MEDICAL PHYSICS ECONOMICS UPDATE

AAPM Annual Meeting July 2014

CMS Proposed Rules for 2015

Jim Goodwin Blake Dirksen Jerry White

Medicare

- Medicare Part A
 - Hospital Inpatient
- Medicare Part C
 Managed Care (Medicare Advantage)
- Medicare Part D
 Prescription Drugs

Medicare Part B

- Physician PaymentFreestanding
 - Cancer Centers
- Hospital Outpatient Departments & Clinics
- Ambulatory Surgical Centers

Medicare

- 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)



Medicare

Medicare Jargon:

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

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 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

Current Procedural Terminology (CPT[®])

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



Medicare Physician Fee Schedule (MPFS)

 Determines reimbursement for Physicians and Freestanding Cancer Centers under Medicare Part B

MPFS

- Under MPFS the cost of providing services are 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 and effort
 - 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

Direct Practice Expense

- Equipment costs depend upon:
 - Actual purchase price
 - Assumed utilization rates (50% for therapy, 90% for CT,MR)
 - CMS determined interest rates

Indirect Expenses

- AMA Physician Practice Information Survey (PPIS) data used for indirect expense cost
 - Determines specialty-specific Practice Expense/Hour (PE/HR)

MPFS Payment Calculation

Resource Based Relative Value Unit (RVU)

- Physician work RVU
- Practice expense RVU
- PE RVUs calculated for PC and TC
- Professional liability insurance RVU

Adjustments

Geographic practice cost index (GPCI)

Convert RVUs To Dollars

Monetary conversion factor is updated annually

Division of RVUs

- PC: RVU_{pw}+RVU_{pe}+RVU_{pli}
- TC: RVU_{pe}+RVU_{pli}
- Global=PC+TC

MPFS Payment Calculation

Total Payment = Total RVU * Conversion Factor

Conversion Factor (CF)

- Scaling factor that converts RVU's to \$
- By statute CF is updated annually with formula that takes into account the Medicare Economic Index (MEI) and compares expenditures with target called Sustainable Growth Rate (SGR)
 - CF adjusted up or down as needed

Conversion Factor 2015

- CF for 2014: \$35.82
- Protecting Access to Medicare Act of 2014 (PMMA) specifies 0% update until 3/31/15
- CF for rest of year based on SGR: -21%
- Congress has provided rescue every year since 2003
- System must be fixed

Practice Expense Changes: Treatment Vault

- CMS proposes to classify radiation vault as indirect expense rather than direct.
- Would consider vault no different than other infrastructure costs
- Would result in practice expense RVU decrease for treatment codes
- Total impact on free standing centers: -8%

MPFS: Specific CPT Payment Changes

- Generally, 2015 changes are small:
 - Medical Physics (77336, 77370): +5%
 - Simulation/planning: +1% 4%
 - Devices: +4%
- Exceptions:
 - Treatment codes: -10%
 - Hyperthermia and neutrons: + & -
 - Simple interstitial: +21%
 - Respiratory motion: +12%

MPFS: Potentially Misvalued Codes

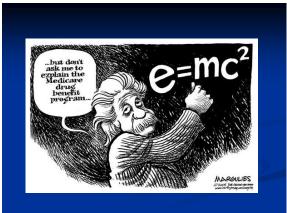
- Affordable Care Act directs HHS Secretary to review and identify potentially misvalued codes
- PMMA expanded categories of codes to be examined
- Public can also nominate codes
- CMS prioritized list includes:
 - 77263 Complex Treatment Planning (PC)
 - 77334 Complex Treatment Device

MPFS: Outside Contracts

- CMS has contracted with two entities to validate RVU's of misvalued codes:
 - 1. The Urban Institute to collect time data from practices
 - 2. RAND Corporation to build a validation model for work RVU's
- Indicative of CMS skepticism with RUC and RVU system

MPFS: Bottom Line

- Free Standing Centers: 8%
- Radiation Oncologists: -4%
- Radiology: -2%



Hospital Outpatient Prospective Payment System (HOPPS)

- Determines payment for hospital outpatient services under Medicare Part B
 Facility payments (TC) only; not MD's
- Inpatient services paid with DRG-based system (Part A)

HOPPS

- MPFS: Resource-based; "bottom-up" methodology
- HOPPS: Cost-based; uses actual hospital claims

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

Radiation Oncology APCs

APC	Name	CPT Codes	
65	IORT	77424, 77425	
66	Level I SRS	77373	
67	Level II SRS	77371, 77372	

Radiation Oncology APCs

APC	Name	CPT Codes
299	Hyperthermia & Radiation Treatment	77470, 77600-77620
300	Level I Radiation Therapy	77401-77404, 77407
301	Level II Radiation Therapy	77406, 77408-77416, 77422, 77423, 77750, 77789
303	Treatment Device Construction	77332-77334

Radiation Oncology APCs

APC	Name	CPT Codes	
304	Level I Therapeuti Radiation Treatme Prep		
305	Level II Therapeut Radiation Treatme Prep		
310	Level III Therapeu Radiation Treatme Prep		

Radiation Oncology APCs

312 Radioelement Applications	77761, 77762, 77763, 77776, 77777, 77799
313 Brachytherapy	77785, 77786, 77787, 0182T
651 Complex Inters Radiation Sour Application	
8001 LDR Prostate Brachytherapy Composite	55875+77778



Radiation Oncology APCs

APC	Name	CPT Codes
412	Level III Radiation Therapy	77418, 0073T
667	Proton Beam Therapy	77520, 77522, 77523, 77525

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

HOPPS

- Converts data to APC weightings
- APC weights are multiplied by conversion factor based on Hospital Market Basket economic index to convert weights to \$
- 2015 Conversion Factor increases 2.1% over 2014

Proposed 2015 Payment Changes

- Payment for a given CPT code changes due to:
 - CF adjustment
 - Changes in APC valuation based on claims data
 - Transfer of codes between APC's

Changes by CPT Code

- Generally, 2015 changes are small:
 - Medical Physics: 0%
 - Simulation/planning: +0 2%
 - Devices: +1 2%
 - IMRT treatment: +1%
 - Ext beam treatment: +2%
 - HDR treatment: -1%
 - SBRT treatment: -1.5%

Changes by CPT Code

Exceptions:

- Hyperthermia (APC change): -53 +25%
- Sp. treatment procedure (APC change): +25%
- Photon treatments (APC change): -34 +21%

Changes by CPT Code

SRS (77371, 77372)
IORT (77424,77425)

HOPPS: Comprehensive APC's

 Gives single payment that includes device, primary service and all adjunct services necessary to support primary service (=packaging)

- New for 2015
- In Rad Onc:
 - APC 648: Level IV Breast and Skin Surgery
 - APC 67: Single Session Cranial SRS

Comprehensive APC's

- SRS (77371, 77372): +172%
- IORT (77424, 77425): +587%
- Catch: It is not yet clear what other tasks/codes will be included in comprehensive APC
 - All codes on same claim?
 - All codes for month?

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

HOPPS: Packaging

- For 2015 Rad Onc's 6 IGRT codes will remain packaged (considered "guidance services") – no separate payment
- For 2015 CMS will package additional ancillary tests and procedures w/cost < \$100
 - No Rad Onc codes included
 - Does include Level 1&2 plain films & Level 1
 US diagnostic screenings

HOPPS: Composite APC's

 Composite APC: Provides a single payment for two or more services that are performed together on the same day

HOPPS: Composite APC's

- 2015: CMS will continue existing composites:
 - APC 8001 LDR Prostate Brachytherapy Composite
 - When 55875 & 77778 are billed on same day
 - Payment -9% for 2015

Imaging APCs 8004-8008

- US, CT/CTA, MR/MRA with & without contrast
- Single payment if more than one exam within
- same family on same day Payment -1.4 - +4.3% for 2015

HOPPS: Brachytherapy Sources

■ I-125: -8%

Ir-192 HDR source: -0.3%

Financing Strategies

•Nationalized Healthcare

England, Norway, Sweden
Medicare

Canada, Taiwan

Subsidized/Regulated Insurance

Holland, Switzerland, France, Germany

Cash

Financing Strategies

•Nationalized Healthcare

· Veterans System, Military, Indian Health Service

•Medicare

- · Medicare, Medicaid
- Subsidized/Regulated Insurance
 - · Employer or group based insurance, Individually

•Cash

New York Times 23 July 2014

New Questions on Health Law As Courts Differ on Subsidies

By ROBERT PEAR

miums for millions of Americans. raising yet more questions about the future of the health care law

WASHINGTON — Two federal appeals court panels issued con-flicting rulings Tuesday on whether the government could subsidize health insurance pre-imums for millions of Americans. states that rely on the federal in-surance exchange.

If it stands, the ruling could cut off financial assistance for more

February enrol	ment num	bers for	 states
with expanded	Medicaid	eligibi	lity

			Change compa average monthly er from July to Sept.	roliment
			5 million 10 millio	
Calif.	10 million	-		+9%
N.Y.	5.8 million	-		+3
III.	2.7 million	-	•	-4
Ohio	2.4 million			+1
Mass.	1.5 million	-		+12
Wash.	1.4 million	-		+23
N.J.	1.4 million	-	Bold text shows increases	+6
Ariz.	1.2 million	-	over 10 percent	+3
Md.	1.0 million	-	over 10 percent	+21
Ky.	982,229	-		+17
Colo.	962,210	-		+23
Minn.	938,480	+		+8
Ore.	844,220	-		+35
Ark.	763,356	+		+12
N.M.	602,014	-		+5
lowa	557,501			+13
W.Va.	473,401			+34
Nev.	404,825	•		+22
Hawaii	313,669	•		+9
D.C.	238,000	•		+1
Del.	230,165	•	Not ava	lable
R.I.	224,583	•		+18
Vt.	168,233	•		+32







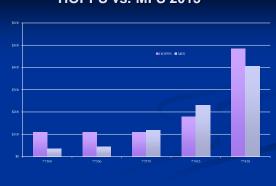
William Brody, M.D. Ph.D. President

Johns Hopkins University

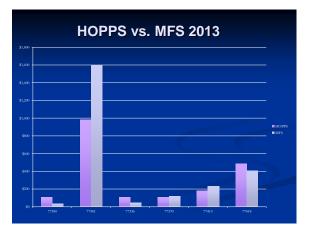
 Not so very long ago, hospitals dealt with only a small number of Medicaid, Blue Cross/Blue Shield we deal with today. The number shocked even me. He said Johns Hopkins Hospital has to bill more than 700 different payers and

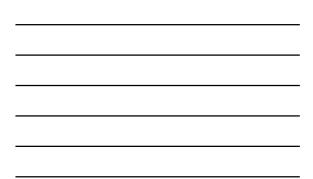
Payment Reduction Initiatives

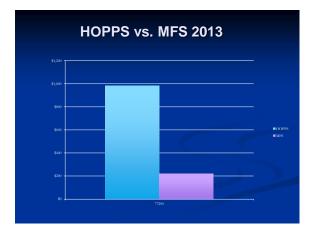
- Multiple procedure reductions
- Bundling and Packaging
- AMA RUC mis-valued code reviews
- · Scrutiny of improvements in technology
- Urban Institute / Rand Corporation Reviews



HOPPS vs. MFS 2013









- Codes The Affordable Care Act (ACA) requires the HHS Secretary to periodically review and identify potentially misvalued services and to make appropriate adjustments
- The ACA requires the Secretary to develop a Validation Process
 - RAND Corp. validation model to predict work RVUs, including time and intensity
 - Urban Institute to develop objective time estimates from several practices

Potentially Misvalued

- Codes
 The Affordable Care Act (ACA) requires the HHS Secretary to periodically review and identify potentially misvalued services and to make appropriate adjustments
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2014 Practice Expense Methodology

- Continued use of AMA Physician Practice Information Survey (PPIS) data to determine practice expense per hour (PE/HR) for each specialty used to calculate indirect practice expense costs
- Continue interest rates based on SBA to calculate equipment cost per minute
 - 5.5% to 8.0% interest rate for different categories of loan size (equipment cost) and maturity (equipment useful life)

2014 Practice Expense Policy American Taxpayer Relief Act of 2012

- American Taxpayer Relief Act of 2012 requires 90% equipment utilization policy for expensive diagnostic over \$1 million
 - Change from 75% to 90% effective 2014
 - Impacts all CT, CTA, MRI and MRA PE RVUs
- No change to 50% utilization rate for therapeutic imaging equipment or diagnostic imaging equipment less than \$1 million



Cost Savings

Medicare Part D Patient Assignment

Random Assignment → Intelligent Assignment

2009 Savings \$5 Billion

Cost Savings

■Lucentis \rightarrow Avastin

- 10 year savings:
 - ■\$ 18 Billion Medicare
 - ■\$ 5 Billion Patients
 - \$ 6 Billion Other Healthcare expenses Total: \$29 Billion

Health Affairs June 2014

AAPM Response to Proposed Rules

- Comments are due September 2, 2014
- AAPM will coordinate with sister societies and will file comment letters
- PEC contacts:
 - Wendy@HealthPolicySolutions.net
 - Jim Goodwin, Blake Dirksen