Radiation Oncology Reimbursement and Coding Basics

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Objectives:

1. Explain the importance of correct coding in billing and reimbursement for a physician office.
2. Provide an overview of the basics of correct radiation oncology coding practices.
3. Give examples of tools used by Medicare to ensure correct coding.
4. Describe and discuss the Medicare formula for calculating physician payment.
Agenda

- Importance of correct coding
- Radiation oncology coding basics
- Correct coding tools (modifiers, CCI edits, MUEs, and RAC audits)
- Medicare physician payment overview
- Resources/More information

Importance of Correct Coding

- **What is correct coding?**
  - Detailed description of level of service performed that is submitted to carrier/payer
  - Documentation is a key component
    - Justifies provision of service
  - Physicians are responsible for providing clear and accurate documentation
  - Physicians and coding staff should work collaboratively to ensure proper coding and documentation is being reported to carrier/payer

- **Why is correct coding important?**
  - Key to appropriate reimbursement
  - Limits audit risk
  - Decreases claim rejections
  - Speeds reimbursement
  - Interfaces with quality reporting measures
Correct Coding Does NOT Mean Correct Payment

- Inaccurate claims payment
- Significant problem and getting worse
- Sample of 2.4M claims
  - Compare remittance to expected contracted fee
- 7 commercial insurers
  - 17.3% in 2010
  - 19.3% in 2011
- Medicare 3.8%

Coding Basics
Common Procedural Terminology

<table>
<thead>
<tr>
<th>CPT® Code Categories</th>
<th>Description</th>
<th>Criteria</th>
<th>RO Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Describes procedures and services</td>
<td>Widely accepted and performed, FDA approval granted, Proven clinical efficacy</td>
<td>77261, Therapeutic radiology treatment planning, simple</td>
</tr>
<tr>
<td>II</td>
<td>Supplemental tracking codes used for data collection about quality of care</td>
<td>Performance measurement codes, Alphanumeric designation, No payment assigned</td>
<td>4165F, 3-dimensional conformal radiotherapy (3D-CRT) or intensity modulated radiation therapy (IMRT) received</td>
</tr>
<tr>
<td>III</td>
<td>Temporary codes used for data collection on assessment of new procedure/service</td>
<td>New emerging technology, Used to track utilization, Typically payment and coverage determined by local carrier for Medicare</td>
<td>0073T, 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</td>
</tr>
</tbody>
</table>
Radiation Oncology Coding Basics

- **Healthcare Common Procedure Coding System (HCPCS)**
  - **Level I**
    - ✔ Used to describe medical, surgical, and diagnostic procedures
    - ✔ CPT® codes which are maintained by the AMA
    - ✔ Ex: 77427, Radiation treatment management, 5 treatments
  - **Level II**
    - ✔ Used to identify products, supplies and services which are not included in CPT® codes
    - ✔ 5-digit alphanumeric code
    - ✔ Maintained by CMS
    - ✔ Ex: A4648, Tissue marker, implantable, any type, each

Radiation Oncology Coding Basics

- **Framework of RO coding – Process of Care**
  1. Consultation
  2. Preparing for treatment
  3. Medical radiation physics, dosimetry, treatment devices, and special services
  4. Radiation treatment delivery
  5. Radiation treatment management
  6. Follow-up care management
Radiation Oncology Coding Basics

• Consultation

An evaluation or management provided by a physician at the request of another physician or appropriate source to either recommend care for a specific condition or problem to determine whether to accept responsibility for ongoing management of the patient’s care or for the care of a specific condition.

<table>
<thead>
<tr>
<th>Consultation Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office or other outpatient visits, new patient</td>
</tr>
<tr>
<td>Office or other outpatient visits, established patient</td>
</tr>
<tr>
<td>Office or other outpatient consultations, new or established patient</td>
</tr>
<tr>
<td>Inpatient consultations, new or established patient</td>
</tr>
<tr>
<td>Initial hospital care, new or established patient</td>
</tr>
<tr>
<td>Subsequent hospital care</td>
</tr>
<tr>
<td>99201-99205</td>
</tr>
<tr>
<td>99211-99215</td>
</tr>
<tr>
<td>99241-99245</td>
</tr>
<tr>
<td>99251-99255</td>
</tr>
<tr>
<td>99221-99223</td>
</tr>
<tr>
<td>99231-99233</td>
</tr>
</tbody>
</table>

Levels of E/M

• Key components
  • History
  • Examination
  • Medical decision making

• Contributory factors
  • Counseling
  • Coordination of care
  • Nature of presenting problem

• Time
Complexity of Medical Decision

- Number of:
  - Possible diagnoses
  - Management options considered
- Amount/Complexity of records, tests, etc.
- Risk of complications, morbidity, mortality
- Comorbidity not considered *unless* significantly increases complexity

### Complexity Table

<table>
<thead>
<tr>
<th>Dx, Tx Options</th>
<th>Amount, Complexity Data</th>
<th>Risk of Comp. or M&amp;M</th>
<th>Decision Complexity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimal</td>
<td>Minimal</td>
<td>Minimal</td>
<td>Straight-forward</td>
</tr>
<tr>
<td>Limited</td>
<td>Limited</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Multiple</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>Extensive</td>
<td>Extensive</td>
<td>High</td>
<td>High</td>
</tr>
</tbody>
</table>
Complexity of Decision Making

- Not clinical treatment planning (7726x)
- Decisions regarding field configuration, energy, modality, fractionation, etc. is not E/M and must be performed and documented elsewhere.

“...time may be...controlling...”

- “Counseling and/or coordination...more than 50%”
- Face time – office
- Unit/Floor time – inpatient
- Must be documented in the medical record
### New Patient

<table>
<thead>
<tr>
<th>History</th>
<th>Exam</th>
<th>Decision</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>99201</td>
<td>Focus</td>
<td>Focus</td>
<td>Straight</td>
</tr>
<tr>
<td>99202</td>
<td>Expand focus</td>
<td>Expand focus</td>
<td>Straight</td>
</tr>
<tr>
<td>99203</td>
<td>Detailed</td>
<td>Detailed</td>
<td>Low</td>
</tr>
<tr>
<td>99204</td>
<td>Comprehensive</td>
<td>Comp.</td>
<td>Moderate</td>
</tr>
<tr>
<td>99205</td>
<td>Comp.</td>
<td>Comp.</td>
<td>High</td>
</tr>
</tbody>
</table>

### Established Patient

<table>
<thead>
<tr>
<th>History</th>
<th>Exam</th>
<th>Decision</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>99211</td>
<td>+/- Physician</td>
<td>Minimal</td>
<td>5 min.</td>
</tr>
<tr>
<td>99212</td>
<td>Focus</td>
<td>Focus</td>
<td>Straight</td>
</tr>
<tr>
<td>99213</td>
<td>Expand</td>
<td>Expand</td>
<td>Low</td>
</tr>
<tr>
<td>99214</td>
<td>Detailed</td>
<td>Detailed</td>
<td>Moderate</td>
</tr>
<tr>
<td>99215</td>
<td>Comp.</td>
<td>Comp.</td>
<td>High</td>
</tr>
</tbody>
</table>
Radiation Oncology Coding Basics

Elimination of consultation codes by Medicare
- As of 1/1/2010 Medicare eliminated payment for office consultation (99241-99245) and inpatient consultation (99251-99255) codes, except for telehealth.
- Providers should report new and established visit codes that best describe the service being provided.
- Private payers may still accept; check individual payer policies.

Typical reasons ROs report E/M codes
- Counseling
- Coordinating care
- Other aspects of cancer (i.e. pain or nutrition management)
- Diagnostic testing for staging

Exclusion – E/M services cannot be reported when billing the following codes:
- Treatment management codes
  - 77427, 77431, 77432, 77435, 77470
- Intracavitary radiation source application codes
  - 77761 - 77763
- Interstitial radiation source application codes [LDR]
  - 77776 - 77778

Radiation Oncology Coding Basics

Preparing for treatment

Codes Related to Preparing for Treatment

| Clinical treatment planning codes (simple, intermediate, complex) | 77261 - 77263 |
| Simulation (simple, intermediate, complex, 3-dimensional)         | 77280 - 77295 |
Radiation Oncology Coding Basics

• Preparing for treatment

Clinical treatment planning – initial step, cognitive process

• Determine disease bearing areas.
• Identify type and method of radiation treatment delivery.
• Specify areas to be treated.
• Select radiation treatment techniques.
• Specify dose and duration of therapy.

Clinical Treatment Planning

• Treatment planning definitions
  ✓ Simple (77261) – planning requires a single treatment area of interest encompassed in a single port or simple parallel opposed ports with simple or no blocking.
  ✓ Intermediate (77262) – planning requires 3 or more converging ports, 2 separate treatment areas, multiple blocks, or special time dose constraints.
  ✓ Complex (77263) – planning requires highly complex blocking, custom shielding blocks, tangential ports, special wedges or compensators, 3 or more separate treatment areas, rotational or special beam considerations, combination of therapeutic modalities.
Radiation Oncology Coding Basics

• Preparing for treatment

Therapeutic radiology simulation – process to establish radiation treatment portals
• Documentation requirements for simulation
• Written record of procedure
• Hard copy or electronically archived images
• Evidence of image review by physician (signature and date of review)

Simulation

• Simulation definitions
  ✓ Simple (77280) – simulation of a single treatment area with either a single port or parallel opposed ports; simple or no blocking.
  ✓ Intermediate (77285) – simulation of 3 or more converging ports, 2 separate treatment areas, multiple blocks.
  ✓ Complex (77290) – simulation of tangential portals, 3 or more treatment areas, rotation or arc therapy, complex blocking, custom shielding blocks, brachytherapy source verification, hyperthermia probe verification, any use of contrast materials
  ✓ Three dimensional (77295) – computer-generated 3D reconstruction of tumor volume and surrounding critical normal tissue structures from direct CT scans and/or MRI data in preparation for non-coplanar or coplanar therapy.
Radiation Oncology Coding Basics

- Medical radiation physics, dosimetry, treatment devices, and special services

<table>
<thead>
<tr>
<th>Codes Related to Medical Radiation Physics, Dosimetry, Treatment Devices, and Special Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic radiation dosimetry calculation and special dosimetry</td>
</tr>
<tr>
<td>Isodose plans</td>
</tr>
<tr>
<td>Special teletherapy port plan</td>
</tr>
<tr>
<td>Treatment devices</td>
</tr>
<tr>
<td>Medical radiation physics</td>
</tr>
</tbody>
</table>

Documentation Requirements

- Medical radiation physics, dosimetry, treatment devices, and special services

**Basic dosimetry (77300)**
- Course of therapy for standard external beam would involve 1–6 dosimetry calculations.
- All calcs. must be checked, reviewed, and approved by a physician.

**Special dosimetry (77331)**
- Uses special radiation monitoring and measuring devices
- Physician order for the procedure and physician-dated signature showing the work product was reviewed

**Teletherapy and brachytherapy isodose plans (77305-77315, 77326-77328)**
- A printed or electronic treatment plan and evidence that the physician has reviewed and approved the work product with a signature and date by the physician and physicist
Documentation

- Medical radiation physics, dosimetry, treatment devices, and special services

- Special teletherapy port plan (77321)
  - The special teletherapy port plan should be reviewed, signed, and dated by the radiation oncologist and physicist.

- Treatment devices (77332-77334 and 77338)
  - Physician signature and date on simulation and port images

- Medical radiation physics (77336 and 77370)
  - Physician request for the consultation and physics report and evidence that the physics report was reviewed by the physician

Radiation Oncology Coding Basics

- Radiation treatment delivery

<table>
<thead>
<tr>
<th>Radiation Treatment Delivery Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>External beam therapy</td>
</tr>
<tr>
<td>Port films</td>
</tr>
</tbody>
</table>
Radiation Delivery

- **Factors that determine which treatment delivery code to choose:**
  - Energy level used in treatment, in megavolts (MV)
  - The complexity of treatment (i.e. number of treatment sites, ports, and devices)
  - Technical-only codes (no physician work associated with codes)

- **Documentation requirements:**
  - Documentation of treatment delivery and port film review should appear on the daily treatment log.
  - Documentation of port films must be maintained as an X-ray film or electronically stored image.

Radiation Oncology Coding Basics

- **Radiation treatment management**

Radiation treatment management represents the radiation oncologist’s professional contribution to patient management during a course of external beam radiation.

<table>
<thead>
<tr>
<th>Radiation Treatment Management Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radiation treatment management</td>
</tr>
<tr>
<td>Special radiation treatment</td>
</tr>
</tbody>
</table>
Radiation Oncology Coding Basics

- Radiation treatment management

**Radiation treatment management typically involves 4 elements**

- Medical E/M of the patient
- Review of port films
- Review of dosimetry, dose delivery, and treatment parameters
- Review of patient treatment set up
  - May be charged once per 5 fractions
    (min. of 3 fractions for a partial week)

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Radiation Oncology Coding Basics

- Special Treatment Procedure, 77470

- CPT® code 77470, Special treatment procedure (eg, total body irradiation, hemibody radiation, per oral, or endocavitary irradiation)
  - Captures the additional physician effort and work required for special radiation treatment procedures
    - Ex: Concomitant chemoradiotherapy
  - Appropriate documentation must be reported.
  - Procedure is performed once per course of therapy.
Radiation Oncology Coding Basics

• Follow-up Care Management

Follow-up care management is the last phase of care in radiation therapy management. Continued follow-up care of patients who have completed radiation therapy is appropriately provided by the radiation oncologist to manage any acute or chronic morbidity resulting from treatment as well as to monitor the patient for tumor recurrence.

*Follow-up care management is typically included in the work of CPT® code 77427, radiation treatment management.*

*Medicare will not pay for routine follow-up care during the three months after completion of external beam therapy.*

Radiation Oncology Coding Basics

• Specialized Techniques

  • Intensity Modulated Radiation Therapy (IMRT)
  • Image Guided Radiation Therapy (IGRT)
  • Stereotactic Radiosurgery (SRS)
  • Stereotactic Body Radiation Therapy (SBRT)
  • Particle Beam Therapy
  • Brachytherapy
Radiation Oncology Coding Basics

• Intensity Modulated Radiation Therapy (IMRT)

**IMRT Codes**

*IMRT is a technology for delivering highly conformal beam radiation to solid tumors.*

<table>
<thead>
<tr>
<th>Service</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMRT radiation dose planning</td>
<td>77301</td>
</tr>
<tr>
<td>IMRT treatment delivery</td>
<td>77418, 0073T</td>
</tr>
<tr>
<td>Compensator-based IMRT</td>
<td>77334</td>
</tr>
<tr>
<td>Design MLC device for IMRT</td>
<td>77338</td>
</tr>
</tbody>
</table>

**Coding Guidance**

• The need for IMRT will always justify a complex level of clinical treatment planning.
  • CPT® code 77263
  • Distinct from radiation dose planning, IMRT, as described by 77301
• Initial simulation (may be required)
  • Localize the area of interest prior to IMRT planning.
  • Place fiducial markers on the skin.
  • CPT® code 77290
• IGRT is used in conjunction with IMRT in patients whose tumors are located near or within critical structures and/or tissue with inherent setup variation (76950, 77014, 77421).
  • Reported separately, when performed
Radiation Oncology Coding Basics

- Intensity Modulated Radiation Therapy (IMRT)

- IMRT Policy Issues
  - In 2008, Medicare spent roughly $1 billion on IMRT.
  - Largely for treatment of prostate cancer
  - 77418: 59.80% prostate; 8% breast (2nd highest)
  - 0073T: 60.80% prostate; 5.40% breast (3rd highest)
  - There is now a push for comparative effectiveness data from payers and cost benefit comparisons with other treatment modalities, i.e. brachytherapy.
  - Radiation oncology benefit managers have emerged.
  - Concern by private payers of over-utilization of IMRT

Radiation Oncology Coding Basics

- Image Guided Radiation Therapy (IGRT)

**IGRT Codes**

*IGRT is a form of adaptive radiation therapy which uses imaging technology to guide action(s) that modifies the treatment in reference to the intended target.*

<table>
<thead>
<tr>
<th>Procedure</th>
<th>CPT Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ultrasound</td>
<td>76950</td>
</tr>
<tr>
<td>CT</td>
<td>77014</td>
</tr>
<tr>
<td>Stereoscopic X-ray</td>
<td>77421</td>
</tr>
</tbody>
</table>
Radiation Oncology Coding Basics

- Image Guided Radiation Therapy (IGRT)

- IGRT Coding Guidance
  - Performed with the following services:
    - 3D conformal therapy
    - IMRT
    - Particle beam therapy
    - SRS/SBRT
  - Code components
    - Includes both a professional and technical component
  - Required documentation
    - Physician involvement and for technical aspect of this code
    - Work in addition to physician work involved with 77427 (weekly management)

IGRT Clinical Appropriateness

- Image Guided Radiation Therapy (IGRT)

- Clinical circumstances must reasonably warrant use of IGRT
  - Target volume is located near or within critical structures
  - Targets with inherent set-up variation
  - Examples
    - Target volume is in close proximity to critical structures that must be protected.
    - Volume of interest must be covered with narrow margins to protect immediately adjacent structures adequately.
    - An immediate adjacent area has been previously irradiated and abutting portals must be established with high precision.
    - Dose escalation is planned to deliver radiation dose in excess of those commonly used for similar tumors with conventional treatment.
Medical Appropriateness Sites

- Imaging modality can visualize target or surrogate
- Target moves relative to isocenter
- High dose required relative to OAR
- Bone or marker???
  - Pelvic bone poor surrogate for prostate
  - Skull may be good surrogate for brain
Supervision

- Image Guided Radiation Therapy (IGRT)

<table>
<thead>
<tr>
<th>CPT® Code</th>
<th>Description</th>
<th>Supervision Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>76950</td>
<td>Ultrasound</td>
<td>General supervision – The procedure is furnished under the physician’s overall direction and control, but the physician’s presence is not required during the performance of the procedure.</td>
</tr>
<tr>
<td>77014</td>
<td>CT</td>
<td>Direct supervision – In the office setting, the physician must be present in the office suite and immediately available to furnish assistance and direction throughout the performance of the procedure. The physician need not be present in the room when the procedure is performed.</td>
</tr>
<tr>
<td>77421</td>
<td>Stereoscopic X-ray</td>
<td>Direct supervision – Same definition as above.</td>
</tr>
</tbody>
</table>

Radiation Oncology Coding Basics

- Stereotactic Radiosurgery (SRS)

**SRS Codes**

*SRS is a technique for delivering a high dose of radiation to a specific target while delivering a minimal dose to surrounding tissues. This technique is used to treat defined target(s) in the head and spine.*

| Treatment delivery (freestanding) | 77372 |
| Treatment delivery (freestanding/hospital outpatient) | 77371, G0339, G0340 |
| Treatment delivery (hospital outpatient) | G0173, G0251 |
| Radiation treatment management (single fraction, cranial only) | 77432 |
Coding Guidance

• Basis for choosing code to report
  ✓ Source used (cobalt vs. linac)
  ✓ Setting (freestanding vs. hospital outpatient)
  ✓ Fractionation scheme (single vs. fractionated)
• Single fraction SRS
  ✓ CPT® code 77432
• Cranial SRS is delivered in 2-5 fractions
  ✓ CPT® code 77435
• Planning and simulation
  ✓ No specific SRS codes

SBRT Management and Delivery

• 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
• 77373
  • Stereotactic body radiation therapy, treatment delivery, per fraction to 1 or more lesions, including image guidance, entire course not to exceed 5 fractions
## Crosswalk CPT® & HCPCS Codes for SRS & SBRT

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>G0173</td>
<td>Linear accelerator based stereotactic radiosurgery, complete course of therapy in one session</td>
<td>77372</td>
<td>Radiation treatment delivery, stereotactic radiosurgery (SRS), complete course of treatment of cerebral lesions(s) consisting of 1 session; linear accelerator based</td>
</tr>
<tr>
<td>G0251</td>
<td>Linear accelerator based stereotactic radiosurgery, delivery including collimator changes and custom plugging, fractionated treatment, all lesions, per session, maximum five sessions per course of treatment</td>
<td>77373</td>
<td>Stereotactic body radiation therapy, treatment delivery, per fraction to one or more lesions, including image guidance, entire course not to exceed 5 fractions</td>
</tr>
<tr>
<td>G0339</td>
<td>Image guided robotic linear accelerator-based stereotactic radiosurgery, complete course of therapy in one session or first session of fractionated treatment</td>
<td>77373</td>
<td>Stereotactic body radiation therapy, treatment delivery, per fraction to one or more lesions, including image guidance, entire course not to exceed 5 fractions</td>
</tr>
<tr>
<td>G0340</td>
<td>Image guided robotic linear accelerator-based stereotactic radiosurgery, delivery including collimator changes and custom plugging, fractionated treatment, all lesions, per session, second through fifth sessions, maximum 5 sessions per course of treatment</td>
<td>77373</td>
<td>Stereotactic body radiation therapy, treatment delivery, per fraction to one or more lesions, including image guidance, entire course not to exceed 5 fractions</td>
</tr>
<tr>
<td>G0243</td>
<td>Multi-source photon stereotactic radiosurgery, delivery including collimator changes and custom plugging, complete course of treatment, all lesions</td>
<td>77371</td>
<td>Radiation treatment delivery, stereotactic radiosurgery (SRS), complete course of treatment of cerebral lesion(s) consisting of 1 session; multi-source Cobalt 60 based</td>
</tr>
</tbody>
</table>

## Indications for SBRT:
“Check with your local contractor.”
- Inoperable early stage lung cancer
- Recurrent lung cancer
- Primary liver cancer
- Secondary lung or liver cancer
- Pancreas
- Adrenal
- Retroperitoneal tumors
- Spinal and paraspinous tumors
- Other recurrent
Noridian LCD effective 1/1/10

- “NAS covers primary and metastatic neoplasms of the lung, liver, kidney, adrenal, pancreas, CNS, brain and spinal cord…”

...when and only when each of the following criteria are met and specifically documented in the medical record:”

- Performance status justifies aggressive treatment
- Other forms of XRT including IMRT cannot be as safely or effectively utilized
- Tumor can be completely targeted with acceptable risk to OAR
- If germ cell or lymphoma, effective chemotherapy regimens are exhausted or not feasible
- Other focal therapy such as RFA or cryo cannot be as safely or effectively utilized
Key Assumptions Made when SBRT Codes Were Created

- SBRT is a stand alone treatment, not a boost after other therapies
- No specific codes for: planning, simulation, medical radiation physics, dosimetry, treatment devices, and special services
- Image guidance, respiratory motion management, etc. is included
- SBRT is 1-5 fractions anywhere in the body
- For radiation oncologist SRS is 1 fraction in the brain
- Radiation oncologist is present and participating during each fraction

Radiation Oncology Coding Basics

- Stereotactic Body Radiation Therapy (SBRT)

<table>
<thead>
<tr>
<th>SBRT Codes</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SBRT describes the delivery of potent doses of radiation using numerous carefully directed fields to extracranial sites.</strong></td>
<td></td>
</tr>
<tr>
<td>Treatment delivery (freestanding)</td>
<td>77373</td>
</tr>
<tr>
<td>Treatment delivery (freestanding/hospital outpatient)</td>
<td>G0339, G0340</td>
</tr>
<tr>
<td>Treatment delivery (hospital outpatient)</td>
<td>G0251</td>
</tr>
<tr>
<td>Radiation treatment management</td>
<td>77435</td>
</tr>
</tbody>
</table>
### Particle Beam Therapy

**Particle beam therapy is a form of conformal external beam radiation treatment.**

<table>
<thead>
<tr>
<th>Proton treatment delivery</th>
<th>77520, 77522, 77523, 77525</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neutron beam treatment delivery</td>
<td>77422, 77423</td>
</tr>
</tbody>
</table>

### Brachytherapy

<table>
<thead>
<tr>
<th>Procedure guidance codes</th>
<th>Fluoroscopy (&lt; &gt; 1 hour)</th>
</tr>
</thead>
<tbody>
<tr>
<td>76000-76001, 76872-76873, 76950,76965, 77002 77012-77014</td>
<td>TRUS US for RT fields, US for interstitial Fluoroscopy for needle placement CT for needle placement, CT for RT fields</td>
</tr>
</tbody>
</table>
Brachytherapy
- Treatment based on placement of radiation sources in the patient near or in the cancer
- Coding is based on:
  - Intracavitary vs. interstitial
  - Low-dose rate (LDR) vs. High-dose rate (HDR)
    - LDR requires knowing the number of sources.
    - HDR requires knowing the number of channels.
- Unique codes for surgical placement of applicator or device to receive the sources
- Guidance codes may be used

LDR Delivery Codes
- Depends on complexity
- Depends on location (cavity vs. interstitial)

<table>
<thead>
<tr>
<th></th>
<th>Interstitial</th>
<th>Intracavitary</th>
<th># Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple</td>
<td>77776</td>
<td>77761</td>
<td>1-4</td>
</tr>
<tr>
<td>Intermediate</td>
<td>77777</td>
<td>77762</td>
<td>5-10</td>
</tr>
<tr>
<td>Complex</td>
<td>77778</td>
<td>77763</td>
<td>&gt;10</td>
</tr>
</tbody>
</table>
Other LDR codes

| Supervision and handling, loading of radiation source | 77790 |
| Surface application brachytherapy | 77789 |

Delivery HDR

- Irrespective of location
- Uses channels rather than sources or dwells

<table>
<thead>
<tr>
<th>Code</th>
<th>Channels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple</td>
<td>77785</td>
</tr>
<tr>
<td></td>
<td>1 channel</td>
</tr>
<tr>
<td>Inter</td>
<td>77786</td>
</tr>
<tr>
<td></td>
<td>2-12 channels</td>
</tr>
<tr>
<td>Complex</td>
<td>77787</td>
</tr>
<tr>
<td></td>
<td>&gt;12 channels</td>
</tr>
</tbody>
</table>
### Insertion Codes ♀

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>19296</td>
<td>“afterloading expandable catheter (single or multichannel) into the breast”</td>
</tr>
<tr>
<td>19298</td>
<td>“afterloading brachytherapy catheters (multiple tube and button type) into the breast”</td>
</tr>
<tr>
<td>57155</td>
<td>“uterine tandem and/or vaginal ovoids”</td>
</tr>
<tr>
<td>57156</td>
<td>“vaginal radiation afterloading apparatus”</td>
</tr>
<tr>
<td>58346</td>
<td>“Heyman capsules”</td>
</tr>
</tbody>
</table>

### Insertion Codes ♂

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>55875</td>
<td>“needles or catheters into prostate, with or without cysto”</td>
</tr>
<tr>
<td>55876</td>
<td>“fiducial marker into prostate”</td>
</tr>
</tbody>
</table>
Insertion Codes

20555  “needles or catheters into muscle and/or soft tissue”
31643  “bronchoscopy”
41019  “needles, catheters…head and neck region”
49327  “interstitial device(s) into abdomen/pelvis”  
(e.g., fiducials)
61770  “Stereotactic with burr holes into brain”
55920  “pelvic organs and/or genitalia (except prostate)"

Brachy Codes

- Brachytherapy

- 77263, therapeutic radiology treatment planning, complex
- 77290/77295, therapeutic radiology simulation-aided field setting, complex/3D
- 77326-77328, brachytherapy isodose plans, simple (1-4 sources), intermediate (5-10) or complex (>10)
- 77332-77334, treatment devices
- 77300, basic radiation dosimetry calculation
- 77470, special treatment procedure

- **Sources: depends on the setting**
  - Use Q3001 if done in physician’s office.
    - Carrier priced
  - Use source-specific C code for facility setting.
    - Priced by HOPPS

- **Documentation**
  - Proper documentation is needed.
New Codes for 2012
Intraoperative Radiation Therapy

- IORT management
  - 77469 Intraoperative radiation treatment management
- IORT delivery
  - 77424 Intraoperative radiation treatment delivery, X-ray, single treatment session
  - 77424 Intraoperative radiation treatment delivery, electrons, single treatment session

Diagnosis Coding – ICD-9

*International Classification of Diseases (ICD)*

- Legislative mandate
  - Social Security Act (SSA) 1842(p)(1), all Medicare claims submitted by a physician or practitioner shall include the appropriate ICD-9-CM code(s)
- Code structure – 3, 4, or 5 digits
  - Must report to highest level of specificity.
  - Diagnosis must be valid at the time procedure is performed.
- Reporting guidance
  - Neoplasm ICD-9 codes = 140 – 239
  - Electronic claims – provider can report up to 8 diagnoses
  - Paper claims – provider can report up to 4 diagnoses
Radiation Oncology Coding Basics

- **Diagnosis Coding – ICD-10**
  - Oct. 1, 2013 conversion to ICD-10
    - Applies to ICD-9-CM and ICD-9-PCS
    - CPT® codes not affected
  - **Rationale for conversion**
    - Code set outdated
    - No room to add new codes
    - More compatible with electronic health records, provides greater detail
  - **Partial freeze of new codes implemented to assist in transition**

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 1, 2011</td>
<td>Last regular, annual updates to both ICD-9-CM and ICD-10</td>
</tr>
<tr>
<td>October 1, 2012</td>
<td>Only limited updates to both ICD-9-CM and ICD-10 to capture new technology and new diseases</td>
</tr>
<tr>
<td>October 1, 2013</td>
<td>Only limited updates to ICD-10 to capture new technology and new diseases</td>
</tr>
<tr>
<td>October 1, 2014</td>
<td>Regular updates to ICD-10 will begin</td>
</tr>
</tbody>
</table>
### Radiation Oncology Coding Basics

#### ICD-9 vs. ICD-10

<table>
<thead>
<tr>
<th>Comparison</th>
<th>ICD-9</th>
<th>ICD-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of codes</td>
<td>17,000 (approximately)</td>
<td>150,000 (approximately)</td>
</tr>
<tr>
<td>Code structure – Length</td>
<td>3-5 characters</td>
<td>3-7 characters</td>
</tr>
<tr>
<td>Code structure – Type of digits</td>
<td>Digit 1 – alpha or numeric</td>
<td>Digit 1 – alpha</td>
</tr>
<tr>
<td></td>
<td>Digits 2-5 – numeric</td>
<td>Digits 2-3 – numeric</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Digits 4-7 – alpha or numeric</td>
</tr>
<tr>
<td>Capacity to add codes</td>
<td>Limited space for adding new codes</td>
<td>Space for adding new codes</td>
</tr>
<tr>
<td>Level of detail</td>
<td>Lacks detail</td>
<td>Very specific</td>
</tr>
<tr>
<td>Laterality</td>
<td>Lacks laterality</td>
<td>Has laterality (i.e. right vs. left)</td>
</tr>
</tbody>
</table>

### Radiation Oncology Coding Basics

#### Crosswalk from ICD-9 to ICD-10

<table>
<thead>
<tr>
<th>ICD-9 Code</th>
<th>ICD-9 Descriptor</th>
<th>ICD-10 Code</th>
<th>ICD-10 Descriptor</th>
</tr>
</thead>
<tbody>
<tr>
<td>172.1</td>
<td>Malignant melanoma of skin of eyelid, including canthus</td>
<td>D03.10</td>
<td>Melanoma in situ of eyelid, including canthus, unspecified side</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D03.11</td>
<td>Melanoma in situ of right eyelid, including canthus</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D03.12</td>
<td>Melanoma in situ of left eyelid, including canthus</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C43.10</td>
<td>Malignant melanoma of eyelid, including canthus, unspecified side</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C43.11</td>
<td>Malignant melanoma of right eyelid, including canthus</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C43.12</td>
<td>Malignant melanoma of left eyelid, including canthus</td>
</tr>
<tr>
<td>185</td>
<td>Malignant neoplasm of prostate</td>
<td>C61</td>
<td>Malignant neoplasm of prostate</td>
</tr>
</tbody>
</table>
Correct Coding Tools

• Modifiers
• NCCI edits
• MUEs
• RAC Audits

Correct Coding Tools

• **Modifiers**
  • **General description**
    ✓ Two-digit suffixes appended to CPT® codes to indicate procedure/service is changed due to extenuating circumstances
    • Definition of procedure/service remains the same
    ✓ Modifiers explain to payers why the procedure/service has been altered
    ✓ May impact payment
    • Documentation is important
Correct Coding Tools

• **Modifiers**
  - Many physician diagnostic or therapeutic services may include both a technical and professional component.
  - Physician must only bill for the component provided.
    - **TC – Technical component**
      - Includes the equipment and technician performing the test
      - Should not be used if service is 100% technical
    - **PC/26 – Professional component**
      - Interpretation of the test results
      - Modifier used when the professional component is reported separately
    - **Global billing – no modifier**
      - Reported when both the TC and PC are provided in a physician’s office, a freestanding imaging or radiation oncology center, or leased hospital radiology department

Other common RO modifiers

- **58** - Staged or related procedure or service by same physician during the postoperative period
- **59** - Distinct procedural service
- **62** – Two surgeons
- **66** – Surgical team
- **76** – Repeat procedure by same physician
National Correct Coding Initiative - NCCI Edits

• History
  ✓ In 1996, CMS developed NCCI to minimize improper coding by stipulating procedures that are not normally performed together.

• Description
  ✓ Identifies procedures that cannot be performed together on the same day, on the same patient, by the same provider

• Types of edits
  ✓ “0” = modifier not allowed to override edit
  ✓ “1” = modifier allowed to override edit
  • Ex: CPT® code 77431 (radiation therapy management) (column 1) with CPT® code 99239 (hospital discharge day) (column 2) has a modifier of 0

Correct Coding Tools

• Medically Unlikely Edits (MUEs)
  • Developed by CMS in 2007 to detect and deny unlikely Medicare claims on a pre-payment basis.
  • MUEs limit the number of units of service that a provider can report per beneficiary, per date of service.
    ✓ Designed to limit fraud and coding errors
    ✓ Ex: CPT® 57156 (ins. vag. brachytx device) has MUE of 1
  • CMS has published many MUEs, but the agency has kept a subset of MUEs confidential and these are not published.
**Why Do Physicians Lose an Audit?**

<table>
<thead>
<tr>
<th>Type of Error</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insufficient Documentation</td>
<td>24.9%</td>
<td>43.7%</td>
</tr>
<tr>
<td>Non-Response</td>
<td>54.7%</td>
<td>29.7%</td>
</tr>
<tr>
<td>Medically Unnecessary</td>
<td>11.3%</td>
<td>17.2%</td>
</tr>
<tr>
<td>Incorrect Coding</td>
<td>6.7%</td>
<td>7.7%</td>
</tr>
<tr>
<td>Other</td>
<td>1.4%</td>
<td>1.6%</td>
</tr>
<tr>
<td><strong>Total (%)</strong></td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

**Recovery Audit Contractors (RACs)**

- **Purpose of RACs**
  - RACs identify and recoup Medicare overpayments and underpayments on a post-payment basis.
- **RAC policies**
  - RACs use same policies as carriers, FIs, and MACs.
  - RACs are limited to a 3-year look back period
    - Will not be able to review claims prior to October 1, 2007
- **Two types of review**
  - Automated – no additional documentation needed
  - Complex – additional documentation required
- **4 RAC contractors**
  - RACs are paid on a contingency basis.
  - Can only review claims for audit issues approved by CMS
- **RO specific issue**
  - RAC contractor CGI is currently reviewing CPT® code 77300

http://www.cms.gov/MLNGenInfo
Correct Coding Tools

- Recovery Audit Contractors (RACs)

2011 Medical Record Guidelines for Physicians

*In general, the number of records that a RAC can request is based on the number of individual providers reporting under an individual tax ID number.*

<table>
<thead>
<tr>
<th>Group Size</th>
<th>Maximum Number of Record Requests per 45 Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 or more</td>
<td>50 records</td>
</tr>
<tr>
<td>25–49</td>
<td>40 records</td>
</tr>
<tr>
<td>6–24</td>
<td>25 records</td>
</tr>
<tr>
<td>Less than 5</td>
<td>10 records</td>
</tr>
</tbody>
</table>

Medicare Physician Payment Overview

- **Path from CPT® code to payment – can take up to 18 months**
  - Step 1 – CPT® code created
    - Physician specialty society or individual submits code proposal to the AMA CPT® Editorial Panel
    - AMA CPT® Editorial Panel creates code and approves final code nomenclature
    - Many code proposals do not pass or are revised from original proposal during review process
RUC Process

- Step 2 – CPT® code valued
  - AMA RVS Update Committee (RUC) develops recommendations on physician work RVUs, physician time, and direct practice expense inputs
  - Recommendations based on surveys conducted by physician specialty societies (work) and expert panel consensus (practice expense)
  - AMA submits recommendations to the Centers for Medicare and Medicaid Services (CMS)

CPT Process

- Step 3 – CPT® code published
  - AMA publishes code in CPT® book
    - Cat. I released annually, effective Jan. 1
    - Cat. III biannual electronic release, effective Jan. 1 and July 1
  - CMS publishes code and code value in Medicare Physician Fee Schedule (MPFS)
    - Rule published annually, effective Jan. 1
    - Proposed rule is released on or around July 1 and final rule is released on or around Nov. 1
Medicare Formula for Physician Payment

Factors impacting payment

- RVU values
  - Work RVUs - the relative level of time, skill, training, and intensity to provide a given service.
  - Practice Expense (PE) RVUs - the costs of maintaining a practice including rent, equipment, supplies, and non-physician staff costs.
  - Malpractice (MP) RVUs - represents payment for the professional liability expenses.
- Geographic practice cost indices (GPCI)
  - 89 physician payment localities
- Physician conversion factor (CF)
  - 2011 CF = $33.9764

Simple Payment Formula

<table>
<thead>
<tr>
<th>Non-facility</th>
<th>Facility</th>
</tr>
</thead>
<tbody>
<tr>
<td>[(Work RVU * Work GPCI) + (Non-facility PE RVU * PE GPCI) + (MP RVU * MP GPCI)] * CF</td>
<td>[(Work RVU * Work GPCI) + (Facility PE RVU * PE GPCI) + (MP RVU * MP GPCI)] * CF</td>
</tr>
</tbody>
</table>
## 2011 Medicare Payment

### 77301, Radiotherapy dose plan IMRT

#### 77301 (Global)

<table>
<thead>
<tr>
<th></th>
<th>Work RVU</th>
<th>Work GPCI</th>
<th>PE RVU</th>
<th>PE GPCI</th>
<th>Mal RVU</th>
<th>Mal GPCI</th>
<th>CF</th>
<th>2011 PAYMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baldwin, AL</td>
<td>7.99</td>
<td>0.971627561</td>
<td>52.84</td>
<td>0.871253</td>
<td>0.63</td>
<td>0.469503142</td>
<td>$33.9764</td>
<td>$1,837.99</td>
</tr>
<tr>
<td>New York, NY</td>
<td>7.99</td>
<td>1.064935773</td>
<td>52.84</td>
<td>1.226358</td>
<td>0.63</td>
<td>1.25873184</td>
<td>$33.9764</td>
<td>$2,517.74</td>
</tr>
</tbody>
</table>

#### 77301-26

<table>
<thead>
<tr>
<th></th>
<th>Work RVU</th>
<th>Work GPCI</th>
<th>PE RVU</th>
<th>PE GPCI</th>
<th>Mal RVU</th>
<th>Mal GPCI</th>
<th>CF</th>
<th>2011 PAYMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baldwin, AL</td>
<td>7.99</td>
<td>0.971627561</td>
<td>3.42</td>
<td>0.871253</td>
<td>0.41</td>
<td>0.469503142</td>
<td>$33.9764</td>
<td>$371.55</td>
</tr>
<tr>
<td>New York, NY</td>
<td>7.99</td>
<td>1.064935773</td>
<td>3.42</td>
<td>1.226358</td>
<td>0.41</td>
<td>1.25873184</td>
<td>$33.9764</td>
<td>$449.14</td>
</tr>
</tbody>
</table>

#### 77301-TC

<table>
<thead>
<tr>
<th></th>
<th>Work RVU</th>
<th>Work GPCI</th>
<th>PE RVU</th>
<th>PE GPCI</th>
<th>Mal RVU</th>
<th>Mal GPCI</th>
<th>CF</th>
<th>2011 PAYMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baldwin, AL</td>
<td>0</td>
<td>0.971627561</td>
<td>49.42</td>
<td>0.871253</td>
<td>0.22</td>
<td>0.469503142</td>
<td>$33.9764</td>
<td>$1,466.44</td>
</tr>
<tr>
<td>New York, NY</td>
<td>0</td>
<td>1.064935773</td>
<td>49.42</td>
<td>1.226358</td>
<td>0.22</td>
<td>1.25873184</td>
<td>$33.9764</td>
<td>$2,068.60</td>
</tr>
</tbody>
</table>

## Medicare Physician Payment Overview

### Physician Conversion Factor – Unpredictable, Unstable

![Graph showing Medicare Physician Payment Overview](image)

<table>
<thead>
<tr>
<th>Year</th>
<th>Physician Conversion Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999-2000</td>
<td>$50,000.00</td>
</tr>
<tr>
<td>2001-2005</td>
<td>$50,000.00</td>
</tr>
<tr>
<td>2006-2009</td>
<td>$50,000.00</td>
</tr>
<tr>
<td>2010 (Jan-May)</td>
<td>$35,000.00</td>
</tr>
<tr>
<td>2010 (June-Dec)</td>
<td>$40,000.00</td>
</tr>
<tr>
<td>2011 (est)</td>
<td>$40,000.00</td>
</tr>
<tr>
<td>2012 (est)</td>
<td>$35,000.00</td>
</tr>
</tbody>
</table>

---

81

82
SGR Held Hostage

- **What does the future hold for the physician conversion factor?**
- Congressional action needed to avoid cuts in 2013
  - Congressional action has averted payment reductions since 2003
  - Eleventh-hour legislation leading to repeated payment delays from CMS

---

Resources/More Information

- **ASTRO Resources**
  - Health Policy Department
    - [http://astro.org/MyASTRO/Products/ProductCategory.aspx?ID=5](http://astro.org/MyASTRO/Products/ProductCategory.aspx?ID=5)
  - 2011 Health Policy Webinars

- **CMS Website Resources**
  - ICD-10
  - MUE edits
  - NCCI edits
  - Physician Center
  - RAC Program
    - [https://www.cms.gov/rac](https://www.cms.gov/rac)
“There are no facts, only interpretations.”

- Friedrich Nietzsche (1844-1900)

Wrap-up/Questions