Clinical brachytherapy involves applying radioactive elements into or around a treatment field.

CPT® guidelines clarify that all codes in this subsection include hospital admission and daily visits. The guidelines also offer several key definitions:

- **Sources**: intracavitary placement or permanent interstitial placement
- **Ribbons**: temporary interstitial placement
- **Simple application**: 1-4 sources or ribbons
- **Intermediate application**: 5-10 sources or ribbons
- **Complex application**: more than 10 sources or ribbons.

**Tip**: You should be able to pick up the number of sources from the brachytherapy plan.

If you can't find the number of sources in the documentation, you should speak with the physicist or physician who should be able to point out the documentation that supports a particular level quickly.

**Special Feature**

**Call on 32553 and 49411 for Fiducial Marker Placement**

CPT® provides specific codes for interstitial device placement in specific anatomic areas.

**Thoracic**: You should use 32553 (Placement of interstitial device[s] for radiation therapy guidance [e.g., fiducial markers, dosimeter], percutaneous, intra-thoracic, single or multiple) for device placement in the thorax.

**Another option**: You have one more code 31626 (Bronchoscopy, rigid or flexible, including fluoroscopic guidance, when performed; with placement of fiducial markers, single or multiple), which may be appropriate when physicians place fiducial markers used to guide a thoracoscopy or to help visualize for a more precise lung wedge biopsy. Alternatively, the code may be appropriate when the physician places a marker to designate an area for radiation.

**Remember**: Code 31626 is for one or more markers.

To keep 31626 straight from 32553, answer one simple question. How did the marker get there? Look at which route the physician used to place the marker:

- **Bronchoscopically**: For a fiducial marker bronchoscopically delivered via the airway, report 31626.
- **Percutaneously**: For percutaneous placement through the chest wall, use 32553.

**Abdominal/Pelvic**: For placement within the abdomen, pelvis, and retroperitoneum, you'll turn to 49411 (Placement of interstitial device[s] for radiation therapy guidance [e.g., fiducial markers, dosimeter], percutaneous, intra-abdominal, intra-pelvic [except prostate], and/or retroperitoneum, single or multiple).

**Prostate**: Note that 49411 excludes prostate placement, which you'll continue to report using 55876 (Placement of interstitial device[s] for radiation therapy guidance [eg, fiducial markers, dosimeter], prostate [via needle, any approach], single or multiple). This updated descriptor simply exchanges "via needle, any approach" for "percutaneous," bringing the wording in line with the new codes' descriptors. You should continue to report 55876 to describe the transrectal approach for fiducial marker placement in the prostate.

**Report separately**: As with prostate device placement, CPT® states you may report imaging guidance (76942, 77002, 77012, 77021) and the devices (such as A4648-A4650) in addition to the procedure codes (32553, 49411, 55876), assuming you provide those items.
Crack 0182T's PC/TC Code

The category III code 0182T (High dose rate electronic brachytherapy, per fraction) allows you to report for the physician delivery of high dose rate radiation therapy, for treating initial stage of breast cancer after a breast conserving surgery.

**Bonus 0182T tip:** You should not report 0182T with 77761-77789, according to CPT® guidelines. But the facility may report C9726 (Placement and removal [if performed] of applicator into breast for radiation therapy), if documented and performed, with 0182T.

Code 0182T is available for your use when the physician uses a Xoft Axxent miniaturized X-ray source — rather than radioactive isotopes — to apply radiation within the body directly to a tumor bed.

Find Suitable Ovoid/Tandem Code

For an ovoid radiation device, such as Fletcher-Suit, inserted vaginally for radiation treatment for cervical cancer, code 57155 (Insertion of uterine tandem and/or vaginal ovoids for clinical brachytherapy) is correct — as long as your physician performed the insertion. Chances are a gynecologist or gynecologic oncologist inserted the Fletcher-Suit device.

Depending on the type of radiation delivery, for the brachytherapy application you'll report either:

- 77761-77763 (Intracavitary radiation source application ...) for intracavitary or low-dose rate (LDR) therapy, or
- 77785-77787 (Remote afterloading high dose rate radionuclide brachytherapy ...) for high-dose rate (HDR) therapy.

**Remember:** You also have associated codes for planning and related services that take place prior to and post-implant, such as 77263 (Therapeutic radiology treatment planning; complex) and 77290 (Therapeutic radiology simulation-aided field setting; complex). However, you should not report 77427 (Radiation treatment management, 5 treatments) — that code is only appropriate for external beam therapy radiation management.

**Don't miss:** If the physician performs both the insertion of the ovoids and administers brachytherapy, you must have separate documentation of each service. While this does not require two pieces of paper, there must at least be separate paragraphs for the surgical insertion of the applicator(s) and the brachytherapy administration.

Stay Alert for 77761-77763 in These Cases

Intracavitary brachytherapy (77761-77763) involves placing applicators with radioactive materials into or around a tumor-bearing area, according to CPT® Assistant, Winter 1991. As the name “intracavitary” suggests, providers place the radioactive sources in body cavities including the lungs, esophagus, and biliary system.

You may be most likely to see intracavitary radiation source application in gynecological cases.

One common use of intracavitary brachytherapy is uterine (endometrium) or cervical carcinoma treatment.

**Watch out:** Anatomically, the cervix is part of the uterus. But your ICD-9 choices vary depending on whether the patient has a cervical neoplasm (180.x, Malignant neoplasm of cervix uteri...) or uterine body neoplasm (182.x, Malignant neoplasm of body of uterus...).

**Example:** A patient diagnosed with a primary endometrial carcinoma receives intracavitary brachytherapy using 10 sources with applicators left in place for two days. You should report 182.0 (...) corpus uteri, except isthmus) and 77762 (Intracavitary radiation source application; intermediate).

**Remember:** If the patient had a hysterectomy as part of the cancer treatment, you should still report 182.0 for treatment aimed at eradicating the uterine cancer.

**Why:** As long as the physician directs treatment to the site, you should consider the malignancy to exist.

**ICD-9 guidelines state:** "When a primary malignancy has been previously excised or eradicated from its site and there is no further treatment directed to that site and there is no evidence of any existing primary malignancy, a code from category V10.x (Personal history of malignant neoplasm) should be used to indicate the former site of the malignancy."

**Note:** Physicians sometimes order both brachytherapy and external beam radiation treatment (77401-77412) for a
Patient. In this case, you may report both services separately. One clinical treatment plan covers both therapies, so you should report only one of these professional treatment planning codes (77261-77263, Therapeutic radiology treatment planning...).

Bulletproof Your Documentation — Here's How

The physician’s ideal procedure note should include the following, among other relevant information:

- Rationale for using brachytherapy
- Intent (cure or palliative)
- Any devices used
- An overall description of procedure events.

Handle 77790 Coding Wisely

Code 77790 (Supervision, handling, loading of radiation source) reports just what it says: supervision, handling, and loading of the radiation source used for brachytherapy. The key is remembering that reporting the code doesn't depend on the number of sources or the complexity of the source.

Note: You should include the care of instruments involved, along with receipt of the radioelements, handling, accounting, logging, storing, inventory, and radiation surveys. Code 77790 is generally a technical-only code because these are typically physics functions. However, this code can sometimes be used as a professional component (with appropriate modifier) under special circumstances.

Special Feature:

Follow a Prostate Brachytherapy Case from Beginning to End

Applying a "one-size-fits-all" approach to prostate brachytherapy coding will likely lead you to claims disaster. Instead, you’ll want to approach each case as unique, and carefully identify which of the related — but separately reportable — services describing the full course of prostate brachytherapy treatment your physician provides.

Begin the Process With Proper E/M Selection

As with nearly all therapeutic services, your first coding challenge for prostate brachytherapy will be to assign an appropriate E/M service code to describe your provider's initial patient assessment.

This initial encounter will typically involve an in-depth, high-level service because the physician must evaluate the patient carefully to determine his suitability for brachytherapy and/or to rule out other modalities, such as external beam treatments.

For example, for an established patient, look to 99214 or 99215 (Office or other outpatient visit for the evaluation and management of an established patient...). For a new patient, select 99204 or 99205 (Office or other outpatient visit for the evaluation and management of a new patient...).

Documentation must substantiate level of service: Although an initial exam for prostate brachytherapy should qualify easily for a level IV or V service, your code selection must ultimately depend on the strength of the physician's documentation. (Note: For those payers still accepting consult codes, consider whether a consult code would be a better option.)

Move Next to Treatment Planning

For each course of treatment, you may report one unit of treatment planning. This may occur, for instance, following E/M examination that confirms the patient's suitability for therapy. CPT® provides three codes to describe this service, depending upon the level of planning complexity:

- 77261 — Therapeutic radiology treatment planning; simple
- 77262 — ... intermediate
- 77263 — ... complex.
Clinical treatment planning can involve "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," according to CPT®.

CPT® further provides guidance on how to select the level of service (simple, intermediate, or complex), as determined by
the number of treatment areas, ports and blocks, as well as the need to consider special beams or combined therapeutic
modalities.

Compare your physician's documentation against the criteria set forth in CPT® to select an appropriate treatment planning
code. In most cases, you should find that prostate brachytherapy will qualify for "complex" treatment planning (77263).

**Documentation tip:** For clinical treatment planning, aim to have a review of imaging studies completed to date, review
of biopsy information, selection of treatment modality (seeds vs. IMRT vs. cryotherapy, etc.), and medical necessity for the
selected option. Also, the physician should list anything unique to the patient such as treatment to a surgically altered
gland, prior radiation to the same anatomic site, staging issues, or patient body size issues.

Stick to 1 Planning Claim per Treatment

Remember that you may report only a single unit of clinical treatment planning (77261-77263) per course of treatment,
even if that treatment involves multiple radiation therapy modalities.

Therefore, if the patient had a course of external beam treatment or other radiation modality prior to the brachytherapy,
for which you previously reported a treatment planning code, you may not report another unit of treatment planning for
the brachytherapy.

Medicare payer guidelines state this limitation explicitly. For instance, some payers state that for prostate brachytherapy
used as an adjunct to external beam radiation therapy, you should report a single complex plan (77263, Therapeutic
radiology treatment planning; complex) to indicate the use of both modalities.

Watch for Possible Volume Study

The physician may perform a volume and mapping study to determine where to insert the catheter for the prostate seeds,
for which you should separately report 76873 (Ultrasound, transrectal; prostate volume study for brachytherapy treatment
planning [separate procedure]).

**Modifier alert:** You should apply modifier 26 (Professional component) to 76873 if the physician performs this procedure
in a facility setting. 

**It's not a sure thing:** Only one physician can claim 76873. In some cases, a urologist may perform the volume and
mapping study.

Report Special Procedures, With Documentation

Depending on the strength of your physician's documentation, you may find that you are able to report special treatment
procedures code 77470 (Special treatment procedure [e.g., total body irradiation, hemibody radiation, per oral or
endocavitary irradiation]) as part of brachytherapy treatment.

Code 77470 describes (documented) planning and effort involved in performing the special procedure. For example, you
may be able to report 77470 if your physician documents hyperfractions due to complicated brachytherapy, concurrent
treatment of multiple sites, or retreatment of a site.

You should report 77470 only once per course of therapy per volume. For instance, if external beam 3-D treatment
preceded the brachytherapy procedure and you reported 77470 at that time, you would not report the code again for a
subsequent implant.

Be sure to append modifier 26 (Professional component) to 77470, when billed, to indicate that the radiation oncologist
provided the "professional" portion of this service only.

Simulation Calls for 77280-77295
Following treatment planning (77261-77263) for prostate brachytherapy, the physician may obtain images (X-ray film) of the targeted treatment area — to define and adjust dose calculations — and of the eventual position of the brachytherapy seeds. For this service, you should select an appropriate simulation code (77280-77290, Therapeutic radiology simulation-aided field setting…).

The initial simulation may be reported as a complex simulation (77290, Therapeutic radiology simulation-aided field setting; complex) when it requires AP and lateral orthogonal films and contrast.

In contrast, you would report three-dimensional MRI or CT-based simulations with dose volume histograms and dose cloud preparation using 77295 (3-dimensional…).

**Note:** You would not report 72290 and 77295 together. "Real-time" 3D planning (72295), which occurs at the same time as placement of the brachytherapy seeds, bundles 77290 on the same date.

Additionally, you may report 77280 (... simple) for verification simulations during treatment.

**You may need modifier 26:** If your physician performs any type of simulation in a facility setting, you must append modifier 26 (Professional component) to the simulation code to show that he provided the "professional" portion of the service only.

### Count Sources for Isodose Planning Code

Next, the physician will order an isodose plan, which determines the dose at each implanted source and throughout the treatment volume, as well as the doses to surrounding normal tissue. Depending on the number of sources the physician specifies, you will select:

- **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** (...intermediate (calculation[s] made from 5 to 10 sources, or remote afterloading brachytherapy, 2-12 channels), includes basic dosimetry calculation(s))
- **77318** (... complex (calculation[s] made from over 10 sources, or remote afterloading brachytherapy, over 12 channels), includes basic dosimetry calculation(s))

**Tip:** A typical course of brachytherapy should require no more than three isodose plans. Documentation should reflect medical necessity for additional units of service. For instance, the physician may need additional calculations to determine decay or point dose calculations.

**Keep Watch for Separate Dosimetry Calculations**

Brachytherapy requires dosimetry calculations prior to (and during) the course of therapy, and you may report these services separately in limited cases.

To report dosimetry calculation to determine dwell times, other than those times estimated in the isodose plan, use 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).

**Proceed carefully:** To report dosimetry calculations separately during brachytherapy, the dosimetrist or physicist must determine (and the radiation oncologist must approve) dwell times other than those estimated in the isodose plan. The isodose plan generally includes multiple calculation points, and you would not separately report calculations made solely for quality assurance (that is, to confirm dose delivery).

**Bottom line:** You will report basic radiation dosimetry calculation separately with brachytherapy only in rare circumstances (for instance, if tumor volume changes).

### Base Delivery Code on Source Type

You will report the actual brachytherapy treatment based on the type of radioactive source and its delivery method.

To describe the placement of seeds, needles, ribbons, or wires containing radioactive materials into body tissues, you
should report 77776-77778 (Interstitial radiation source application ...), as determined by the number of sources (prostate seed implants are usually "complex");

- 1-4 sources: 77776 (... simple)
- 5-10 sources: 77777 (... intermediate)
- 10 or more sources: 77778 (... complex).

**Watch for included services:** Note that CPT® includes hospital services (admission, daily visits, discharge) in the clinical brachytherapy codes. You should not report hospital services separately with 77776-77778.

**Imaging note:** In some cases, the radiation oncologist may provide the ultrasonic guidance (76965, Ultrasonic guidance for interstitial radioelement application) for placing the seeds.

Typically, however, a urologist will provide this service. You should report 76965 only if your physician performs and documents the guidance.

Turn to 77790 for Manual Loading

If the brachytherapy requires manual loading of an isotope (LDR), you might report 77790 (Supervision, handling, loading of radiation source).

The service includes receipt, accounting, handling, and storage of the material.

Note that physicians will rarely perform 77790. Instead, this usually is a technical service that the physicist will provide.

**Watch for Needle or Catheter Placement**

If your physician performs and documents placement of the needles or catheters used to implant the brachytherapy seeds, you may report 55875 (Transperineal placement of needles or catheters into prostate for interstitial radioelement application, with or without cystoscopy).

Be aware, however, that a radiation oncologist often will work with a urologist to treat a prostate brachytherapy patient, and traditionally the urologist has been responsible for placing the needles or catheters. Only the physician who actually places the needles or catheters should report 55875.

Note that 55875 includes cystoscopy, which allows the physician to determine the seeds' location and whether any have been misplaced.

**Don't Forget Treatment Devices**

Generally, the physician will use a simple treatment device with prostate brachytherapy.

You may report 77332 (Treatment devices, design and construction; simple [simple block, simple bolus]) separately for this service.

The device is an interstitial brachytherapy prostate seed template. You may report 77332 if documentation from the physician states involvement in selection and placement of the device.

Finally, you might be able to report 77470 (Special treatment procedure [e.g., total body irradiation, hemibody radiation, per oral or endocavitary irradiation]) if the physician does extra work or uses facility resources.

Documentation must clearly state why the case was more complex to bill for 77470.

**Capture Post-Treatment Services**

After the initial brachytherapy treatment, you might be able to report several post-treatment services. For example, the physician may want to verify the source of radiation by repeating isodose planning, or by performing another complex simulation.

When your physician performs simulation and reviews isodose plans post-brachytherapy, you should report them the same way you would have pre-brachytherapy.
For instance, a patient arrives for a complex, post-brachytherapy isodose plan in an office setting. On the claim, you should report 77318 (Brachytherapy isodose plan; complex (calculation[s] made from over 10 sources, or remote afterloading brachytherapy, over 12 channels), includes basic dosimetry calculation(s)).

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