

Clinical Treatment Planning

Definition

Following the determination that a patient is a candidate for radiation therapy, clinical treatment planning is a professional-only service that takes the patient from the medical decision making process through the stage of developing a complete plan for the course of radiation therapy. The purpose of “pre-computer” treatment planning is to determine the best way to deliver the radiation and to limit the dose to normal tissues; it is billed on the date it is authenticated (signed and dated) by the physician. The clinical treatment planning process is a complex cognitive service that includes, but may not be limited to:

- ◆ Ordering and/or interpreting special testing (CT, MRI, PET, nuclear medicine, endoscopy, biopsy, lymphangiography, angiography, bone scans, etc.)
- ◆ Tumor localization procedures and services, such as the review of biopsy reports, surgical notes, etc.
- ◆ Correlation of physical exam findings with imaging studies to determine the exact location of the tumor or other treatment volume
- ◆ Treatment received to date, including surgery to remove the malignancy, chemotherapy before or concurrent with radiation, other or prior treatments to any site of disease
- ◆ Ordering of isodose plans, brachytherapy plans, 3D plans, IMRT plans, SRS or SBRT plans, including medical necessity for the treatment modality(ies) selected
- ◆ Treatment volume determination (determine site, extent, and volume of disease, and adjacent or surrounding normal critical structures)
- ◆ Toxicity and tolerance concerns for structures in the treatment field
- ◆ Treatment time/dosage determination
- ◆ Selection and sequencing of treatment modality(ies)
 - In general, a combination of treatment modalities (for example, surgery, radiation, chemotherapy or external beam treatment combined with brachytherapy) will require complex planning effort.
- ◆ Determination of the number and size of treatment ports
- ◆ Design and/or selection of appropriate treatment devices, custom shielding and/or complex blocks, immobilization device orders
- ◆ Orders for other procedures to plan the course of radiation therapy as completely as possible for the patient's maximum benefit (special dosimetry services, special physics consultations, special teletherapy isodose plans, special treatment procedures, orders and medical necessity for verification simulation, etc.)
- ◆ Orders and medical necessity for image guidance and/or tumor motion tracking, including frequency and imaging modality
- ◆ Any treatment concerns or variables unique to an individual patient, such as unusual anatomy, family history, comorbidities, etc.
- ◆ Documentation of care coordination with other medical specialties to address related or unrelated medical conditions (pain management, nutrition, etc.)



- All patient encounters should include some type of recommendation.

CODING COMPASS

Following is a summary of the key concepts & guidelines for treatment management:

- ◆ In order to charge for treatment management, the billing physician must perform a face-to-face encounter with the patient during each 5-fraction week of therapy.¹³⁴
 - There are no exceptions for holiday weeks, physician absence, etc.
 - If more than one physician performs an on-treatment visit during the same 5-fraction week, code 77427 may be billed in the name of either physician (but not both physicians).
- ◆ A fraction equals one treatment session of radiation therapy; each treatment represents a fraction of the total radiation dose the patient will receive during the course of therapy.
 - A week of radiation therapy is comprised of five fractions, regardless of the amount of time that passes between fractions.
 - Each 5-fraction week of therapy must include a progress note that documents a face-to-face physician-patient encounter and evaluation.
 - Three or four fractions remaining at the end of a course of fractionated treatment are reported with an additional unit of treatment management (77427), providing there is appropriate documentation of a patient encounter.
 - When the entire course of therapy consists of three, four or five fractions (non-SBRT), one unit of code 77427 may be reported.
 - When the entire course of therapy consists of one or two fractions (non-SRS or SBRT), one unit of code 77431 may be reported with appropriate documentation. This code is not reported for 1 or 2 remaining treatments at the end of a fractionated course of therapy.
- ◆ Medicare generally requires that the treatment management service be reported on the first day of the 5-fraction week of therapy billed (e.g., fraction 1, fraction 6, fraction 11, etc.). Don't bill this service on the day of the encounter.
- ◆ Hyperfractionation (BID or twice daily treatment) is particularly effective in the treatment of certain cancers. The physician may report a treatment management service (code 77427) every 2 ½ days, providing there is documentation of a face-to-face visit during each 5-fraction week of treatment.
 - CMS states that 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 separate days.¹³⁵
- ◆ Surgical procedures performed during the weekly on-treatment visit, such as flexible fiberoptic laryngoscopy, are *not* included in the treatment management code and should be separately charged by the physician and hospital.

¹³⁴ CPT® Manual

¹³⁵ <http://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/clm104c13.pdf>

Radiation Treatment Delivery

Definition

Teletherapy, or external beam radiation, is the delivery of a radioactive source of electromagnetic energy from a machine at a distance from the treatment area. The area irradiated from each angle or port is called a field. Personnel who are specifically trained in this specialty deliver radiation treatments.

External beam radiation therapy (EBRT) is commonly delivered by a linear accelerator that can deliver photons (x-rays) and/or electrons to the targeted area. Photons are used for deeper lying tumors, while electrons deliver the maximum dose of radiation near the surface of the skin.

Photon Treatment

A photon is a basic unit of light and other forms of electromagnetic radiation. Any beam of photons will deliver a dose of radiation that steadily decreases in strength as the beam moves farther from its source (including x-rays and gamma rays). The beam also tends to fan out as it moves away from the source.

Electron Treatment

Electron beams are useful for skin cancers, superficial lesions and shallow tumor volumes because electrons have limited penetrating power. Electron treatment spares deeper-lying tissues but is not effective for internal tumors.

Blood Irradiation

Blood irradiation should be reported per treatment, not per unit of blood. This service is typically charged internally to the hospital laboratory (or department requesting the irradiation) and *not* billed to an individual patient. According to the Medicare Claims Processing Manual, Chapter 4:¹⁵²

In situations where a beneficiary receives a medically reasonable and necessary transfusion of an irradiated blood product, an OPPS provider may bill the specific HCPCS code which describes the irradiated product, if a specific code exists, in addition to the CPT[®] code for the transfusion. If a specific HCPCS code for the irradiated blood product does not exist, then the OPPS provider should bill the appropriate HCPCS code for the blood product, along with CPT[®] code 86945 (irradiation of blood product, each unit).

EXAMPLE: If an OPPS provider transfuses the product described by P9040 (red blood cells, leukocytes reduced, irradiated, each unit), it would not be appropriate to bill an additional CPT[®] code for the irradiation of the blood product since charges for irradiation should be included in the charge for P9040.

Chapter 12 of the National Correct Coding Policy Manual adds:¹⁵³

Blood products are described by HCPCS Level II P codes. If a P code describes an irradiated blood product, CPT code 86945 (Irradiation of blood product, each unit) should not be reported separately since the P code includes irradiation of the blood product.

¹⁵² <http://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/clm104c04.pdf>

¹⁵³ <https://www.cms.gov/Medicare/Coding/NationalCorrectCodInitEd/index.html?redirect=/nationalcorrectcodinited/>

images, the review and approval should be documented to indicate a contemporaneous, medically necessary service.

Image-Guided Radiotherapy (IGRT)

IGRT helps remove uncertainties relating to the absolute position of the anatomy at the time of delivery, by acquiring volumetric images on the treatment machine. Currently, there are several IGRT imaging techniques:

- ◆ Ultrasound [US]
- ◆ kV or MV imaging systems
- ◆ Computed Tomography (CT)

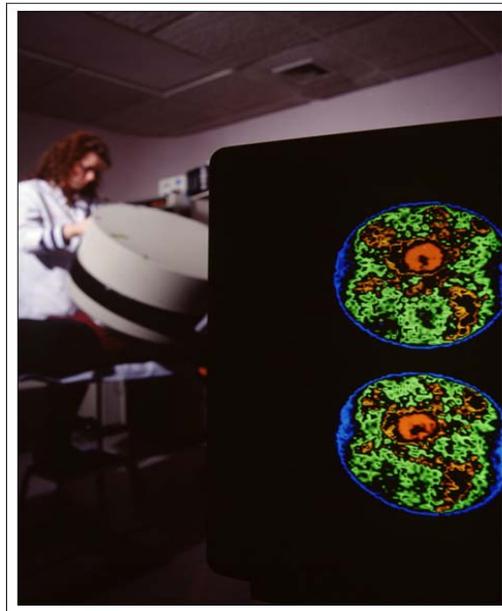
Image-guided radiation therapy is not represented by a “code,” but is instead a treatment process. When a patient is treated using any of the imaging modalities available, treatment setup is performed with direct visualization of the tumor volume and surrounding normal structures. The imaging may include the use of fiducial markers to verify patient and target volume position, or the alignment of images may occur using anatomic landmarks. This added accuracy allows radiation to be delivered to a tumor based on its exact location in the body at the precise moment of treatment.

Only one image-guidance code may be charged per treatment session.

For example, if the patient had both CT imaging and kV on-board imaging during the same treatment session, only one image-guidance service may be billed.

In addition, a verification simulation and an image-guidance procedure would *not* be charged on the same service date. One set of images is one billable event.

Last, portal imaging is not charged on the same day the patient receives an image guidance procedure.



The National Correct Coding Initiative (NCCI or CCI) states that physicians may report only one guidance code for a single anatomic area. Specifically, CCI states:

Guidance for placement of radiation fields by computerized tomography or by ultrasound (CPT[®] codes 77014 or 76950) for the same anatomical area are mutually exclusive of one another.¹⁵⁹

IGRT (regardless of the imaging modality used) is an “all or nothing” service; if the physician does not review and approve the images/shifts prior to the patient’s next treatment, there is no professional or technical IGRT charge to report. Also, beginning

¹⁵⁹ <http://www.cms.gov/Medicare/Coding/NationalCorrectCodInitEd/index.html?redirect=/NationalCorrectCodInitEd/>