

MEDICAL PHYSICS ECONOMICS UPDATE

AAPM Meeting
July 2015
Blake Dirksen and Jonas Fontenot

DISCLAIMER

Jonas Fontenot is co-founder of pF Biomedical Solutions, a provider of radiation oncology consulting services

Blake Dirksen has ownership stake in pxAlpha, a medical device start up

The comments in this presentation are not intended to express a political opinion.

THE AAPM PEC

Purpose

Monitor and analyze the activities of entities that influence reimbursement for medical physics services, advise the Association on the formal positions it should take on related issues, and provide information to the membership and other organizations.

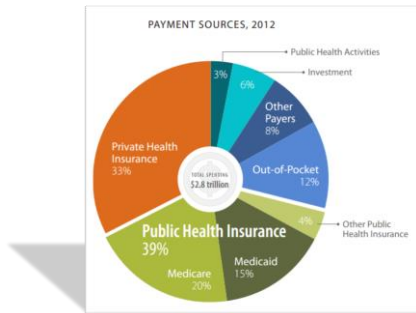
Activities/ Responsibilities

- Review the proposed actions of CMS and other reimbursement agencies
- Review guidelines that relate to the use of CPT codes and their implementation
- Ensure coordination between the activities of the AAPM and those of related organizations
- Work with related organizations to develop consistent responses to proposals and issues of mutual concern
- Provide information to the membership through existing channels within the AAPM
- Provide information to other organizations regarding reimbursement for professional medical physics services.

Members

Blake Dirksen (chair)
Jonas Fontenot (vice chair)
Jim Goodwin
Jerry White
Mike Mills
Jim Hevezi
Justin Keener
Paul King
Lena Lamel
George Sherouse
Chris Baird
David Piantino
Doug Pfeiffer
Joe Hellman
Marilyn Wexler
Wendy Smith Fuss
Lynne Faircobent

WHO PAYS FOR HEALTHCARE?



MEDICARE DRIVES REIMBURSEMENT IN MEDICINE



In 2013, Medicare had 52.3 million enrolled

By 2030 that number is expected to hit 81.8 million

- That is more than the population of any European country other than Russia

Over 98% of the elderly have health insurance through the Medicare.

MEDICARE STRUCTURE

Medicare Part A

- Hospital Inpatient

Medicare Part C

- Managed Care (Medicare Advantage)

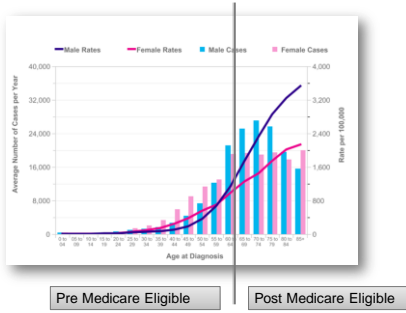
Medicare Part D

- Prescription Drugs

Medicare Part B

- Physician Payment
- Freestanding Cancer Centers
- Hospital Outpatient Departments & Clinics
- Ambulatory Surgical Centers

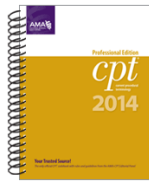
MEDICARE PAYS FOR THE MAJORITY OF CANCER CARE



“CARE” IS DESCRIBED BY CPT® CODES

Current Procedural Terminology (CPT®)

- All medical procedures are described by a code
- Listing of descriptive terms/identifying codes for reporting of medical services and procedures
- Published by American Medical Association (AMA); copyrighted
- Updated Yearly
- Nearly 10,000 codes



UNDER WHAT SYSTEM ARE PHYSICS SERVICES PAID?

Part B has three different payment systems

- Medicare Physician Fee Schedule Payment System (MPFS)
- Hospital Outpatient Prospective Payment System (HOPPS)
- Ambulatory Surgical Center Payment System (ASC)

Reimbursement has two components:

- “Professional” means physician
- “Technical” means everything else

Setting	Technical	Professional
Hospital	HOPPS	MPFS
Free Standing	MPFS	MPFS

HOSPITAL OUTPATIENT PROSPECTIVE PAYMENT SYSTEM (HOPPS)

Determines payment for hospital outpatient services under Medicare Part B
Does not cover professional (physician) payments

HOPPS

Under HOPPS, CPT codes are grouped into Ambulatory Payment Classifications (APCs)

- CPT codes within an APC are similar clinically and in resources required
- Each APC is assigned reimbursement level; all codes within APC receive same payment

HOPPS

APC	Description	CPT Codes	2015 Payment	2016 Proposed Payment	Payment Change 2015-2016	Percentage Change 2015-2016
5611	Level 1 Therapeutic Radiation Treatment Preparation	77299, 77300, 77306, 77307, 77316, 77331, 77332, 77336, 77399	\$113.17	\$109.98	(\$3.19)	-2.8%
5612	Level 2 Therapeutic Radiation Treatment Preparation	77280, 77333, 77370	n/a	\$169.37	n/a	n/a
5613	Level 3 Therapeutic Radiation Treatment Preparation	77285, 77290, 77317, 77318, 77321, 77334, 77338	\$314.55	\$297.70	(\$16.85)	-5.4%

HOPPS

CMS looks at hospital outpatient claims (bills) from 2 years prior (2 year data lag)
Reduces hospital charges to cost using cost-to-charge ratios (CCR) obtained from reported hospital data
Calculates geometric mean costs for each APC
CPT codes can be reassigned to new/existing APCs

HOPPS: PACKAGING

Packaging: A procedure/service is considered to be ancillary and cost is paid as part of another code that is considered the primary procedure/service

- Packaged codes are not paid separately
- Packaged codes should still be reported
- 12 categories of codes considered to be ancillary

MEDICARE PHYSICIAN FEE SCHEDULE (MPFS) PAYMENT SYSTEM

Physician Payment

- Professional Component

Freestanding Center Payment

- Global Payment = Technical Component + Professional Component

MPFS

CPT codes are assigned relative value units (RVUs)

A conversion factor is used to convert an RVU into a payment

A geographic practice expense is also applied

Three (3) RVU Components

- Physician Work (physician time, effort & intensity)
- Practice Expense (staff time, equipment, supplies)
- Malpractice Expense (professional liability insurance)

MPFS 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 PAYMENTS

Payment is based on relative value units (RVUs) adjusted for locality cost differences (GPCI) and multiplied by a conversion factor (CF) that translates RVUs into dollars.

Example of 2015 payment for CPT 77336*

$$2.15 \text{ RVUs} \times \$35.9336 \text{ CF} = \$77.26$$

*Example excludes the geographic practice cost index (GPCI) adjustment

CONVERSION FACTOR

The conversion factor (CF) is updated on an annual basis in accordance with federal statutes

The sustainable growth rate (SGR) formula was enacted in 1997 to help control cost growth

Congress acted frequently to avert SGR reductions

SGR was legislatively repealed in 2015

0.5% annual update of CF through 2018

0% from 2019-2023

0.5 or 1% thereafter

MPFS RVU

RVUs describe relative resources needed to provide a particular service

Set by CMS based on advisory recommendations, historically the RUC

Relative Value Scale Update Committee (RUC)

established by the AMA

consists of 31 mostly specialist physicians

Advise CMS on RVU valuations based on specialty society input and practice surveys

MPFS RVU

Codes must be revalued at least every 5 years unless Potentially misvalued codes are identified each year may be revalued more frequently

Radiation oncology found itself under CMS scrutiny in 2012 when CMS discovered the RUC-recommended 60 minutes of procedure time for IMRT did not match public information showing 5-30 minutes

CMS initiated revaluation of dozens of radiation oncology codes, resulting in both CPT and RVU changes

MEDICARE RULEMAKING CYCLE

Rules 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

WARNING

The 2016 rules and what I am about to discuss are proposals and are not final.

Final rules are expected in November and will be implemented on January 1st, 2016.

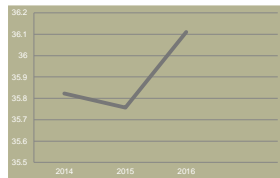
2016 MPFS PROPOSED RULE

CONVERSION FACTOR

2014: \$35.8228

2015: \$35.7547

2016: \$36.1096



UPDATED CPT CODES

Starting in 2015, new CPT codes were created for many of the common procedures performed in Radiation Oncology. These included many of the common dosimetry, image guidance, and treatment codes.

Due to stakeholder requests for more time to comment, CMS deferred implementing the valuation and use of some new CPT codes. CMS created temporary G codes for use in 2015, with the expectation that the new codes would have a published CMS valuation for 2016.

These codes have been assigned values in 2016 and if finalized, will be put into use January 1st, 2016.

LINEAR ACCELERATOR UTILIZATION FACTOR

In the past the utilization factor has been 50%. A week is considered 50 hours of use so the prior assumption was 25 hours per week.

CMS proposes to increase the utilization factor to 70% over the next two years (60% in 2016 and 70% in 2017).

This means that the cost of the linear accelerator is divided among more treatments and therefore each code with the linear accelerator as an input will have a reduction in reimbursement.

CODES IMPACTED

- 77301: IMRT Plan
- 77385: IMRT Tx Simple
- 77386: IMRT Tx Complex
- 77402: Tx Delivery Simple
- 77407: Tx Delivery Intermediate
- 77412: Tx Delivery Complex

OFFSET

The Radiation Oncology code pool is somewhat budget neutral

Decreases in treatment codes result in an increase in other oncology codes including the two physics codes.

THE VAULT

In the 2015 proposed rule CMS removed the linear accelerator vault as an input. CMS did NOT finalize that proposal for 2015.

CMS left the linear accelerator vault as an input in the 2016 proposed rule.

CMS also added the HDR Brachytherapy vault as an input in the HDR codes, increasing the reimbursement for HDR brachytherapy.

IMRT VS NON IMRT LINAC

In the past there have been two linac inputs
IMRT Linac
Non-IMRT Linac

CMS believes that there is only one linac type that can be purchased.

Because of this there is now only one linac equipment item, the IMRT linac.

This helps offset the utilization reduction for non-IMRT treatments.

IMPACT

Due to the high volume of treatment codes, the linear accelerator utilization leads to a net 3% reduction in radiation oncology reimbursement and a 9% reduction for free standing radiation therapy centers (approximate, data is still be evaluated).

The PEC and AAPM will be working the ASTRO on comments to CMS regarding the potential negative impact this cut could have on patient care.

WHAT ABOUT PHYSICS?

Continuing Physics Consult (77336): 11.7% Increase
 Special Physics Consult (77370): 13.1% Increase

NEW CODES: IMRT

In the past there has been one IMRT treatment code.
 IMRT Tx 2014: \$402.10

The proposed reimbursement for 2016 for the two updated IMRT treatment codes.

IMRT Tx Simple 2016: \$279.49
 IMRT Tx Complex 2016: \$421.04

However, 2016 codes include the IGRT component (\$75.46 for 77421 or \$117.86 for 77014 in 2014).

This means that IMRT treatment delivery reimbursement compared to 2015 is **46% lower** for simple IMRT Tx delivery and **19% lower** for complex delivery assuming IGRT is utilized.

NEW CODES: TREATMENT DELIVERY

CPT Code	CPT Code Descriptor	2014 Payment	2015 Payment	2016 Proposed Payment	2015-2016 Percent Change
77371	SRS Co-60				
77372	SRS Linac Based	1045.31	1068.30	1157.67	8%
77373	SBRT Treatment	1251.65	1356.49	1472.91	9%
77385*	IMRT Tx Simple			279.49	
77386	IMRT Tx Complex			421.04	
77387	IGRT			211.24	

**NEW CODES:
TREATMENT DELIVERY**

CPT Code	CPT Code Descriptor	2014 Payment	2015 Payment	2016 Proposed Payment	2015-2016 Percent Change
77401	Superficial Tx	20.06	20.84	25.28	21%
77402	Rad Tx Delivery Simple	140.07	162.42	139.02	-14%
77407	Rad Tx Delivery Int	254.34	258.36	240.13	-7%
77412	Rad Tx Delivery Comp	241.45	276.33	214.13	-23%
77417 DRA	Port Films	13.97	10.78	11.92	11%
77401	Superficial Tx	20.06	20.84	25.28	21%

**OTHER CPT® CODES
NEW HDR TREATMENT
CODES**

CPT Code	CPT Code Descriptor	2014 Payment	2015 Payment	2016 Proposed Payment
7778C	HDR Brachytherapy; 1 channel			348.46
7778S	HDR brachytherapy; 1 channel	237.51	240.75	
7778D	HDR brachytherapy; 2-12 channels			648.36
77786	HDR brachytherapy; 2-12 channels	484.68	493.37	
7778E	HDR brachytherapy; over 12 channels			991.57
77787	HDR brachytherapy; over 12 channels	771.98	786.58	

New codes include the Dose Calc (77300)

OTHER CPT® CODES

CPT Code	CPT Code Descriptor	2014 Payment	2015 Payment	2016 Proposed Payment	2015-2016 Payment Change	2015-2016 Percent Change
77280	Simulation, simple	271.54	272.74	293.93	21.20	8%
77285	Simulation; intermediate	423.07	429.76	463.65	33.88	8%
77290	Complex simulation	507.25	513.49	554.28	40.79	8%
77293	Respiratory motion management simulation	432.38	466.78	501.20	34.43	7%
77295	3D simulation	485.04	491.57	526.84	35.27	7%
77300	Basic radiation dosimetry calculation	67.35	63.60	67.89	4.28	7%

OTHER CPT® CODES

CPT Code	CPT Code Descriptor	2014 Payment	2015 Payment	2016 Proposed Payment	2015-2016 Payment Change	2015-2016 Percent Change
77301	IMRT planning	1959.87	1950.83	2108.08	157.25	8%
77316	Brachytherapy isodose plan; simple		187.57	203.30	15.72	8%
77317	Brachytherapy isodose plan; intermediate		245.43	264.68	19.26	8%
77318	Brachytherapy isodose plan; complex		354.66	382.04	27.38	8%
77321	Special teletherapy port plan	91.71	92.71	99.30	6.59	7%
77331	Special dosimetry	63.76	64.32	68.25	3.93	6%

Note: Isodose planning codes include the dose calculation (77300)

OTHER CPT® CODES

CPT Code	CPT Code Descriptor	2014 Payment	2015 Payment	2016 Proposed Payment	2015-2016 Payment Change	2015-2016 Percent Change
77332	Treatment devices; simple	80.60	83.01	88.11	5.10	6%
77333	Treatment devices; intermediate	53.02	53.18	56.33	3.15	6%
77334	Treatment devices; complex	150.46	153.08	163.58	10.50	7%
77336	Continuing medical physics consult	74.87	77.26	86.30	9.04	12%
77338	MLC for IMRT	501.88	508.46	545.62	37.16	7%
77370	Special medical radiation physics consult	114.63	117.50	132.88	15.38	13%

2016 HOPPS

2016 HOPPS PROPOSED RULE

CMS proposes a 0.1% decrease in overall reimbursement in 2016

Reorganized APCs to be more clinically homogenous, improve resource homogeneity, reduce overlap in APCs, and increase simplicity

WHAT DOES THAT MEAN?

For example, 77332, simple treatment device.

Used to reside in APC 303 (Treatment Device Construction) which was deleted. It now resides in APC 5611 (Level 1 Therapeutic Radiation Treatment Preparation)

The former APC 303 had a payment of \$215.63 but the new APC has a payment of \$109.98

WHAT ABOUT THE PHYSICS CODES?

The continuing physics consultation code (77336) remains in the same APC and has a 2.8% decrease from \$113.17 to \$109.98

The special medical physics consult (77370) has been moved to APC 5612 (Level 2 Therapeutic Radiation Treatment Preparation). This results in a payment increase from \$113.17 to \$169.37, or 49.7%.

COMMONLY USED HOPPS CODES

Code	2015	2016	% Diff
IMRT Planning (77301)	\$1036.39	\$1038.53	1.4%
IMRT Tx Simple (77385)	\$507.75	\$518.74	2.2%
IMRT Tx Complex (77386)	\$507.75	\$518.74	2.2%
Tx Delivery Simple (77402)	\$100.13	\$104.23	4.1%
Tx Delivery Inter (77407)	\$100.13	\$104.23	4.1%
Tx Delivery Comp (77412)	\$193.24	\$197.20	2.0%

CODES WITH GREATEST CHANGE

- Simple Sim (77280): Up 49.7%
- Simple Treatment Device (77332): Down 49.0%
- Intermediate Treatment Device (77333): Down 21.5%
- Complex Treatment Device (77334): Up 38.1%
- SRS Treatment (composite APC): Down 24.8% (more on this later)
- SBRT (77373): Down 10.7%
- Intracavitary Radiation Source Application Simple (77761): Up 31.0%
- Intracavitary Radiation Source Application Intermediate (77762): Down 50.2%
- Intracavitary radiation source application complex (77763): Up 31%

IGRT

CMS proposes to continue to package image guidance procedures in 2016.

Packaged codes are not paid separately, but rate setting uses the codes reported, therefore IGRT SHOULD be reported for NON IMRT treatments.

IGRT is bundled into IMRT, meaning it is included in the work description of IMRT. This means it CANNOT be reported along with an IMRT treatment or else you are reporting the work twice. Do NOT report IGRT with IMRT treatments.

STEREOTACTIC RADIOSURGERY

CPT 77371 and 77372, (single fraction SRS codes) will still be in a comprehensive APC... However.

In 2015 codes on the same claim as the 77371 were considered ancillary and not paid separately. What sites did was put the 77371 on a single claim and the rest on a separate claim and were therefore paid.

In 2016 CMS proposes to remove the auxiliary work (sim, planning, etc) from the comprehensive APC and gather more data. This is why there is a 24.8% decrease in reimbursement. A modifier will be used to report planning and preparation codes to identify those attached to comprehensive APC. This is a proposed change and not finalized.

Stay tuned for more information.

CODING UPDATES

Per ASTRO, a simulation (77290) cannot be billed in conjunction with an IMRT plan (77301).

IMRT planning code can be billed for SBRT and SRS treatment planning if all the IMRT criteria are met.

PROPOSALS TO IMPROVE MEDICARE

VALUE BASED PURCHASING

Reward improved performance
Punish poor results

BLENDED PAYMENT

Mix of Fee for Service and per patient management fee

BUNDLED PAYMENT

Single prospective payment for a specific medical condition

ACCOUNTABLE CARE ORGANIZATION

Providers and organization accountable for cost and quality

GLOBAL PAYMENT

Organization is paid to cover the needs of a group of patients

PREMIUM SUPPORT

Give beneficiaries a stipend to purchase their own plans

Perspective

Setting Value-Based Payment Goals — HHS Efforts to Improve U.S. Health Care
Shira M. Burnell



- 85% of all Medicare payments tied to quality or value by 2016 and 90% by 2018
- 30% of all Medicare payments via alternative payment models by the end of 2016 and 50% by the end of 2018

“Looking ahead, we plan to develop and test new payment models for specialty care, starting with Oncology care...”

RESOURCES

- AAPM Government Affairs Tab on the AAPM website
- The ASTRO Coding Guide
- Reach out to us
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THANK YOU

James Goodwin
Wendy Smith Fuss
Jerry White
AAPM PEC