263, 77280-77290, 77295, 77316-77318, 77336, 77370, 77470, 77761-77763, 77778

HDR: 77263, 77280-77290, 77295, 77316-77318, 77332, 77336, 77370, 77470, 77767-77768, 77770-77772

Electronic Brachytherapy: 0395T, 77280-77290, 77370

Protons: 77014, 77261-77263, 77280-77290, 77295, 77300, 77301, 77332-77334, 77336, 77338, 77387, 77417, 77427, 77520-77525, G6001, G6002, G6017

Superficial/Orthovoltage: 77280-77290, 77300, 77401

\*Treatment technique certified will determine additional codes available

\*This list is not all inclusive of treatment techniques available.

Codes that fall outside of the 77XXX series, but are an integral part of some radiation therapy procedures will be included in authorizations based on approved treatment plans. This would include, but is not limited to: 41019, 55875, 55876, 55920, 57155, 57156, 58346, 76965, A9606, C2616.

### III. Crosswalk for Radiation Therapy Treatment Delivery and IGRT Codes

| Freestanding | Hospital                                              |
|--------------|-------------------------------------------------------|
| 77014*       | 77387*                                                |
| G6001*       | 77387*                                                |
| G6002*       | 77387*                                                |
| G6003        | 77402                                                 |
| G6004        |                                                       |
| G6005        |                                                       |
| G6006        |                                                       |
| G6007        | 77407                                                 |
| G6008        |                                                       |
| G6009        |                                                       |
| G6010        |                                                       |
| G6011        | 77412                                                 |
| G6012        |                                                       |
| G6013        |                                                       |
| G6014        |                                                       |
| G6015        | 77385 for breast and prostate<br>77386 for all others |
| G6016        | 77385 for compensator based IMRT                      |
| G6017*       | 77387*                                                |

\*To report the physician work associated with image guidance, attach modifier -26 to 77387, G6001, G6002, G6017 or 77014, depending on which image guidance service was provided, provider location and health plan requirements. Only one type of imaging is allowed per date of service. Please note that the technical component of IGRT is included in IMRT treatment delivery codes 77385 and 77386 and is not separately reported

#### References

1. ASTRO/ACR, Guide to Radiation Oncology Coding (2015), pages 77-78.
2. ASTRO/ACR, Guide to Radiation Oncology Coding (2015), pages 99-100.
3. ASTRO/ACR, Guide to Radiation Oncology Coding (2015), page 117.
4. ASTRO/ACR, Guide to Radiation Oncology Coding (2015), page 123.
5. ASTRO/ACR, Guide to Radiation Oncology Coding (2015), pages 66-69.
6. ASTRO/ACR, Guide to Radiation Oncology Coding (2015), page 83.
7. AMA 2015 and 2016 CPT Code Changes
8. 2016 National Correct Coding Initiative Policy Manual
9. ASTRO/ACR, Guide to Radiation Oncology Coding (2015), pages 57-58.
10. ASTRO/ACR, Guide to Radiation Oncology Coding (2015), page 58.
11. ASTRO/ACR, Guide to Radiation Oncology Coding (2015), page 121.
12. ASTRO/ACR, Guide to Radiation Oncology Coding (2015), page 122.
13. ASTRO/ACR, Guide to Radiation Oncology Coding (2015), page 59.
14. ASTRO/ACR, Guide to Radiation Oncology Coding (2016), pages 53-54
15. <https://www.astro.org/Daily-Practice/Coding/Coding-Guidance/Respiratory-Motion-Management-77293/>
16. ASTRO/ACR, Guide to Radiation Oncology Coding (2015), page 52
17. <https://www.astro.org/Daily-Practice/Coding/Coding-Guidance/77301-in-2016/>
18. ASTRO/ACR, Guide to Radiation Oncology Coding (2015), pages 93-102
19. ASTRO/ACR, Guide to Radiation Oncology Coding (2016), pages 66, 139
20. ASTRO/ACR, Guide to Radiation Oncology Coding (2015), pages 146-149

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