LCD for Brachytherapy (L30320)

Contractor Information

Contractor Name

Wisconsin Physicians Service Insurance Corporation

Contractor Number

00951, 00952, 00953, 00954, 52280, 05101, 05201, 05301, 05401, 05102, 05202, 05302, 05402

Contractor Type

Carrier - FI - MAC

LCD Information

LCD ID Number

L30320

LCD Title

Brachytherapy

Contractor's Determination Number

RAD-036

AMA CPT / ADA CDT Copyright Statement

CMS National Coverage Policy

Medicare Claims Processing Manual
Chapter 13 - Radiology Services and Other Diagnostic Procedures

70 - Radiation Oncology (Therapeutic Radiology)
70.1 - Weekly Radiation Therapy Management (CPT 77419 - 77430)
70.2 - Services Bundled Into Treatment Management Codes
70.3 - Radiation Treatment Delivery (CPT 77401 - 77417)
70.4 - Clinical Brachytherapy (CPT Codes 77750 - 77799)
70.5 - Radiation Physics Services (CPT Codes 77300 - 77399)

Formerly:
MCM 15021 Transmittal 1787, 01/24/2003
MCM 15022 Payment Conditions for Radiology Services.
MCM 5262 Payments Under the Fee Schedule for Radiologist Services.

Primary Geographic Jurisdiction

Oversight Region

Region I
Region X

Original Determination Effective Date

For services performed on or after 08/16/2009

Original Determination Ending Date

Revision Effective Date

For services performed on or after 01/01/2010

Revision Ending Date

Indications and Limitations of Coverage and/or Medical Necessity

Radiation oncology consists of two primary treatment modalities: external beam radiation therapy (EBRT) and brachytherapy. Brachytherapy is a type of radiation therapy that utilizes natural or manufactured radioactive isotopes or radionuclides that are temporarily or permanently implanted to treat malignancies or certain benign conditions and derives a physical advantage based upon the inverse square law of physics. This is achieved by implanting a radioactive source in the form of wires or seeds, close to or into the tumor or treatment site. There are currently three basic clinical brachytherapy formats: interstitial, intracavitary or intraluminal therapy. Brachytherapy may use a solid radioactive source, such as a 'seed' or liquid colloid isotopes, and may be either temporary or permanent. Further, brachytherapy may be called high dose rate or low dose rate.

Brachytherapy may be used independently as the sole treatment or as an adjunctive treatment in combination with external beam therapy and other modalities such as surgery or chemotherapy.

Brachytherapy may be performed concomitantly with surgical resection or in conjunction with procedures such as endoscopy or angioplasty, which are required to achieve access to the site of the disease. There are two distinct phases required to complete the process known as brachytherapy:
1. the insertion or placement of non-radioactive applicators or conduits that receive or transmit the radioactive material into the body, and
2. the loading of the radioactive material (the active or therapeutic agent) into the conduits or directly into tissue.

Low-dose rate (LDR) Brachytherapy - Rate of dose delivery is low (10-100 cGy per HOUR).
LDR is usually delivered over several days in a hospital setting; however, LDR may consist of permanently implanted sources and be performed as either an ambulatory or in-patient procedure. Radiation therapy is delivered as the isotope decays.

Low-dose-rate brachytherapy is of two types:
1. Permanently inserted sources or temporarily inserted sources. Common permanent sources are Palladium 103, Iodine 125, Cesium 131 and Gold198 that are usually used for treatment of prostate cancer.
2. Common temporarily inserted seeds/sources are Iridium 192 and Cesium 137. Iridium is physically smaller and can be used for interstitial implants (breast, head and neck, complex gynecological, sarcomas and others). The Cesium is contained in a larger tube and is used mostly for intracavitary gynecological implants. Temporary (LDR) implants usually are in place 1 to 3 days and patients are admitted and must be kept under radiation safety conditions in isolation on the wards to protect medical personnel from low level exposure to radiation

Description of a Prostate Brachytherapy Low-Dose-Rate Procedure
Patients with prostate cancers that are eligible for seed implantation fall within a set of guidelines established by the treating radiation oncologist and urologist. These guidelines determine candidates for the procedure versus those patients who may be best suited for an alternative therapy. The physicians present the recommendations to the patient.

Prior to the permanent seed implant, a transrectal ultrasound, CT scan or MRI examination is done to determine the shape and size of the prostate and technical feasibility of prostate brachytherapy.

After the urology diagnostic work-up and low dose rate brachytherapy has been chosen by the patient, there are several aspects to the episode of care including preplan, implant, and post implant (post plan). The prostate is "mapped" to determine the number of seeds required. Some centers may perform a pre-plan calculation to determine which holes in the template the needles need to be inserted and how many seeds to deposit through each needle in order to adequately irradiate the prostate. Other centers are performing the planning in the operating room at the time of the implant. Preplan tumor mapping and simulations done prior to the implant should not be billed again at the time of the implant. Conversely, simulations done on the day of implant (real time) should not be billed a second time on a day prior to the implant. The implant is generally done on an outpatient basis without an overnight hospital stay at an outpatient hospital facility or an ASC. A radiation oncologist and urologist may be both present for the case, and work as a team along with other specialized staff or the radiation oncologist or surgeon may perform the procedure alone.

In the operating room, the patient is placed under anesthesia, general, spinal or local. The ultrasound probe, is attached to the "stepper" assembly that also holds the square grid template against the perineum. The physician pushes stainless steel needles through the holes in the template, into the perineum and then the prostate, guided by the images seen on the ultrasound.

The physician may be performing a real-time plan with computers assessing the prostate gland and needle placement, or they may be following the pre-plan blueprint. Throughout the procedure
there is an assessment of the implant and the prostate. This is done to assure an adequate placement is taking place to deliver sufficient radiation dose. This is done in 3D fashion with available technology.

The number of seeds used depends on the volume of the prostate.
Fifty to 150 seeds are inserted using 15-40 needles (Most prostate implants require 60 to 120 seeds). . This varies with the size and shape of the prostate and other factors (e.g. seed activity). There are three types of radioactive material (radioisotopes) that can be implanted into the prostate: iodine (I-125); palladium (Pd-103); and cesium (Cs-131).

Post implant, a second dataset is done to produce an accurate and safe plan (post plan). The documentation should support the simulation done. This can be done on the day of the procedure or up to 4 weeks following the procedure. This allows for review of the plan and true delivery compared with the dose planned.

High-dose rate (HDR) brachytherapy - Treatment delivery is at higher dose rates (10-100 cGy per MINUTE).

HDR is performed by using a remote afterloading device to deliver the radioactive source(s). HDR allows the dose to be delivered customarily in minutes and usually on an outpatient basis and is often given in a series of multiple fractions.

High-dose-rate brachytherapy involves the use of a high activity radiation source with source radioactivity and energy far too great to allow manual handling. HDR may be used for virtually any site in the body that is suitable for brachytherapy.

Description of a High-Dose-Rate Procedure
The HDR brachytherapy system uses a single, tiny (1mm by 3 mm) source that contains a highly radioactive source of Iridium-192 that is laser welded to the end of a thin, flexible stainless steel cable. The HDR machine, called a remote afterloader, safely stores the radiation source between treatments and delivers the source directly into the patient during therapy. The first step in the HDR brachytherapy process is the placement of the brachytherapy catheters, needles or other treatment applicators into the patient.

Then, following localization radiographs or scans (simulation) and related computer based treatment planning calculations (treatment planning/dosimetry), HDR treatment is administered to the patient in a shielded vault. The computer-guided remote afterloader is used to direct the source with millimeter precision into the applicator system. The source moves in 5mm steps to specific locations within the hollow conduits implanted in the target volume. It stops at designated positions called "dwell" positions. The distribution of radiation dose is determined by the dwell position location and how long the source remains at each of the many potential sites. HDR brachytherapy treatment courses may vary from 1 to 12 or more treatments (also known as fractions), depending on the type of cancer being treated, the prescribed dose, whether external radiation is also being administered and many other factors.

Pulsed Dose Rate (PDR) Brachytherapy: Uses sources of intermediate strength and delivers a series of doses on a 1-2 hourly schedule over a 1-2 day treatment period. It is also a form of remote afterloading.

Indications

Brachytherapy may be indicated as a primary or adjunctive therapy in a variety of tumors. A dose rate is selected based on the individual needs of the patient. LDR (low dose rate) and HDR (high dose rate) brachytherapy are two delivery systems for brachytherapy that use radioactive material to deliver a dose of intensive radiation therapy to a specific well-defined local site (treatment volume). In both LDR and HDR the treatment site should be defined and accessible to the applicators that are the delivery medium for the radioactive sources. Brachytherapy is done to treat a primary or metastatic neoplasm, while sparing sensitive, normal tissues that may be nearby. LDR and HDR procedures may be given with intent to cure, intent to palliate, or to obtain local control (either cure or palliation). Both may be given in conjunction with a course of external beam radiation therapy, or as single modalities.

The typical requirements of brachytherapy may involve:
1. Treatment planning (77263)
Brachytherapy is routinely designated complex (CPT code 77263) because it requires complex treatment volume design, dose levels near normal tissue tolerance, analysis or special tests, complex fractionation, or delivery concurrent with other therapeutic modalities or treatment of previously irradiated tissues.

2. Dosimetry (77300)
Brachytherapy requires certain calculations to be made throughout the course of treatment. Each basic dosimetry calculation may be submitted when performed for brachytherapy treatment.

3. Radiation treatment management (77427 - three or more treatments a week) or (77431- one treatment a week) Special treatment procedure (77470)
Brachytherapy management requires an understanding of the process of treatment delivery. There is a completely different process for patient management. Treatment is done weekly, 2 or more times a week and occasionally twice per day.

The management of brachytherapy includes overall management of the patient during the course of radiation therapy. It includes review of the treatment record to assure that the therapy is proceeding according to the radiation plan and dose prescription, medical evaluation of the patient during the course of treatment, making the necessary adjustments to the applicator during the course of treatment, and any other modifications or clinical interventions needed to assure safe and effective treatment during the clinical course of therapy.
Special treatment procedure (77470):
The delivery of brachytherapy often requires special arrangements with the operating room and radiation safe ward, coordination of the applicator insertion process with other specialists, preparation and provision of the applicators and related equipment, scheduling and integration of required physics support, and acquisition and preparation of the radiation sources. Brachytherapy is often delivered in conjunction with external radiation, chemotherapy, or surgery. Integration of these processes makes brachytherapy a special treatment procedure.

The regulation reads:
Weekly Radiation Therapy Management (CPT 77427). Pay for a physician's weekly treatment management services under code 77427. Instruct billing entities to indicate on each claim the number of fractions for which payment is sought.

A weekly unit of treatment management is equal to five fractions or treatment sessions. A week for the purpose of making payments under these codes is comprised of five fractions regardless of the actual time period in which the services are furnished. It is not necessary that the radiation therapist personally examine the patient during each fraction for the weekly treatment management code to be payable.

Multiple fractions representing two or more treatment sessions furnished on the same day may be counted as long as there has been a distinct break in therapy sessions, and the fractions are of the character usually furnished on different days.
Code 77427 is also reported if there are three or four fractions beyond a multiple of five at the end of a course of treatment; one or two fractions beyond a multiple of five at the end of a course of treatment are not reported separately. The professional services furnished during treatment management typically consist of:

review of port films;
review of dosimetry, dose delivery, and treatment parameters;
review of patient treatment set-ups;
examination of patient for medical evaluation and management, (e.g., assessment of the patient’s response to treatment, coordination of care and treatment, review of imaging and/or lab test results).

EXAMPLE:
18 fractions = 4 weekly services
62 fractions = 12 weekly services
8 fractions = 2 weekly services
6 fractions = 1 weekly service

If billings have occurred which indicate that the treatment course has ended (and, therefore, the number of residual fractions has been determined), but treatments resume, adjust your payments for the additional services consistent with the above policy.

EXAMPLE:
8 fractions = payment for 2 weeks
2 additional fractions are furnished by the same physician. No additional Medicare payment is made for the 2 additional fractions.

Please note that the management code should be used mainly if there will be more than one fraction of HDR or LDR

4. Simulation (77280-77295)

For brachytherapy, simulation may require the use of imaging examinations of the implanted sources or applicator(s) containing dummy sources. These films of the implanted sources are used to develop isodose curves and other dosimetry, and may be billed separately, when appropriate.

Brachytherapy simulation CPT code 77290 is the complex process of obtaining images of the implanted region for purposes of making position adjustments and for performing dose calculations. Non-radioactive "dummy" sources are used to geographically define the "eventual position" of the radioactive sources in temporary implant devices, whereas permanently implanted sources are imaged directly. Contrast may be utilized to delineate adjacent normal tissues and organs.
Subsequent "check" verification simulations during the course of temporary implants to confirm or correct applicator position are reported as simple CPT code 77280.
CPT code 77295 may be billed as part of the brachytherapy process when the needed parameters are included (i.e. 3D volume reconstruction with DVH for target and normal tissues, etc. This information can be obtained from CT, U/S or MRI.).

5. Isodose planning (77326-77328)
Brachytherapy requires an isodose plan. This plan determines the dose at each implanted source and throughout the treatment volume and doses to surrounding normal tissue.

6. Handling and Loading of Radioelement (77790)
Where brachytherapy techniques require the manual loading of an isotope (LDR), the supervision, loading and handling of the isotope may be separately reported.

7. Source Application/Placement (77750, 77761-77763, 77776-77778, 77781-77784, and 77789)
Selection and placement of after-loading applicators and the loading and unloading of radioactive sources may be performed by the radiation oncologist alone or in collaboration with another physician.

8. Applicator placement
The choice of applicators and the actual placement of the after-loading device may be performed by the radiation oncologist alone or in collaboration with another physician (e.g., gynecologist, urologist, pulmonologist, gastroenterologist, thoracic surgeon).

9. Treatment devices (77332-77334)
Treatment devices (e.g., blocks, shields and wedges) may include the use of certain templates, molds, or other apparatus that may be required for specific clinical circumstances. These may be covered as treatment devices.

10. Medical Physics Services (77336, 77370 and 77331)
CPT code 77336 is a "weekly code;" however, for radiation therapy treatment that is not administered in five weekly fractions (such as brachytherapy) or for a course of radiation therapy consisting of one or two fractions, code 77336 may be reported.
CPT code 77370 may be justified for the complex interrelationships of electron and photon ports and complex dosimetric considerations in brachytherapy, including high dose rate remote afterloader applications, intravascular brachytherapy treatments, and interstitial radioactive seed implantation.
CPT code 77331 is Special dosimetry (e.g. TLD, microdosimetry) when prescribed by a physician. In some instances, measurement of the delivered radiation dose may be used to guide and determine the dose to selected positions within or around the implant treatment volume. (This can be very helpful, especially in difficult case such as retreatment using brachytherapy in previously irradiated areas.)

11. For coverage of intravascular brachytherapy see policy CV-035

12. For coverage of External Beam radiation see policy RAD-014.

Limitations

1. Although radiographs may be used in brachytherapy simulation, these images should not be reported as port-films.
2 Follow-up visits for 90 days after treatment are not separately payable. (This does not apply to a patient visit for complaints unrelated to the current treatment).
3. Only a physician authorized as an authorized user by the Nuclear Regulatory Commission or an Agreement State for brachytherapy should work with radioactive materials.
4. Products used for the patient's comfort may not be charged as treatment devices (e.g., pillows, pads, or cushions).

Coding Information

Bill Type Codes:

Contractors may specify Bill Types to help providers identify those Bill Types typically used to report this service. Absence of a Bill Type does not guarantee that the policy does not apply to that Bill Type. Complete absence of all Bill Types indicates that coverage is not influenced by Bill Type and the policy should be assumed to apply equally to all claims.

11x	Hospital-inpatient (including Part A)
12x	Hospital-inpatient or home health visits (Part B only)
13x	Hospital-outpatient (HHA-A also) (under OPPS 13X must be used for ASC claims submitted for OPPS payment -- eff. 7/00)
85x	Special facility or ASC surgery-rural primary care hospital (eff 10/94)

Revenue Codes:

Contractors may specify Revenue Codes to help providers identify those Revenue Codes typically used to report this service. In most instances Revenue Codes are purely advisory; unless specified in the policy services reported under other Revenue Codes are equally subject to this coverage determination. Complete absence of all Revenue Codes indicates that coverage is not influenced by Revenue Code and the policy should be assumed to apply equally to all Revenue Codes.

Revenue codes only apply to providers who bill these services to the fiscal intermediary. Revenue codes do not apply to physicians, other professionals and suppliers who bill these services to the carrier.

Please note that not all revenue codes apply to every type of bill code. Providers are encouraged to refer to the FISS revenue code file for allowable bill types. Similarly, not all revenue codes apply to each CPT/HCPCS code. Providers are encouraged to refer to the FISS HCPCS file for allowable revenue codes.

All revenue codes billed on the inpatient claim for the dates of service in question may be subject to review.

0333	Radiology therapeutic-radiation therapy

CPT/HCPCS Codes

Many of the CPT codes in the radiation oncology section can be used for both external beam radiation therapy (EBRT) and brachytherapy, while others are specific to one modality or the other. See policy RAD014 for more information on these services.
The CPT codes below, with the exception of 77261-77263, 77280-77295, 77336, 77370 and 79900 are those specific only to brachytherapy. CPT codes 77300 (Basic Dosimetry), 77332-77334 (Treatment devices, designs and construction), 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), and 77470 (Special treatment procedure) are also relevant to brachytherapy.

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
77295	THERAPEUTIC RADIOLOGY SIMULATION-AIDED FIELD SETTING; 3-DIMENSIONAL
77326	BRACHYTHERAPY ISODOSE PLAN; SIMPLE (CALCULATION MADE FROM SINGLE PLANE, 1 TO 4 SOURCES/ RIBBON APPLICATION, REMOTE AFTERLOADING BRACHYTHERAPY, 1 TO 8 SOURCES)
77327	BRACHYTHERAPY ISODOSE PLAN; INTERMEDIATE (MULTIPLANE DOSAGE CALCULATIONS, APPLICATION INVOLVING 5 TO 10 SOURCES/RIBBONS, REMOTE AFTERLOADING BRACHYTHERAPY, 9 TO 12 SOURCES)
77328	BRACHYTHERAPY ISODOSE PLAN; COMPLEX (MULTIPLANE ISODOSE PLAN, VOLUME IMPLANT CALCULATIONS, OVER 10 SOURCES/RIBBONS USED, SPECIAL SPATIAL RECONSTRUCTION, REMOTE AFTERLOADING BRACHYTHERAPY, OVER 12 SOURCES)
77331	SPECIAL DOSIMETRY (EG, TLD, MICRODOSIMETRY) (SPECIFY), ONLY WHEN PRESCRIBED BY THE TREATING PHYSICIAN
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
77470	SPECIAL TREATMENT PROCEDURE (EG, TOTAL BODY IRRADIATION, HEMIBODY RADIATION, PER ORAL, ENDOCAVITARY OR INTRAOPERATIVE CONE IRRADIATION)
77750	INFUSION OR INSTILLATION OF RADIOELEMENT SOLUTION (INCLUDES 3-MONTH FOLLOW-UP CARE)
77761	INTRACAVITARY RADIATION SOURCE APPLICATION; SIMPLE
77762	INTRACAVITARY RADIATION SOURCE APPLICATION; INTERMEDIATE
77763	INTRACAVITARY RADIATION SOURCE APPLICATION; COMPLEX
77776	INTERSTITIAL RADIATION SOURCE APPLICATION; SIMPLE
77777	INTERSTITIAL RADIATION SOURCE APPLICATION; INTERMEDIATE
77778	INTERSTITIAL RADIATION SOURCE APPLICATION; COMPLEX
77785	REMOTE AFTERLOADING HIGH DOSE RATE RADIONUCLIDE BRACHYTHERAPY; 1 CHANNEL
77786	REMOTE AFTERLOADING HIGH DOSE RATE RADIONUCLIDE BRACHYTHERAPY; 2-12 CHANNELS
77787	REMOTE AFTERLOADING HIGH DOSE RATE RADIONUCLIDE BRACHYTHERAPY; OVER 12 CHANNELS
77789	SURFACE APPLICATION OF RADIATION SOURCE
77790	SUPERVISION, HANDLING, LOADING OF RADIATION SOURCE
Q3001	RADIOELEMENTS FOR BRACHYTHERAPY, ANY TYPE, EACH

Brachytherapy Sources Payable as of 01/01/2008 in the ASC setting

A9527	IODINE I-125, SODIUM IODIDE SOLUTION, THERAPEUTIC, PER MILLICURIE
C1716	BRACHYTHERAPY SOURCE, NON-STRANDED, GOLD-198, PER SOURCE
C1717	BRACHYTHERAPY SOURCE, NON-STRANDED, HIGH DOSE RATE IRIDIUM-192, PER SOURCE
C1719	BRACHYTHERAPY SOURCE, NON-STRANDED, NON-HIGH DOSE RATE IRIDIUM-192, PER SOURCE

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, PALADIUM-103, GREATER THAN 2.2 MCI (NIST), PER SOURCE
C2636	BRACHYTHERAPY LINEAR SOURCE, NON-STRANDED, PALADIUM-103, PER 1 MM
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
C2698	BRACHYTHERAPY SOURCE, STRANDED, NOT OTHERWISE SPECIFIED, PER SOURCE
C2699	BRACHYTHERAPY SOURCE, NON-STRANDED, NOT OTHERWISE SPECIFIED, PER SOURCE
C9728	PLACEMENT OF INTERSTITIAL DEVICE(S) FOR RADIATION THERAPY/SURGERY GUIDANCE (EG, FIDUCIAL MARKERS, DOSIMETER), FOR OTHER THAN THE FOLLOWING SITES (ANY APPROACH): ABDOMEN, PELVIS, PROSTATE, RETROPERITONEUM, THORAX, SINGLE OR MULTIPLE

The following CPT procedure codes may be included for performing prostate brachytherapy:

55860	EXPOSURE OF PROSTATE, ANY APPROACH, FOR INSERTION OF RADIOACTIVE SUBSTANCE;
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), PERCUTANEOUS, PROSTATE, SINGLE OR MULTIPLE
76000	

	FLUOROSCOPY (SEPARATE PROCEDURE), UP TO 1 HOUR PHYSICIAN TIME, OTHER THAN 71023 OR 71034 (EG, CARDIAC FLUOROSCOPY)
76001	FLUOROSCOPY, PHYSICIAN TIME MORE THAN 1 HOUR, ASSISTING A NONRADIOLOGIC PHYSICIAN (EG, NEPHROSTOLITHOTOMY, ERCP, BRONCHOSCOPY, TRANSBRONCHIAL BIOPSY)
76872	ULTRASOUND, TRANSRECTAL;
76873	ULTRASOUND, TRANSRECTAL; PROSTATE VOLUME STUDY FOR BRACHYTHERAPY TREATMENT PLANNING (SEPARATE PROCEDURE)
76950	ULTRASONIC GUIDANCE FOR PLACEMENT OF RADIATION THERAPY FIELDS
76965	ULTRASONIC GUIDANCE FOR INTERSTITIAL RADIOELEMENT APPLICATION
77014	COMPUTED TOMOGRAPHY GUIDANCE FOR PLACEMENT OF RADIATION THERAPY FIELDS
C9725	PLACEMENT OF ENDORECTAL INTRACAVITARY APPLICATOR FOR HIGH INTENSITY BRACHYTHERAPY

The following CPT procedure codes may be included for performing prostate brachytherapy with a TC modifier:

77012	COMPUTED TOMOGRAPHY GUIDANCE FOR NEEDLE PLACEMENT (EG, BIOPSY, ASPIRATION, INJECTION, LOCALIZATION DEVICE), RADIOLOGICAL SUPERVISION AND INTERPRETATION

The following CPT procedure code may be included for lung brachytherapy:

31626	BRONCHOSCOPY, RIGID OR FLEXIBLE, INCLUDING FLUOROSCOPIC GUIDANCE, WHEN PERFORMED; WITH PLACEMENT OF FIDUCIAL MARKERS, SINGLE OR MULTIPLE
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

The following CPT procedure code may be included for esophageal brachytherapy:

43241

	UPPER GASTROINTESTINAL ENDOSCOPY INCLUDING ESOPHAGUS, STOMACH, AND EITHER THE DUODENUM AND/OR JEJUNUM AS APPROPRIATE; WITH TRANSENDOSCOPIC INTRALUMINAL TUBE OR CATHETER PLACEMENT

The following CPT procedure codes may be included for gynecologic cases:

49411	PLACEMENT OF INTERSTITIAL DEVICE(S) FOR RADIATION THERAPY GUIDANCE (EG, FIDUCIAL MARKERS, DOSIMETER), PERCUTANEOUS, INTRA-ABDOMINAL, INTRA-PELVIC (EXCEPT PROSTATE), AND/OR RETROPERITONEUM, 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 TANDEMS AND/OR VAGINAL OVOIDS FOR CLINICAL BRACHYTHERAPY
58346	INSERTION OF HEYMAN CAPSULES FOR CLINICAL BRACHYTHERAPY

The following CPT procedure codes may be included for breast cases:

19296	PLACEMENT OF RADIOTHERAPY AFTERLOADING 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 AFTERLOADING 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 AFTERLOADING 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
C9726	

	PLACEMENT AND REMOVAL (IF PERFORMED) OF APPLICATOR INTO BREAST FOR RADIATION THERAPY

ICD-9 Codes that Support Medical Necessity

Note: ICD-9 codes must be coded to the highest level of specificity.

140.0 - 195.8	MALIGNANT NEOPLASM OF UPPER LIP VERMILION BORDER - MALIGNANT NEOPLASM OF OTHER SPECIFIED SITES
196.0 - 198.89	SECONDARY AND UNSPECIFIED MALIGNANT NEOPLASM OF LYMPH NODES OF HEAD FACE AND NECK - SECONDARY MALIGNANT NEOPLASM OF OTHER SPECIFIED SITES
199.0 - 199.1	DISSEMINATED MALIGNANT NEOPLASM - OTHER MALIGNANT NEOPLASM OF UNSPECIFIED SITE
200.00 - 208.91	RETICULOSARCOMA UNSPECIFIED SITE - UNSPECIFIED LEUKEMIA IN REMISSION
233.0	CARCINOMA IN SITU OF BREAST
235.0 - 238.9	NEOPLASM OF UNCERTAIN BEHAVIOR OF MAJOR SALIVARY GLANDS - NEOPLASM OF UNCERTAIN BEHAVIOR SITE UNSPECIFIED
372.40 - 372.45	PTERYGIUM UNSPECIFIED - RECURRENT PTERYGIUM

Diagnoses that Support Medical Necessity

ICD-9 Codes that DO NOT Support Medical Necessity

Any not listed above

ICD-9 Codes that DO NOT Support Medical Necessity Asterisk Explanation

Diagnoses that DO NOT Support Medical Necessity

General Information

Documentation Requirements

1. Documentation supporting the medical necessity of these services, such as ICD-9-CM codes, must be submitted with each claim. Claims submitted without such evidence will be denied as not medically necessary.
2. The treatment goal must be documented (curative, palliative or tumor control) in the medical record.
3. The record must contain documentation of the patient's informed consent to treatment.
4. A written, signed and dated prescription or treatment plan designed by the radiation oncologist must be on file. The prescription must include all of the following information: designation of the treatment site, designation of the isotope, designation of the number of source positions, the planned dose to each critical dose point.
5. Given the multiplicity of services that are inherent in brachytherapy, it is essential that the medical records reflect each service in a clear linear and temporally logical form. Flow charts, where helpful, are recommended. All procedures should be documented with a procedural note.
6. Medical records must be made available to Medicare upon request.

Appendices

Utilization Guidelines

Sources of Information and Basis for Decision

American Society for Therapeutic Radiology and Oncology/American College of Radiology (ASTRO ACR) 2002 Radiation Oncology Coding User's Guide.
American College of Radiology (ACR) Standard for the Performance of High-Dose-Rate Brachytherapy, 2000.
ACR Standard for the Performance of Low-Dose-Rate Brachytherapy, 2000.
ACR Standard for the Performance of Brachytherapy Physics: Manually-Loaded Temporary Implants, 2000.
ACR Standard for the Performance of Brachytherapy Physics: Remotely-Loaded HDR Sources, 2000.
ACR Standard for Transperineal Permanent Brachytherapy of Prostate Cancer, 2000.
Cheng, BS; Nagalingam, S; Komanduri, MA; Tupchong, L. "Dosimetric Considerations of Stereotactic Brain Implants," Int J Radiation Oncology Biol Phys, 1989, v 17: 887-891.
Brenner, DJ; Huang, Y; Hall, EJ. "Fractionated High Dose-Rate Versus Low Dose-Rate Regimens for Intracavitary Brachytherapy of the Cervix: Equivalent Regimens for Combined Brachytherapy and External Irradiation," Int J Radiation Oncology Biol Phys, 1991, v 21: 1415-1423.
Nori, D; Allison, R; Kaplan, B; Samala, E; Osian, A; Karbowitz, S. "High Dose-Rate Intraluminal Irradiation in Bronchogenic Carcinoma," Chest, 1993, v 104: 1006-1011.
Waksman, Ron; Schwartz, Robert S. "Vascular Brachytherapy for Prevention of Restenosis: A Brief History and Overview." The Journal of Invasive Cardiology, January 1999, Vol. 11, No. 1: pp. 33-35.
Advantages of Cesium-131 for Permanent Seed Implant Brachytherapy, D.J. Swanberg and G.N. Brown, PhD.
Arthur, Douglas W. et al; Accelerated partial breast irradiation: an updated report from the American Brachytherapy Society; Brachytherapy 2002, 184-190
Benitez, Pamela R.; Partial Breast irradiation in breast-conserving therapy by way of interstial brachytherapy; AJS, Vol. 188; 2004, 355-364
Other carrier local coverage decisions and coding information.

Advisory Committee Meeting Notes

Wisconsin: 01/16/2009
Illinois: 01/28/2009
Michigan: 01/07/2009
Minnesota: 01/22/2009
Iowa 02/12/2009

W. Missouri 02/12/2009
E. Missouri 02/12/2009
Kansas 02/12/2009
Nebraska 02/12/2009

This policy does not reflect the sole opinion of the contractor or the Contractor Medical Director(s). Although the final decision rests with the contractor, this policy was developed in cooperation with the Carrier Advisory Committee(s), which include representatives of various medical specialty societies.
This policy was presented at an open meeting on: 12/17/2008

Start Date of Comment Period

02/12/2009

End Date of Comment Period

03/30/2009

Start Date of Notice Period

07/01/2009

Revision History Number

X

Revision History Explanation

Removed contractor 05392 based on the policy being effective 8/16/09.

Entered italicized print.

11/15/2009 - The description for CPT/HCPCS code 55876 was changed in group 3
11/15/2009 - The description for CPT/HCPCS code 31643 was changed in group 4

01/01/2010, HCPCS update impacting CPT codes 31626, 32553, 49411, C9728, 55876, C9725, C9726

Reason for Change

Last Reviewed On Date

11/10/2009

Related Documents

This LCD has no Related Documents.

LCD Attachments

Coding and Billing Guidelines 01/01/2010 (PDF - 50,670 bytes)

All Versions

Updated on 03/05/2010 with effective dates 01/01/2010 - N/A

Updated on 11/15/2009 with effective dates 08/16/2009 - N/A

Updated on 07/17/2009 with effective dates 08/16/2009 - N/A