Coding Guidance for Use of CT Image Guidance Related to IMRT Planning and Treatment Delivery

IMRT is a technology for delivering highly conformal external beam radiation therapy to a well-defined treatment volume. IMRT treatment planning and delivery can provide a more conformal target coverage and normal tissue sparing than 2-D or 3-D treatment planning and treatment delivery. IMRT is particularly useful for producing highly conformal dose distributions needed to irradiate targets positioned near, or immediately adjacent to, sensitive normal tissues.

Image guidance may be used to direct the radiation beam or to track motion during IMRT treatment delivery. A variety of techniques may be used to perform guidance including imaging (i.e., ultrasound, CT, MRI and stereoscopic imaging) and non-imaging (i.e., electromagnetic or infrared tracking) techniques.

IMRT Treatment Planning

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

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

CPT Code 77014 should not be billed for CT imaging used in the development of the IMRT treatment plan.

Use of CPT Code 77014 during IMRT Treatment Delivery

In 2014, CPT code 77014 Computed Tomography Guidance for Placement of Radiation Therapy Fields was packaged into simulation codes 77280, 77285 and 77290. As a result, CPT Code 77014 can only be billed to describe the CT image guidance used to direct the radiation beam or to track motion during the process of treatment delivery.

CT guidance can accurately define positioning adjustments for target localization for daily delivery of IMRT treatments. Three-dimensional CT (MV or kV CT) images are acquired on the treatment system for image guided patient localization prior to the delivery of each fraction. CPT Code 77014 can be delivered using one of three systems:
• Helical Tomo Therapy
• Integrated cone beam CT (MV or kV)
• CT on rails

Image guidance is a critical component in the delivery of IMRT and CPT Code 77014
*Computed Tomography Guidance for Placement of Radiation Therapy Fields* is one of
several image guidance techniques which can be used. A radiation oncologist, or a
medical physicist or trained therapist under the supervision of the radiation oncologist,
reviews the automated image fusion and makes manual or automatic adjustments as
necessary. These images may be used for subsequent planning target volume (PTV)
determination adapting to patient-specific PTV or online guidance. A medical physicist,
or trained radiation therapist under the supervision of the radiation oncologist, must
perform the scan. The physician must review any necessary patient positioning
adjustments and review all CT images in near real time.

**Application of Image Guidance Codes with IMRT Based on Site of Service**

A new CPT code for image guidance was created in 2015:

- 77387: Guidance for localization of target volume for delivery of radiation
treatment delivery, includes intrafraction tracking, when performed.

However, CPT code 77387 did not receive an assigned reimbursement value in the
MPFS. Providers billing under Medicare were instructed to report IGRT services using
the following Healthcare Common Procedure Coding System (HCPCS) G-codes and CPT
code:

- 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 (e.g., 3D positional tracking, gating, 3D surface
tracking), each fraction of treatment
- 77014: Computed tomography guidance for placement of radiation therapy
fields

Please see the table below for an outline of IGRT reporting requirements in regard to
their application with the delivery of IMRT. It is extremely important to check with your
payer before submitting claims, as requirements and policies vary by payer.
<table>
<thead>
<tr>
<th>IGRT with IMRT Delivery</th>
<th>IGRT Reporting in the Freestanding Setting</th>
<th>IGRT Reporting in the Hospital Setting</th>
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<tr>
<td></td>
<td>Freestanding office reporting G-codes bills:</td>
<td>Hospital bills:</td>
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<tr>
<td></td>
<td>o IMRT code: <strong>G6015</strong> or <strong>G6016</strong></td>
<td>o IMRT code: <strong>77385</strong> or <strong>77386</strong></td>
</tr>
<tr>
<td></td>
<td>o IGRT code: <strong>G6001, G6002 and/or 77014</strong> (global)</td>
<td>Physician bills:</td>
</tr>
<tr>
<td></td>
<td>Freestanding office reporting CPT codes bills:</td>
<td>o IGRT code(s): <strong>G6001, G6002, and/or 77014</strong> with the -26 modifier attached (PC), or</td>
</tr>
<tr>
<td></td>
<td>o IMRT code: <strong>77385</strong> or <strong>77386</strong>, and</td>
<td>o IGRT code: <strong>77387</strong> with the -26 modifier attached (PC)</td>
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<tr>
<td></td>
<td>o IGRT code(s): <strong>G6001, G6002, and/or 77014</strong> with the -26 modifier attached (PC), or</td>
<td><em>Note:</em> Do not bill or report IGRT-TC separately with IMRT.</td>
</tr>
<tr>
<td></td>
<td>o IGRT code: <strong>77387</strong> with the -26 modifier attached (PC)</td>
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*Note:* Do not bill or report IGRT-TC separately with IMRT.