Economics and the Clinical Physicist

A Primer on Reimbursement, Coding and Billing
What We’ll Cover

- How Medicare works
- CPT Codes
- Medicare Reimbursement Mechanisms
- Coding and Billing
- Where to Get Help
Contributors

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- Jim Hevezi, Ph.D.
- Jim Goodwin, M.S.
- Wendy Smith Fuss, MPH
- ACR Economics Commission and ACR Economics Staff
- ASTRO Health Policy Staff
...but don’t ask me to explain the Medicare drug benefit program...
Where does the money come from?

- Government programs: Medicare, Medicaid
- Private Insurance
- Health maintenance organizations: HMO, PPO
- Direct payment from the patient (generally ~ 3x higher cost)
- Charity
Medicare

Medicare Jargon:

- Reimbursement has two components
- “Professional” means physician
- “Technical” means everything else, including equipment, supplies, expenses, and non-physician labor, which includes the medical physicist
- Physician-owned practices bill a “global” fee that includes both professional and technical components
Medicare

- Medicare is administered by the Centers for Medicare and Medicaid Services (CMS)
Medicare

- Medicare Part A
  - Hospital Inpatient

- Medicare Part C
  - Managed Care (Medicare Advantage)

- Medicare Part D
  - Prescription Drugs

- Medicare Part B
  - Physicians
  - Freestanding Cancer Centers
  - Hospital Outpatient Departments & Clinics
  - Ambulatory Surgical Centers
Medicare

- Part B has three different payment systems!
  - Medicare Physician Fee Schedule Payment System (MPFS): physicians and FS centers
  - Hospital Outpatient Prospective Payment System (HOPPS): outpatient facilities
  - Ambulatory Surgical Center Payment System (ASC)
Medicare

- Medicare is administered through private Medicare Administrative Contractors (MAC’s)
  - 15 jurisdictions; 10 contractors

- Contractor Medical Director (CMD)

- Local Coverage Determinations (LCD’s)
  - Outline coverage policies of MAC
  - LCD’s differ

- Carrier Advisory Committee (CAC)
Medicare Rulemaking Cycle

- Rules ($ and policies) are updated annually
- Proposed rules published June/July
  - 60 day comment period
- Final rules published November 1st
  - 60 day comment period (certain items)
- Final rule effective January 1
Service Descriptors

  - Listing of descriptive terms/identifying codes for reporting of medical services and procedures (>7000)
  - Published by American Medical Association (AMA); copyrighted
  - Updated Yearly
Coding Systems

- **Health Care Common Procedure Coding System (HCPCS)**
  - Level I: CPT Codes
  - Level II: Products, supplies, other services
    - Ex: brachytherapy sources (Cxxxx)

- **International Stratified Classification of Diseases (ICD-9) (ICD-10)**
CPT® Code Categories

- **Category I**
  - Standard codes for routine procedures
  - xxxxx

- **Category II**
  - Tracking codes
  - xxxxF

- **Category III**
  - Emerging Technology codes
  - xxxxT
Category I CPT Codes

- Surgery 10xxx-69xxx
- Radiology 70xxx-79xxx
- Radiation Oncology 77xxx
  - Clinical Treatment Planning
  - Medical Radiation Physics, Dosimetry, Treatment Devices and Special Services
  - [Treatment Delivery Modalities]
  - Clinical Brachytherapy
CPT® Editorial Panel

- Maintains CPT® Manual
- 17 members
- Appointed by AMA Board of Trustees
- Radiologist Richard Duszak, Jr., M.D. is member
- CMS has 2 representatives
CPT® Advisory Committee

- >100 Medical Specialty Societies Represented
- 13 are Radiology Societies
  - Daniel Picus, M.D, ACR
  - David Beyer, M.D., ASTRO
  - Andy Su, M.D., ACRO
  - Paul Wallner, D.O, ACRO
  - American College of Nuclear Physicians
  - American Institute of Ultrasound in Medicine
  - American Roentgen Ray Society
  - American Society for Neuroimaging
  - American Society of Neuroradiology
  - Association of University Radiologists
  - Radiological Society of North America
  - Society of Interventional Radiology
  - Society of Nuclear Medicine
  - Society of Radiologists in Ultrasound
How are CPT® codes created?

- Staff Review
  - Panel has Already Addressed the Issue
    - Requestor Notified
  - New Issue or Significant New Information Received
    - Coding Suggestion
How are CPT® codes created?

New Issue or Significant New Information Received

Specialty Advisors

Advisor(s) Agree No New Code or Revision Needed

Staff Letter to Requestor Informing Him/Her of Correct Coding Interpretation or Action Taken by the Panel

Advisors Say Give Consideration or 2 Specialty Advisors Disagree on Code Assignment or Nomenclature

Editorial Panel
How are CPT® codes created?

- Editorial Panel
  - Table for Further Study
  - Reject Proposal Change
  - Add New Code/Delete Existing Code/or Revise Current Terminology
Congratulations!

- The CPT® Editorial Panel has approved your code request and it will be entered into the 2014 CPT® guide.
Congratulations!

- The CPT® Editorial Panel has approved your code request and it will be entered into the 2014 CPT® guide.

- Want to get paid?
Meet the RUC
Relative Value Scale Update Committee (RUC)

- Provides data and recommendations to CMS regarding the valuation of services provided by physicians and freestanding cancer centers under Medicare Part B

They determine what physicians get paid!
STOP!
RUC

- **31 members**
  - 25 appointed by special societies
    - Geraldine McGinty, M.D., ACR
    - 4 rotating seats (2 internal medicine subspecialty, 1 primary care & 1 other specialty)
  - 1 American Medical Association
  - 1 American Osteopathic Association
  - 1 Chair of the Relative Value Update Committee (RUC)
  - 1 Chair of the Practice Expense Subcommittee
  - 1 CPT® Editorial Panel
  - 1 Co-Chair of Health Care Professionals Advisory Committee (HCPAC)
RUC Advisory Committee

- 122 Specialty Society Representatives
  - Ezequiel Silva, III, M.D.
    - ACR RUC Advisor
  - Najeeb Mohideen, M.D.
    - ASTRO RUC Advisor
  - Sheila Rege, M.D.
    - ACRO RUC Advisor
- Recommend Relative Value Units (RVUs)
- Other recommendations to the RUC
- Each representative supported by internal specialty society RVS committee
RUC Cycle

- Coordinated with CPT® Editorial Panel schedule
- RUC Advisory Committee members and their Specialty Society RVS Committees generate recommendations that are presented at RUC
- RUC reviews and may adopt or modify before submitting to CMS
- CMS reviews RUC recommendations and publishes in Medicare Physician Fee Schedule final rule on November 1st
  - These RVUs are subject to comment and considered interim for 1 year
RUC Cycle

- Previously, CMS accepted approx. 90% of RUC recommendations
- Acceptance rate of RUC recommendations has decreased in recent years
The RUC Process

CPT® Editorial Panel Adopts Coding Changes

Specialty Society Advisors Review New, Revised or Existing CPT® Codes

Codes Do Not Require New Values

No Comment

Comment on Other Societies’ Proposals

Survey Physician; Recommended Values

RVS Update Committee

Centers for Medicare and Medicaid Services

Medicare Physician Fee Schedule

Specialty Society RVS Committee
RUC Code Valuation Review

- In 2012 CMS consolidated the Five-Year review of Work and Practice Expense with annual review of potentially misvalued codes
  - Includes public nomination process for misvalued codes
- CMS has entered into two contracts with outside entities to develop validation models for RVUs
Potentially Misvalued Codes

- 77336 (Continuing Medical Physics Consultation) was accepted by CMS as potentially misvalued
  - PE data has been submitted via RUC process by AAPM (ASTRO)
  - Decision will be included in Medicare Physician Fee Schedule Final Rule on November 1st (MPFS only)
Potentially Misvalued Codes

- In 2012 CMS also finalized proposal to review CPT codes with “Stand Alone” procedure time
  - 24 codes total
  - 23 were Radiation Oncology!
“First we’re going to run some tests to help pay off the machine.”
Medicare Physician Fee Schedule (MPFS)

- Determines reimbursement for Medicare Part B: Physicians and Freestanding Cancer Centers
MPFS

- Under MPFS the cost of providing services is broken down into 3 components that are valued by RUC:
  - Physician work
  - Practice expense
  - Malpractice insurance

- Relative Value Units (RVUs) are calculated for each
Physician Work

- Physician Work RVU based on:
  - Time
  - Technical skill
  - Mental effort and judgment
  - Intensity

- New/revised codes are compared to reference codes to determine RVU
Practice Expense Categories

- **Direct Practice Expense**
  - Non-physician clinical labor *(Physics)*
  - Medical supplies
  - Medical equipment

- **Indirect Practice Expense**
  - Administrative labor
  - Office supplies and equipment
  - Overhead and everything else
MPFS Payment Calculation
3 Steps

- **Calculate Resource Based RVU’s**
  - Physician work RVU
  - Practice expense RVU
    - Separate PE RVUs calculated for PC and TC
  - Professional liability insurance RVU

- **Apply Adjustment**
  - Geographic practice cost index (GPCI)

- **Convert RVUs To Dollars**
MPFS Payment Calculation

- **Total RVU =** \((\text{Work RVU} \times \text{Work GPCI})\)  
  \(\text{+ (PE RVU} \times \text{PE GPCI})\)  
  \(\text{+ (PLI RVU} \times \text{PLI GPCI})\)

- **Total Payment =** Total RVU \(\times\) Conversion Factor
Division of RVUs

- $PC = RVU_{pw} + RVU_{pe} + RVU_{pli}$
- $TC = RVU_{pe} + RVU_{pli}$
- $Global = PC + TC$
MPFS Payment Calculation

- Total RVU = (Work RVU * Work GPCI) + (PE RVU * PE GPCI) + (PLI RVU * PLI GPCI)

- Total Payment = Total RVU * Conversion Factor
Conversion Factor (CF)

- Converts RVUs to $

- By statute CF is updated annually with formula
  - Takes into account Medicare Economic Index (MEI)
  - Compares Medicare expenditures with target called Sustainable Growth Rate (SGR)

- CF adjusted up or down as needed to keep Medicare spending within limits
Conversion Factor Dilemma

<table>
<thead>
<tr>
<th>Year</th>
<th>Calculated CF</th>
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<tbody>
<tr>
<td>2009</td>
<td>-15.1%</td>
</tr>
<tr>
<td>2010</td>
<td>-21.2%</td>
</tr>
<tr>
<td>2011</td>
<td>-24.9%</td>
</tr>
<tr>
<td>2012</td>
<td>-27.4%</td>
</tr>
<tr>
<td>2013</td>
<td>-26.5%</td>
</tr>
<tr>
<td>2014</td>
<td>-24.4%</td>
</tr>
</tbody>
</table>

these %’s represent across the board cuts in payments
Conversion Factor Dilemma

- Congress has averted decreases with 11th hour interventions
- Each “fix” compounds problem
- Everyone agrees that SGR system is flawed
- No permanent solution yet ($$$)
Radiation Therapy under MPFS

<table>
<thead>
<tr>
<th>Year</th>
<th>Oncologists</th>
<th>Centers</th>
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<tbody>
<tr>
<td>2009</td>
<td>-3%</td>
<td>n/a</td>
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<tr>
<td>2010</td>
<td>-1%</td>
<td>n/a</td>
</tr>
<tr>
<td>2011</td>
<td>-1%</td>
<td>+3%</td>
</tr>
<tr>
<td>2012</td>
<td>-6%</td>
<td>-6%</td>
</tr>
<tr>
<td>2013</td>
<td>-7%</td>
<td>-9%</td>
</tr>
<tr>
<td>(2014)</td>
<td>-5%</td>
<td>-13%</td>
</tr>
</tbody>
</table>
Imaging under MPFS

- CMS has been concerned about growth of imaging expenses
- 2006: Multiple Procedure Payment Reduction (MPPR) policy implemented
  - Reduced payment for selected procedures when performed on same day
  - US, CT/CTA, MR/MRA
MPPR

- **TC:**
  - 1st: 100% payment; 2nd: 50% payment

- **PC:**
  - 1st: 100% payment; 2nd: 75% payment

- Applies across families, not limited to contiguous areas
- Applies to services furnished in the same session by a physician or physicians in the same group practice
HELLO?
ANYBODY?

MEDICARE
SYSTEM
Hospital Outpatient Prospective Payment System (HOPPS)

- Determines payment for hospital outpatient services under Medicare Part B
  - Facility payments not physicians
- Inpatient services are paid with DRG-based system (Part A)
HOPPS & MPFS are not the same!

- MPFS: Resource-based; “bottom-up”

- HOPPS: Cost-based; uses actual hospital claims data
HOPPS

- Under HOPPS, CPT codes are grouped into Ambulatory Payment Classifications (APCs)
  - CPT codes within an APC are similar clinically and in resources required
  - “2x Rule”
  - 800 APCs
  - Each APC is assigned reimbursement level; all codes within APC receive same payment
HOPPS

- CMS looks at hospital outpatient claims from 2 years prior (2 year data lag)
- Reduces hospital charges to cost with cost-to-charge ratios (CCR)
- Calculates geometric mean costs
- Reimbursement rates are modified by economic indices
  - Hospital Market Basket
HOPPS Cost Saving Strategies

- Packaging: Ancillary procedure/service cost is packaged with and paid as part of another code that is considered the Primary procedure/service
  - Ex: IGRT (Guidance services)

- Packaged codes are not paid separately
  - May be conditionally packaged and paid separately if not provided on the same day as the Primary procedure
HOPPS Cost Saving Strategies

- Bundling: Provide a single payment for groups of services that are typically performed together during a clinical encounter and that result in the provision of a complete service
  - Single encounter (same day)
  - Episode of care (multiple days)
HOPPS Cost Saving Strategies

- **Composite APC**: Provide a single payment for two or more services that are performed together on the same day
  - Ex: APC 8001 LDR Prostate Brachytherapy Composite
    - Includes 55875 & 77778
  - Ex: Imaging APCs 8004-8008
    - US, CT/CTA, MR/MRA with & without contrast
HOPPS Pitfalls

- HOPPS payments based on single and pseudo-single claims
  - Radiation oncology claims are typically multiple procedure claims
    - Date of service and Bypass List used to create pseudo-single claims from multiple procedure claims

- Accurate hospital coding and billing is extremely important (even packaged)

- Hospital Chargemaster, Cost-to-Charge Ratios: black boxes???
New Technology

- **New Technology APC**
  - CPT code for new technology may be placed into a New Technology APC for 2-3 years
  - Assignment to a New Technology APC category based on external cost data
  - CPT will be reassigned to clinical APC when sufficient claims data has been collected

- **Pass-Through Payments**
  - Temporary payments for new drugs and devices for 2-3 years based on cost
# Radiation Oncology APCs

<table>
<thead>
<tr>
<th>APC</th>
<th>Name</th>
<th>CPT Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>65</td>
<td>IORT</td>
<td>77424, 77425</td>
</tr>
<tr>
<td>66</td>
<td>Level I SRS</td>
<td>77373</td>
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<tr>
<td>67</td>
<td>Level II SRS</td>
<td>77371, 77372</td>
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<tr>
<th>APC</th>
<th>Name</th>
<th>CPT Codes</th>
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<tbody>
<tr>
<td>299</td>
<td>Hyperthermia &amp; Radiation Treatment</td>
<td>77470, 77600-77620</td>
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<tr>
<td>300</td>
<td>Level I Radiation Therapy</td>
<td>77401-77404, 77407</td>
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<tr>
<td>301</td>
<td>Level II Radiation Therapy</td>
<td>77406, 77408-77416, 77422, 77423, 77750, 77789</td>
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<tr>
<td>303</td>
<td>Treatment Device Construction</td>
<td>77332-77334</td>
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</table>
## Radiation Oncology APCs

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<tr>
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<th>CPT Codes</th>
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</thead>
<tbody>
<tr>
<td>304</td>
<td>Level I Therapeutic Radiation Treatment Prep</td>
<td>77280, 77299, 77305, 77310, 77326, 77331, 77336, 77370, 77399</td>
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<tr>
<td>305</td>
<td>Level II Therapeutic Radiation Treatment Prep</td>
<td>77285, 77300, 77321, 77327, 77328</td>
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<td>310</td>
<td>Level III Therapeutic Radiation Treatment Prep</td>
<td>32553, 49411, 55876, 77290, 77315, 77338, C9728</td>
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<tr>
<td>316</td>
<td>Level IV Therapeutic Radiation Treatment Prep</td>
<td>77295, 77301</td>
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<tr>
<td>312</td>
<td>Radioelement Applications</td>
<td>77761, 77762, 77763, 77776, 77777, 77799</td>
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<tr>
<td>313</td>
<td>Brachytherapy</td>
<td>77785, 77786, 77787, 0182T</td>
</tr>
<tr>
<td>651</td>
<td>Complex Interstitial Radiation Source Application</td>
<td>77778</td>
</tr>
<tr>
<td>8001</td>
<td>LDR Prostate Brachytherapy Composite</td>
<td>55875+77778</td>
</tr>
</tbody>
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## Radiation Oncology APCs

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<tr>
<th>APC</th>
<th>Name</th>
<th>CPT Codes</th>
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</thead>
<tbody>
<tr>
<td>412</td>
<td>Level III Radiation Therapy</td>
<td>77418, 0073T</td>
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<tr>
<td>667</td>
<td>Proton Beam Therapy</td>
<td>77520, 77522, 77523, 77525</td>
</tr>
</tbody>
</table>
Ambulatory Surgical Centers

- Reimbursement similar to HOPPS
Can I Get Paid Now?
Every Billing Event Requires:

- Medical Necessity (Local & National Coverage Determinations, medical review policy, professional guidance, etc.)
- Prescribed by physician
- Performed
- Documented (report, signed, dated)
Accurate Coding is Essential

- Close is not good enough
- If you didn’t document it, you didn’t do it
- If you don’t document correctly either you won’t get paid or you may have to pay back
- Ordering, signing and dating must be clear
Coding Speed Bumps

- MUE (Medical Unlikely Edits)
  - Created to reduce errors due to incorrect coding
    - Place limits on #units of service on same day
    - Not all are published
Coding Speed Bumps

- NCCI (National Correct Coding Initiative)
  - Edits to prevent improper payment when incorrect code combinations are reported
    - One code may be a component of a more comprehensive code
    - One code is mutually exclusive of another code in the pair (Mutually Exclusive edits)
Modifiers

- Allow reporting of services and procedures that have been altered or delivered under special circumstances
  - 51: Multiple procedures
  - 59: Distinct procedure or service
  - 76: Repeat procedure by same physician
Continuing Medical Physics Consultation 77336

- Describes ongoing medical physics assessment provided by QMP to each patient
- Not just chart checks!
- Should be performed by QMP
- Billed per 5 fractions of external beam treatment
- Covers brachytherapy, BID, single fractions
- Document (best: checklist)
Special Physics Consult 77370

- Special Physics Medical Consult used to address patient-specific problem
- Does not need to be limited to traditional external beam beam patients
  - 77370 can be billed to Diagnostic or Nuclear Medicine patients for a variety of procedures (e.g., I-131 thyroid ablation work, assessment of fetal dose from Dx procedures, etc.).
- Must be ordered; written report required
Questionable Practices

- Special Medical Physics Consultations (77370) on all or nearly all patients
- Special Dosimetry (77331) routinely on all patients for QA purposes
- Continuing medical physics consultation (77336) without participation by the medical physicist
- Special dosimetry (77331) for seed calibration measurements
- Special Medical Physics Consultations (77370) for patient-specific IMRT QA
Sources of Coding Information

- ASTRO/ACR Coding Guide
- CPT Manual and CPT Assistant
- CMS website
- AAPM, ASTRO, ACR websites
- AAPM Professional Economics Committee
- Private coding consultants
ASTRO/ACR Guide to Radiation Oncology Coding

- Updated annually
- Last major revision 2010; next revision 2015
- Covers use and documentation for each Radiation Therapy CPT code
AAPM/PEC

- AAPM website: Government Affairs/CMS
  - AAPM comment letters
  - Health policy updates
  - Coding FAQ’s

- PEC Activities
  - Analysis and response to CMS rulemaking
  - Support ASTRO and ACR on RUC issues
  - Review regulatory and legislative actions
  - Member assistance
Thank You