HEALTHHELP®

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Intensity Modulated Radiation Therapy (IMRT) Bladder Cancer

Radiation Therapy

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Table of Contents

Intensity-Modulated Radiation Therapy (IMRT) for Bladder and/or Urethral Cancer

Bladder Cancer Guideline

IMRT for bladder cancer may be appropriate when the medical record demonstrates **ALL** of the following:
37 fractions or less to all or part of the bladder and **ALL** of the following: [7] [5] [6]

I. IMRT is being administered with another treatment modality (eg, chemotherapy, transurethral resection of the bladder tumor (TURP)). [2] [3]

II. IMRT plan reduces local organ toxicity (eg, heart, kidneys, lungs, stomach). [1] [4]

III. Physical ability and clinical status of **ANY** of the following:

- Eastern Cooperative Oncology Group (ECOG) Performance Status Grade of 1 or less
- Karnofsky Performance Status (KPS) Grade of 80 or more

Urethral Cancer Guideline

IMRT for urethral cancer may be appropriate when the medical record demonstrates **ALL** of the following:

I. Treatment consists of **ANY** of the following: [3]

A. **39 fractions or less** for **ANY** of the following: [8]

1. Definitive treatment for **ANY** of the following:

i. cT2 cN0 disease

ii. cT3 to cT4 disease

iii. Lymph node positive disease

2. Post-operative adjuvant treatment

B. **42 fractions or less** for recurrent disease [9]

II. IMRT is being administered with chemotherapy.

III. IMRT plan reduces local organ toxicity (eg, heart, kidneys, lungs, stomach).

IV. Physical ability and clinical status of **ANY** of the following:

- Eastern Cooperative Oncology Group (ECOG) Performance Status Grade of 1 or less

- Karnofsky Performance Status (KPS) Grade of 80 or more

LCD 36711
See also, **LCD 36711**: Intensity Modulated Radiation Therapy (IMRT) at https://www.cms.gov/medicare-coverage-database/search.aspx *if applicable to individual's healthplan membership*.

LCD 36773
See also, **LCD 36773**: Intensity Modulated Radiation Therapy (IMRT) at https://www.cms.gov/medicare-coverage-database/search.aspx *if applicable to individual's healthplan membership*.

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Procedure Codes

Intensity-modulated radiation therapy (IMRT) Associated Procedure Codes

Table 1. Intensity-modulated radiation therapy (IMRT) Associated Procedure Codes

CODE	DESCRIPTION
77385	Intensity modulated radiation treatment delivery (IMRT), includes guidance and tracking, when performed; simple
77386	Intensity modulated radiation treatment delivery (IMRT), includes guidance and tracking, when performed; complex
G6015	Intensity modulated treatment delivery, single or multiple fields/arcs, via narrow spatially and temporally modulated beams, binary, dynamic MLC, per treatment session
G6016	Compensator-based beam modulation treatment delivery of inverse planned treatment using 3 or more high resolution (milled or cast) compensator, convergent beam modulated fields, per treatment session

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IMRT Bladder Cancer Definition Section

Adjuvant treatment refers to enhancing the effectiveness of medical treatment.
cT2cN0 staging is the cancer staging when the tumor is greater than 20 mm but less than or equal to 50 mm in greatest dimension and when there is no regional lymph node metastasis.
cT3 staging is cancer staging where the tumor is greater than 50 mm in greatest dimension.
Definitive treatment is the treatment plan for a disease or disorder that has been chosen as the best one for a patient after all other choices have been considered.
Eastern Cooperative Oncology Group (ECOG) scale describes a patient's level of functioning in terms of the ability to care for one's self, daily activity and physical ability (eg, walking, working).
Intensity modulated radiation therapy (IMRT) is a type of three-dimensional radiation therapy that uses computer-generated images to match radiation to the size and shape of a tumor. In IMRT, thousands of tiny radiation beams enter the body from many angles and intersect the tumor. Since the intensity of each beam can be controlled, the radiation dose can wrap around normal tissue, create concave shapes and turn corners. The aim is to deliver a higher radiation dose to a tumor with less damage to nearby healthy tissue.
Karnofsky performance status (KPS) is an assessment tool for functional impairment. It can be used to compare effectiveness of different therapies and to assess the prognosis in individual patients. In most serious illnesses, the lower the Karnofsky score, the worse the likelihood of survival.

Disclaimer

Purpose

The purpose of the clinical guidelines is to assist healthcare professionals in selecting the medical service that may be appropriate and supported by evidence to improve patient outcomes. These clinical guidelines neither preempt clinical judgment of trained professionals nor advise anyone on how to practice medicine. Healthcare professionals using these clinical guidelines are responsible for all clinical decisions based on their assessment.

Medical Evidence and Clinical Review

Medical information is constantly evolving, and HealthHelp reserves the right to review and update these clinical guidelines periodically. All Clinical Reviewers are instructed to apply clinical indications based on individual patient assessment and documentation, within the scope of their clinical license.

Payment Disclaimer

The use of these clinical guidelines does not provide authorization, certification, explanation of benefits, or guarantee of payment; nor do the guidelines substitute for, or constitute, medical advice. Federal and State law, as well as member benefit contract language (including definitions and specific contract provisions/exclusions) take precedence over clinical guidelines and must be considered first when determining eligibility for coverage. All final determinations on coverage and payment are the responsibility of the health plan. Nothing contained within this document can be interpreted to mean otherwise.

Legal Notice

Ancillary Payment Policy Recommendations

Radiation Therapy

Policy Initiated: 01/01/2022

Radiation Oncology Ancillary Code Policy

Background

HealthHelp's Radiation Therapy Program includes utilization management review of primary treatments, as well as coding and reimbursement strategies to promote appropriate ordering and payment across secondary/ancillary treatment planning and treatment approach procedures (see full list of included codes in the Associated Procedure Code se).

Review & Authorization

Medical appropriateness review and authorization of primary radiation therapy treatments includes 2D3D, Brachytherapy, IMRT, Neutron Therapy, Proton Beam, and Stereotactic Radiosurgery. These reviews are supported by our high-touch, educational model, and leverages the use of authorization denial(s) as a last resort, and only following peer-to-peer physician discussions.
All primary radiation treatment authorizations are also reviewed against our current, evidence- and practice-based management of ancillary or secondary treatment planning and treatment approach procedure codes to promote appropriate ordering, billing, and reimbursement. HealthHelp employs multiple management strategies within the ancillary coding space, including (1) offering user-prompting within our authorization system to promote appropriate ordering, (2) authorizing appropriate ancillary codes and billable units in addition to the primary procedure, (3) monitoring claims for fraud, waste, and abuse.

1. Appropriate Ancillary Code Ordering

To address the most frequently overused and inappropriate ordering of ancillary procedures, HealthHelp's system generates user-prompts based on the users selection of a range of available codes. Our goal is to improve appropriate ordering of ancillary codes prior to the primary treatment being authorized and prior to the case being escalated for additional clinical review. User prompts are generated for the following inappropriately ordered combinations of ancillary codes:

Table 1. Ancillary Codes - Inappropriate Combinations

77280 & 77387	77338 & 77334	77307 & 77306	77432 & 77435

77280 & 77014	77431 & 77427	77387 & 77014	G6002 & 77014
77334 & 77332	77295 & 77301	77318 & 77316	

2. Appropriate Ancillary Code Reimbursement, by Cancer-Type and Primary Treatment

The current evidence base within Radiation Therapy supports appropriate billable ranges for select cancer diagnoses when treated by select primary treatment modalities. When a primary Radiation Therapy treatment modality is authorized, HealthHelp systems automatically reviews the patient's cancer-type/diagnosis and will approve the appropriate billable ancillary code(s), as well as the appropriate billable units for that ancillary code. The evidence base does not support, nor do we recommend payment for services above these recommendations.

2.1 Cone-Beam Computed Tomography (CBCT) Guidance (CPT 77014 or CPT 77387)

CPT 77014 OR CPT 77387 - IMRT or 2D3D

CBCT (CPT 77014 OR CPT 77387) is clinically appropriate when IMRT or 2D3D is being utilized in the following clinical settings (Loo Jr., et al. Revised 2019 (CSC/BOC)):

Cancer Type	Units Approved
Brain	Up to 33 max
Bone Metastasis	Up to 20 max
Cervical	Up to 35 max
Endometrial	Up to 35 max
Hepatobiliary	Up to 30 max
Keloid	None
Lung	Up to 35 max
Pancreatic	Up to 30 max
Prostate	Up to 45 max
Rectal	Up to 30 max

Clinical Rationale/Guidance:

IGRT images should be reviewed by the physician initially at the time of verification (online image guidance) and then according to the frequency defined in the IGRT directive, prior to the subsequent fraction, to ensure treatment accuracy and reproducibility (offline image guidance).
Each facility, under the direction of the radiation oncologist, should define a threshold above which the physician is required to review the patient setup and images before treatment is delivered (online image guidance). This threshold can vary according to the site treated or patient specific anatomic factors (ie, abdominal or pelvic treatment site in an obese patient in whom larger shifts

are expected). In SRS and SBRT cases, definition of a threshold for physician notification may not be necessary because the physician and physicist will already be present for real-time image approval.

If IGRT via advanced imaging cannot be performed because of technical issues, the radiation oncologist will decide whether to cancel/postpone treatment until advanced imaging is restored or, using alternate image guidance such as orthogonal MV x-rays, to register either fiducial markers or bony anatomy for a limited number of fractions.

CPT 77014 - SRS/SBRT or Brachytherapy

CBCT (CPT 77014) is clinically appropriate when SRS/SBRT or Brachytherapy is being utilized in the following clinical settings (ASTRO 2015)(CMS 2015):

Cancer Type	Units Approved
Brain	1 Maximum
Bone Metastasis	1 Maximum
Cervical	1 Maximum
Endometrial	1 Maximum
Hepatobiliary	1 Maximum
Keloid	None
Lung	1 Maximum
Pancreatic	1 Maximum
Prostate	1 Maximum
Rectal	1 Maximum

Clinical Rationale/Guidance:

The American Medical Association (AMA) bundles IGRT codes and includes these within the primary codes for daily treatment. Because of this, IGRT codes may not be billed separately for Stereotactic Body Radiation Therapy (SBRT). Similarly, IGRT codes cannot be billed separately with Stereotactic Radiosurgery (SRS), as referenced in the ASTRO coding guide.

CPT 77014 or CPT 77387 - Proton Therapy

CBCT (CPT 77014 OR CPT 77387) is clinically appropriate when Proton Therapy is being utilized in the following clinical settings (ASTRO 2017)

Cancer Type	Units Approved
Brain	Up to 33 max
Bone Metastasis	Up to 20 max
Cervical	Up to 35 max
Endometrial	Up to 35 max
Hepatobiliary	Up to 30 max

Cancer Type	Units Approved
Keloid	None
Lung	Up to 35 max
Pancreatic	Up to 30 max
Prostate	Up to 45 max
Rectal	Up to 30 max

Clinical Rationale/Guidance:

CBCT is appropriate for proton therapy when available on the treatment device.

2.2 Complex Treatment Devices, Design & Construction (CPT 77263, CPT 77334 or CPT 77300)

CPT 77263 - 2D3D, IMRT, Proton Therapy, Brachytherapy, or SBRT

Complex Treatment Devices, Design & Construction (CPT 77263) is clinically appropriate when 2D3D, IMRT, Proton Therapy, Brachytherapy, or SBRT is being is being utilized in the following clinical settings:

Cancer Type	Units Approved
Brain	Up to 1 maximum
Bone Metastasis	Up to 1 maximum
Cervical	Up to 1 maximum
Endometrial	Up to 1 maximum
Hepatobiliary	Up to 1 maximum
Keloid	Up to 1 maximum
Lung	Up to 1 maximum
Pancreatic	Up to 1 maximum
Prostate	Up to 1 maximum
Rectal	Up to 1 maximum

Clinical Rationale/Guidance:

CPT code 77263 should be used when complex treatment planning is involved. Complex planning requires highly complex blocking, custom shielding blocks, tangential ports, special wedges or compensators, three (3) or more separate treatment areas, rotational or special beam considerations, or combination of therapeutic modalities. Complex planning includes interpretation of special testing, tumor localization, treatment volume determination, treatment time/dosage determination, choice of treatment modality, determination of number and size of treatment ports, selection of appropriate treatment devices, and other procedures. (CMS 2015)

CPT 77334 or CPT 77300 - 2D3D

Complex Treatment Devices, Design & Construction (CPT 77334 or CPT 77300) is clinically appropriate when 2D3D is being utilized in the following clinical settings:

Cancer Type	Units Approved
Brain	Up to 10 maximum
Bone Metastasis	Up to 10 maximum
Cervical	Up to 10 maximum
Endometrial	Up to 10 maximum
Hepatobiliary	Up to 10 maximum
Keloid	Up to 1 maximum
Lung	Up to 10 maximum
Pancreatic	Up to 10 maximum
Prostate	Up to 10 maximum
Rectal	Up to 10 maximum

Clinical Rationale/Guidance:

CPT code 77334 should be used for complex treatment devices, design, and construction that include customized, single-use bolus such as wax molds conformed to a particular patient body part; customized blocks (low temperature alloy); customized compensators; wedges; molds or casts; custom made immobilization devices, or eye-shields; custom made immobilization include restraining devices such as aquaplast and alpha cradle.

CPT 77334 or CPT 77300 - IMRT

Complex Treatment Devices, Design & Construction (CPT 77334 or CPT 77300) is clinically appropriate when IMRT is being utilized in the following clinical settings:

Cancer Type	Units Approved
Brain	Up to 1 maximum
Bone Metastasis	Up to 1 maximum
Cervical	Up to 1 maximum
Endometrial	Up to 1 maximum
Hepatobiliary	Up to 1 maximum
Keloid	Up to 1 maximum
Lung	Up to 1 maximum
Pancreatic	Up to 1 maximum
Prostate	Up to 1 maximum
Rectal	Up to 1 maximum

Clinical Rationale/Guidance:

Use of complex treatment devices, design & construction is appropriate for simulation only, it is not appropriate to be used in treatment planning. VMAT (CPT 77338) has better dosimetry and accuracy. This applies to the following clinical scenarios: lung cancer, esophageal cancer, breast cancer, rectal cancer. (CMS 2015) (Merrow, C E, et al., "A dosimetric evaluation of VMAT for the treatment of non-small cell lung cancer." 2013) (Munch, Aichmeier, et al., Comparison of dosimetric parameters and toxicity in esophageal cancer patients undergoing 3D conformal radiotherapy or VMAT 2016) (Liu, et al. 2016)((Zhao, et al. 2016)

CPT 77334 or CPT 77300 - SBRT

Complex Treatment Devices, Design & Construction (CPT 77334 or CPT 77300) is clinically appropriate when SBRT is being utilized in the following clinical settings:

Cancer Type	Units Approved
Brain	Up to 1 maximum
Bone Metastasis	Up to 1 maximum
Cervical	Up to 1 maximum
Endometrial	Up to 1 maximum
Hepatobiliary	Up to 1 maximum
Keloid	Up to 1 maximum
Lung	Up to 1 maximum
Pancreatic	Up to 1 maximum
Prostate	Up to 1 maximum
Rectal	Up to 1 maximum

Clinical Rationale/Guidance:

VMAT (CPT 77338) is appropriate and superior to fixed beam approach. (Sapkaroski, Osborne and Knight 2015)(Wu, et al. 2009)

CPT 77334 or CPT 77300 - Brachytherapy

Complex Treatment Devices, Design & Construction (CPT 77334 or CPT 77300) is clinically appropriate when Brachytherapy is being utilized in the following clinical settings:

Cancer Type	Units Approved
Brain	Up to 1 maximum
Bone Metastasis	Up to 1 maximum
Cervical	Up to 1 maximum
Endometrial	Up to 1 maximum
Hepatobiliary	Up to 1 maximum
Keloid	Up to 1 maximum

Cancer Type	Units Approved
Lung	Up to 1 maximum
Pancreatic	Up to 1 maximum
Prostate	Up to 1 maximum
Rectal	Up to 1 maximum

Clinical Rationale/Guidance:

Applicable for treatment devices, design and construction as well as complex (irregular blocks, special shields, compensators, wedges, molds or casts). (CMS 2015)

2.3 Continuing Medical Physics Consultation (CPT 7736, CPT 77370, CPT 77470)

CPT 77336 - 2D3D, IMRT, Proton Therapy, Brachytherapy, or SBRT

Continuing medical radiation physics consultation (CPT 77336) is clinically appropriate when 2D3D, IMRT, Proton Therapy, Brachytherapy, or SBRT is being utilized in the following clinical settings:

Cancer Type	Units Approved
Brain	Up to 1 max billable unit per every 5 fractions
Bone Metastasis	Up to 1 max billable unit per every 5 fractions
Cervical	Up to 1 max billable unit per every 5 fractions
Endometrial	Up to 1 max billable unit per every 5 fractions
Hepatobiliary	Up to 1 max billable unit per every 5 fractions
Keloid	Up to 1 max billable unit per every 5 fractions
Lung	Up to 1 max billable unit per every 5 fractions
Pancreatic	Up to 1 max billable unit per every 5 fractions
Prostate	Up to 1 max billable unit per every 5 fractions
Rectal	Up to 1 max billable unit per every 5 fractions

Clinical Rationale/Guidance:

Code 77336 is appropriate to use for continuing medical radiation 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 (once every consecutive five treatments delivered). This frequency should match the weekly radiation treatments billed. It is specific to the review of the weekly radiation treatment plan. This consultation ensures that the treatment administered conforms the specifications of the prescribing physician. It includes a documented review of the patient's treatment chart and record to verify that the patient received the prescribed radiation dosage, appropriate positioning and beam orientation and radiation safety. (Cheng, et al. Revised 2019 (CSC/BOC))

CPT 77370 - 2D3D, IMRT, Proton Therapy, Brachytherapy, or SBRT

Continuing medical radiation physics consultation (CPT 77370) is clinically appropriate when 2D3D, IMRT, Proton Therapy, Brachytherapy, or SBRT is being utilized in the following clinical settings:

Cancer Type	Units Approved
Brain	Up to 1 max per course of treatment
Bone Metastasis	Up to 1 max per course of treatment
Cervical	Up to 1 max per course of treatment
Endometrial	Up to 1 max per course of treatment
Hepatobiliary	Up to 1 max per course of treatment
Keloid	Up to 1 max per course of treatment
Lung	Up to 1 max per course of treatment
Pancreatic	Up to 1 max per course of treatment
Prostate	Up to 1 max per course of treatment
Rectal	Up to 1 max per course of treatment

Clinical Rationale/Guidance:

Code 77370 is appropriate to use for special medical radiation physics consultation when a problem or special situation arises during radiation therapy. This code requires a detailed written report describing the problem to be given to the requesting physician. (Loo Jr., et al. Revised 2019 (CSC/BOC))

CPT 77470 - 2D3D, IMRT, Proton Therapy, Brachytherapy, or SBRT

Special treatment procedures code (CPT 77470) is clinically appropriate when 2D3D, IMRT, Proton Therapy, Brachytherapy, or SBRT is being utilized in the following clinical settings:

Cancer Type	Units Approved
Brain	Up to 1 max per course of treatment
Bone Metastasis	Up to 1 max per course of treatment
Cervical	Up to 1 max per course of treatment
Endometrial	Up to 1 max per course of treatment
Hepatobiliary	Up to 1 max per course of treatment
Keloid	Up to 1 max per course of treatment
Lung	Up to 1 max per course of treatment
Pancreatic	Up to 1 max per course of treatment
Prostate	Up to 1 max per course of treatment
Rectal	Up to 1 max per course of treatment

Clinical Rationale/Guidance:

Special treatment procedures (e.g., total body irradiation, hemibody radiation, per oral or endocavitary irradiation CPT code 77470 is used to cover the additional physician effort and work for the special procedure of hyper-fractionation, total body irradiation, per oral, endocavitary, or intraoperative cone use, or when other modalities are being managed in combination with external beam therapy, such as brachytherapy, stereotactic radiosurgery, and any other special time consuming treatment plan. This code is not intended to be used because a patient has another ongoing medical diagnosis like diabetes, COPD, or hypertension. CPT code 77470 (Special radiation treatment) covers the additional physician effort and work required for the special procedures of: hyperfractionation, total body irradiation, brachytherapy, hyperthermia, planned combination with chemotherapy; or, other combined modality therapy, stereotactic radiosurgery, intra-operative radiation therapy, and, hemibody irradiation, intracavitary cone use, radiation response modifiers, heavy particles (e.g. protons/neutrons), 3-D CRT, IMRT, any other special time consuming treatment plan. (CMS 2015)

2.4 Conformal Planning; Respiratory Motion Management (CPT 77293)

CPT 77293 - 2D3D, IMRT, Proton Therapy, Brachytherapy, or SBRT

Respiratory motion management simulation (CPT 77293) is clinically appropriate when 2D3D, IMRT, Proton Therapy, Brachytherapy, or SBRT is being utilized in the following clinical settings:

Cancer Type	Units Approved
Brain	Up to 1 max per course of treatment
Bone Metastasis	Up to 1 max per course of treatment
Cervical	Up to 1 max per course of treatment
Endometrial	Up to 1 max per course of treatment
Hepatobiliary	Up to 1 max per course of treatment
Keloid	Up to 1 max per course of treatment
Lung	Up to 1 max per course of treatment
Pancreatic	Up to 1 max per course of treatment
Prostate	Up to 1 max per course of treatment
Rectal	Up to 1 max per course of treatment

Insert text

Clinical Rationale/Guidance:

This code describes the physician work and resources involved in acquiring a respiratory correlated or '4-D' CT simulation study for conformal planning. This add-on code, +77293, must always be billed with either CPT code 77295 or 77301 on the same date of service, even though the work may take place over many days. (ASTRO 2014)

2.5 Stereotactic Radiation Treatment Management (CPT 77432 or CPT 77435)

CPT 77432 or 77435 - 2D3D, IMRT, Proton Therapy, Brachytherapy, or SBRT

Stereotactic radiation treatment management of lesions (CPT 77432 or 77435) is clinically appropriate when 2D3D, IMRT, Proton Therapy, Brachytherapy, or SBRT is being utilized in the following clinical settings:

Cancer Type	Units Approved
Brain	Up to 1 max per course of treatment
Bone Metastasis	Up to 1 max per course of treatment
Cervical	Up to 1 max per course of treatment
Endometrial	Up to 1 max per course of treatment
Hepatobiliary	Up to 1 max per course of treatment
Keloid	Up to 1 max per course of treatment
Lung	Up to 1 max per course of treatment
Pancreatic	Up to 1 max per course of treatment
Prostate	Up to 1 max per course of treatment
Rectal	Up to 1 max per course of treatment

Clinical Rationale/Guidance:

Stereotactic radiation treatment management of cerebral lesion(s) (complete course of treatment consisting of one session) (77432), generally reflects the work by the radiation oncologist and is specifically used for single fraction, complete course of therapy. Note, this is code if only for the professional component. 77432 and 77470 are not payable on the same date of service. Stereotactic body radiation therapy, treatment management, per treatment course, to 1 or more lesions, including image guidance, entire course not to exceed 5 fractions (77435) is a professional charge for treatment management, specifically performed by the radiation oncologist. This code can only re reported once for the entire episode of patient care. (CMS 2015) (CMS 2013)

3. Quarterly Claims Monitoring

HealthHelp provides quarterly claims monitoring for a targeted series of ancillary codes, highlighting anomalies and tracking trends for potential future areas of outreach and further management. Reports will include consistent measurement of procedure volume over time, including outlier ordering provider behavior.

19294	19296	19297	19298	31643	32553	41019	49411	49412	55875
55876	55920	57155	57156	58346	61797	61799	61800	63621	76873
76965	77261	77262	77280	77285	77290	77295	77299	77301	77306
77307	77316	77317	77318	77321	77331	77332	77333	77338	77399

77417	77427	77431	77469	77499	77600	77605	77610	77615	77620
77790	77799	79005	79101	79403	A4648	A4650	A9517	A9527	A9563
A9564	C1715	C1716	C1717	C1718	C1719	C1728	C2616	C2634	C2635
C2636	C2637	C2638	C2639	C2640	C2641	C2642	C2643	C2698	C2699
C9725	C9726	C9728	G6001	G6002	G6017	Q3001	S2095	S8030	

Associated Procedure Codes

CODE	DESCRIPTION
19294	Preparation of tumor cavity with placement of a radiation therapy applicator for intraoperative radiation therapy (iort) concurrent with partial mastectomy (list separately in addition to code for primary procedure)
19296	Placement of radiotherapy after loading expandable catheter (single or multichannel) into the breast for interstitial radioelement application following partial mastectomy includes imaging guidance on date separate from partial mastectomy
19297	Placement of radiotherapy after loading expandable catheter (single or multichannel) into the breast for interstitial radioelement application following partial mastectomy includes imaging guidance concurrent with partial mastectomy (list separately in addition to code for primary procedure)
19298	Placement of radiotherapy after loading brachytherapy catheters (multiple tube and button type) into the breast for interstitial radioelement application following (at the time of or subsequent to) partial mastectomy includes imaging guidance
31643	Bronchoscopy rigid or flexible including fluoroscopic guidance when performed with placement of catheter(s) for intracavitary radioelement application
32553	Placement of interstitial device(s) for radiation therapy guidance (eg fiducial markers dosimeter) percutaneous intra-thoracic single or multiple
41019	Placement of needles catheters or other device(s) into the head andor neck region (percutaneous transoral or transnasal) for subsequent interstitial radioelement application
49411	Placement of interstitial device(s) for radiation therapy guidance (eg fiducial markers dosimeter) percutaneous intra-abdominal intra-pelvic (except prostate) andor retroperitoneum single or multiple
49412	Placement of interstitial device(s) for radiation therapy guidance (eg fiducial markers dosimeter) open intra-abdominal intrapelvic andor retroperitoneum including image guidance if performed single or multiple (list separately in addition to code for primary procedure)
55875	Transperineal placement of needles or catheters into prostate for interstitial radioelement application with or without cystoscopy
55876	Placement of interstitial device(s) for radiation therapy guidance (eg fiducial markers dosimeter) prostate (via needle any approach) single or multiple
55920	Placement of needles or catheters into pelvic organs and or genitalia (except prostate) for subsequent interstitial radioelement application
57155	Insertion of uterine tandem and or vaginal ovoids for clinical brachytherapy
57156	Insertion of a vaginal radiation after loading apparatus for clinical brachytherapy
58346	Insertion of heyman capsules for clinical brachytherapy
61797	Stereotactic radiosurgery (particle beam gamma ray or linear accelerator) each additional cranial lesion simple (list separately in addition to code for primary procedure)

CODE	DESCRIPTION
61799	Stereotactic radiosurgery (particle beam gamma ray or linear accelerator) each additional cranial lesion complex (list separately in addition to code for primary procedure)
61800	Application of stereotactic headframe for stereotactic radiosurgery (list separately in addition to code for primary procedure)
63621	Stereotactic radiosurgery (particle beam gamma ray or linear accelerator) each additional spinal lesion (list separately in addition to code for primary procedure)
76873	Ultrasound transrectal prostate volume study for brachytherapy treatment planning (separate procedure)
76965	Ultrasonic guidance for interstitial radioelement application
77014	Computed tomography guidance for placement of radiation therapy fields
77261	Therapeutic radiology treatment planning simple
77262	Therapeutic radiology treatment planning intermediate
77263	Therapeutic radiology treatment planning complex
77280	Therapeutic radiology simulation-aided field setting simple
77285	Therapeutic radiology simulation-aided field setting intermediate
77290	Therapeutic radiology simulation-aided field setting complex
77293	Respiratory motion management simulation (list separately in addition to code for primary procedure)
77295	3-dimensional radiotherapy plan including dose-volume histograms
77299	Unlisted procedure therapeutic radiology clinical treatment planning
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
77301	Intensity modulated radiotherapy plan including dose-volume histograms for target and critical structure partial tolerance specifications
77306	Teletherapy isodose plan simple (1 or 2 unmodified ports directed to a single area of interest) includes basic dosimetry calculation(s)
77307	Teletherapy isodose plan complex (multiple treatment areas tangential ports the use of wedges blocking rotational beam or special beam considerations) includes basic dosimetry calculation(s)
77316	Brachytherapy isodose plan simple (calculation[s] made from 1 to 4 sources or remote afterloading brachytherapy 1 channel) includes basic dosimetry calculation(s)
77317	Brachytherapy isodose plan intermediate (calculation[s] made from 5 to 10 sources or remote afterloading brachytherapy 2-12 channels) includes basic dosimetry calculation(s)
77318	Brachytherapy isodose plan complex (calculation[s] made from over 10 sources or remote afterloading brachytherapy over 12 channels) includes basic dosimetry calculation(s)
77321	Special teletherapy port plan particles hemibody total body
77331	Special dosimetry (eg tld microdosimetry) (specify) only when prescribed by the treating physician
77332	Treatment devices design and construction simple (simple block simple bolus)
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 molds or casts)

CODE	DESCRIPTION
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
77338	Multi-leaf collimator (mlc) device(s) for intensity modulated radiation therapy (imrt) design and construction per imrt plan
77370	Special medical radiation physics consultation
77387	Guidance for localization of target volume for delivery of radiation treatment includes intrafraction tracking when performed
77399	Unlisted procedure medical radiation physics dosimetry and treatment devices and special services
77417	Therapeutic radiology port image(s)
77427	Radiation treatment management 5 treatments
77431	Radiation therapy management with complete course of therapy consisting of 1 or 2 fractions only
77432	Stereotactic radiation treatment management of cranial lesion(s) (complete course of treatment consisting of 1 session)
77435	Stereotactic body radiation therapy treatment management per treatment course to 1 or more lesions including image guidance entire course not to exceed 5 fractions
77469	Intraoperative radiation treatment management
77470	Special treatment procedure (eg total body irradiation hemibody radiation per oral or endocavitary irradiation)
77499	Unlisted procedure therapeutic radiology treatment management
77600	Hyperthermia externally generated superficial (ie heating to a depth of 4 cm or less)
77605	Hyperthermia externally generated deep (ie heating to depths greater than 4 cm)
77610	Hyperthermia generated by interstitial probe(s) 5 or fewer interstitial applicators
77615	Hyperthermia generated by interstitial probe(s) more than 5 interstitial applicators
77620	Hyperthermia generated by intracavitary probe(s)
77790	Supervision handling loading of radiation source
77799	Unlisted procedure clinical brachytherapy
79005	Radiopharmaceutical therapy by oral administration
79101	Radiopharmaceutical therapy by intravenous administration
79403	Radiopharmaceutical therapy radiolabeled monoclonal antibody by intravenous infusion
A4648	Tissue marker, implantable, any type, each
A4650	Implantable radiation dosimeter, each
A9517	Iodine i-131 sodium iodide capsule(s), therapeutic, per millicurie
A9527	Iodine i-125, sodium iodide solution, therapeutic, per millicurie
A9563	Sodium phosphate p-32, therapeutic, per millicurie
A9564	Chromic phosphate p-32 suspension, therapeutic, per millicurie
C1715	Brachytherapy needle
C1716	Brachytherapy source, non-stranded, gold-198, per source
C1717	Brachytherapy source, non-stranded, high dose rate iridium-192, per source

CODE	DESCRIPTION
C1718	Brachytherapy source, iodine 125, per source
C1719	Brachytherapy source, non-stranded, non-high dose rate iridium-192, per source
C1728	Catheter, brachytherapy seed administration
C2616	Brachytherapy source, non-stranded, yttrium-90, per source
C2634	Brachytherapy source, non-stranded, high activity, iodine-125, greater than 1.01 mci (nist), per source
C2635	Brachytherapy source, non-stranded, high activity, palladium-103, greater than 2.2 mci (nist), per source
C2636	Brachytherapy linear source, non-stranded, palladium-103, per 1 mm
C2637	Brachytherapy source, non-stranded, ytterbium-169, per source
C2637	Brachytherapy source, non-stranded, ytterbium-169, per source
C2638	Brachytherapy source, stranded, iodine-125, per source
C2639	Brachytherapy source, non-stranded, iodine-125, per source
C2640	Brachytherapy source, stranded, palladium-103, per source
C2641	Brachytherapy source, non-stranded, palladium-103, per source
C2642	Brachytherapy source, stranded, cesium-131, per source
C2643	Brachytherapy source, non-stranded, cesium-131, per source
C2644	Brachytherapy source, cesium-131 chloride solution, per millicurie
C2698	Brachytherapy source, stranded, not otherwise specified, per source
C2699	Brachytherapy source, non-stranded, not otherwise specified, per source
C9725	Placement of endorectal intracavitary applicator for high intensity brachytherapy
C9726	Placement and removal (if performed) of applicator into breast for intraoperative radiation therapy, add-on to primary breast procedure
C9728	Placement of interstitial device(s) for radiation therapy/surgery guidance (e.g., fiducial markers, dosimeter), for other than the following sites (any approach): abdomen, pelvis, prostate, retroperitoneum, thorax, single or multiple
G6001	Ultrasonic guidance for placement of radiation therapy fields
G6002	Stereoscopic x-ray guidance for localization of target volume for the delivery of radiation therapy
G6017	Intra-fraction localization and tracking of target or patient motion during delivery of radiation therapy (eg,3d positional tracking, gating, 3d surface tracking), each fraction of treatment
Q3001	Radioelements for brachytherapy, any type, each
S2095	Transcatheter occlusion or embolization for tumor destruction, percutaneous, any method, using yttrium-90 microspheres
S8030	Scleral application of tantalum ring(s) for localization of lesions for proton beam therapy

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