

A BRIEF HISTORY OF MEDICAL PHYSICS REIMBURSEMENT

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CPT	Mod	Status	Description	2012 Work RVU	2012 PE RVU	2012 MP RVU	2012 Total RVU	2013 Work RVU	2013 PE RVU	2013 MP RVU	2013 Total RVU	% change
77418	A		Radiation to delivery inset	0.00	13.97	0.01	13.98	0.00	8.41	0.01	8.42	-40%
77426	TC	A	Special radiation treatment	0.00	2.07	0.01	2.08	0.00	1.42	0.01	1.43	-31%
77466	A		to radiation to management	5.75	2.32	0.47	8.54	5.75	NA	0.47	6.22	-28%
77333	TC	A	Radiation treatment aid(s)	0.00	0.38	0.01	0.39	0.00	0.27	0.01	0.28	-28%
77234	A		Steril delivery	0.00	46.82	0.07	46.89	0.00	33.66	0.07	33.73	-28%
77235	TC	A	Set radiation therapy field	0.00	0.04	0.04	0.08	0.00	6.48	0.04	6.52	-19%
77044	TC	A	CT scan for therapy guide	0.00	2.98	0.01	2.99	0.00	2.43	0.01	2.44	-18%
77421	TC	A	Stereoscopic x-ray guidance	0.00	1.98	0.01	1.99	0.00	1.63	0.01	1.64	-18%
77402	A		Radiation treatment delivery	0.00	3.37	0.01	3.38	0.00	4.50	0.01	4.51	-16%
77321	TC	A	Special teletherapy plan	0.00	1.51	0.01	1.52	0.00	1.29	0.01	1.30	-14%
77421	A		Stereoscopic x-ray guidance	0.39	2.13	0.02	2.54	0.39	1.81	0.02	2.22	-13%
77407	A		Radiation treatment delivery	0.00	7.42	0.01	7.43	0.00	6.49	0.01	6.50	-11%
77240	TC	A	Teletherapy machine plan simple	0.00	0.81	0.01	0.82	0.00	0.71	0.01	0.72	-12%
77044	A		CT scan for therapy guide	0.85	3.32	0.05	4.22	0.85	2.81	0.05	3.71	-12%
77310	TC	A	Teletherapy machine plan intermediate	0.00	1.08	0.01	1.09	0.00	0.96	0.01	0.97	-11%
77420	A		Special radiation treatment	2.09	2.90	0.11	5.10	2.09	2.36	0.11	4.56	-11%

Glossary of Acronyms

- ❑ HCFA-Health Care Financing Administration
- ❑ CMS-Centers for Medicare/Medicaid Services
- ❑ AMA-American Medical Association
- ❑ AAPM-duh??
- ❑ ACR-I hope duh??
- ❑ ASTRO-duh??
- ❑ RUC-Relative-Value-System Update Committee
- ❑ RVU – Relative Value Units
- ❑ CEP- Clinical Expert Panels
- ❑ CPT - Current Procedural Terminology

Glossary cont'd

- ❑ RBRVS – Resource Based Relative Value System
- ❑ PE, PERVU – Practice Expense, RVU
- ❑ ZWP – Zero Work Pool
- ❑ PC – Professional Component (of reimbursement)
- ❑ TC – Technical Component (of reimbursement)
- ❑ IMRT-Intensity Modulated Radiation Therapy
- ❑ IGRT-Image Guided Radiation Therapy
- ❑ SRS-Stereotactic Radio-Surgery
- ❑ SBRT-Stereotactic Body Radiation Therapy

What I'm not going to talk about

- ❑ Brachytherapy
 - An important adjunct to Radiation Oncology but did not contribute significantly to our reimbursement
 - Except, maybe for HDR, where MP's had to be present for each treatment delivery-NRC required
- ❑ Diagnostic Radiology & Medical Physics
 - No patient specific reimbursement codes exist for these services unfortunately (some RO codes may be applicable, however)
 - AAPM economics force is looking at changing this
 - Not a good time for this, however

What I Can't Talk About

- ❑ Unless made "public" by AMA, CMS or others, much of the activities of the RUC are confidential and societal participants in CPT code approval work are prohibited from disclosing the proceedings at the RUC.
- ❑ I will be telling you some "stories" that I feel I can disclose to you about my experiences in this regard, but others must be kept confidential or ACR or ASTRO may be at risk.

Where we came from

- ▣ At the Cancer Therapy & Research Center in San Antonio, I found a "Menu" of charges for radiotherapy patients circa 1975:
- ▣ "External beam radiotherapy: \$1.00/rad"
- ▣ "Radium Application for Gyn cancer: \$150"
- ▣ And many of you can find similar methods that were used during the era of HCFA (70's & 80's)
- ▣ "Whatever the market would bear"

Continued.....

- ▣ In 1990, I became Director of Medical Physics at the CTRC in San Antonio and researched how Medical Physics services there were charged
- ▣ I discovered that it was somewhat chaotic
- ▣ Dosimetrists, for example, did not charge out their services for some "charity" patients
- ▣ Medical Physics charges were whatever administration thought was "fair"
- ▣ To get a handle on the problem, I joined the ACR's Med Phys Econ Committee in 1993

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- ▣ I became Chair of this Committee in 1996 and began working with committee members to insure that Medical Physics services were being reimbursed fairly and accurately reflecting the services rendered
- ▣ It was at about this time, 3 events occurred that changed how this would be accomplished
- ▣ 1. The Harvard RBRVS was being instituted across all medicine
- ▣ 2. 3D Treatment planning and delivery (CT)
- ▣ 3. ASTRO/ACR began developing RO Coding

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- ❑ Two other events would be important for Radiology and Radiation Oncology at this time
- ❑ Physicians effort for CPT (Current Procedure Terminology) was couched in their "Work"
- ❑ This consisted in the amount of "Time" it took to perform a procedure and the "Intensity" of the physician work effort
- ❑ Eg., Coronary Bypass Graft was near top of intensity scale and physical exam near bottom of "intensity" scale
- ❑ Probably why internists/family practice are at bottom of physician salary scale now!

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- ❑ Also, ancillary staff to these procedures would be paid out of a pool of Government dollars called the "Zero Work Pool" (ZWP)
- ❑ Although Radiologists were MD's, HCFA wanted to classify them as "technical diagnosticians" and that they would not be paid out of the physician reimbursement basket
- ❑ Dr. Jim Moorefield was ACR's rep on the RUC at the time and it was largely his efforts that reversed this.

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- ❑ To institute the new RBRVS, AMA asked the medical societies to put together a list of all of their current medical procedures and submit them to CMS
- ❑ The AMA and CMS put numbers to this list beginning with 0100, Anesthesia, Head. Anesthesia for procedures of the salivary gland, including biopsy
- ❑ To 99607, Medicine, Home Health Procedure Services, Medication Therapy, each additional 15 minutes
- ❑ Radiology 76000+ series, Radiation Oncology 77000+ series

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- ❑ These CPT codes (Category I, there's also Cat II and Cat III codes) were developed by society Clinical Expert Panels and given times and intensity numbers for each service
- ❑ In addition, societies were asked to develop the cost of equipment and supplies used in each procedure by these CEP's
- ❑ Remember, this was before the RUC was authorized
- ❑ Every society thought their procedures took the most time, most intense and cost the most!!

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- ❑ So CMS in their initial report to AMA and medicine, said everyone "lied to us", but everyone lied uniformly, so they renormalized all the times, intensities and equipment costs and published the first CPT manual in 1995.
- ❑ This is what Medicare uses to reimburse providers and private payors (Blue Cross, Aetna, etc.) use these codes to reimburse for services to their beneficiaries also
- ❑ But they don't "have to"! (HighMark, CK)

One more thing.....

- ❑ As new codes are developed, old one's should "go away"
- ❑ But they don't, many times
- ❑ RUC and Budget Neutrality
 - If new procedure code approved, money comes out of rest of medicine
 - Over-used procedures and over-valued codes
- ❑ "If you're not at table, you're on the MENU!"

Diversion.....

- ❑ Shortly after 3D treatment planning became “vogue”, HCFA wanted to reimburse physician work for stereotactic radiosurgery work (read GammaKnife)
- ❑ Chose CPT code 77432 for Patient Management for Radiation Oncologists and set a RVU for the code.
- ❑ Fortunately for MPs, ACMP had representatives at this session and in an outside corridor discussion with HCFA reps, said that 3D planning was time, intense, and costly for Medical Physicists

Diversion.....

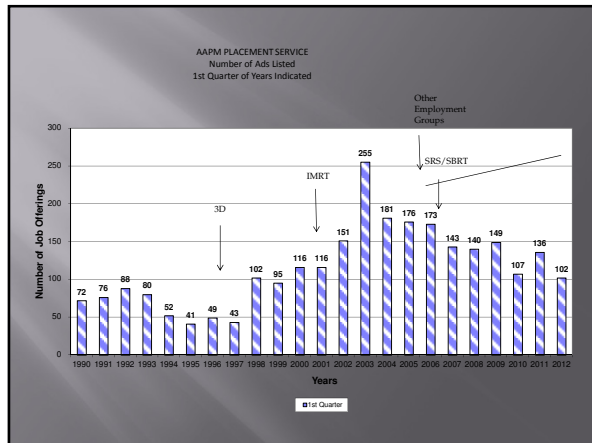
- ❑ In this discussion, CPT 77395 was initially assigned to the generation of 3D plans, but for some reason, CPT 77295 was assigned to the CT simulation by HCFA AND planning for the code when the CPT Manual was published in Jan 1996.
- ❑ Nonetheless, the Relative Value Units assigned to CPT 77295 were the highest of any planning code before, both for PC and TC.
- ❑ It was amazing!!

More Diversion.....

- ❑ It was about this time that CMS replaced HCFA as the agency for Medicare/Medicaid
- ❑ The CPT Editorial Panel & The RUC (Google NYT RUC or WSJ RUC to learn more)
- ❑ ACR & ASTRO formed Joint Economics Committee (I served on this committee)
- ❑ Eventually, ASTRO “broke away” from ACR Econ Committee and formed Health Policy Council
- ❑ We met in Chicago and pounded out the first ASTRO/ACR Rad Onc Coding Guide

Further Diversion.....

- ❑ Let's look at how the technology advances in Radiation Oncology procedures has affected our employment in Medical Physics (RO)
- ❑ Graph shows the relative number of ads in the AAPM employment structure vs. year.
- ❑ Note that each year that a new tech advance in Radiation Oncology (major), the number of MP ads increased by a lot!!
- ❑ This is not a random event. MP's are thought to be at the forefront of these events and hence, crucial to their implementation



Rise of Financial Consultants and Head Hunters

- ❑ It was also about this time that groups like AMAC, Revenue Cycle and others arose
- ❑ Dr. Bogardus had his own company and manual
- ❑ These entities purported to act as "experts" in coding
- ❑ But only the Specialty Societies are the bearers of "the truth" in coding
- ❑ ASTRO's Emerging Technology Committee assesses new technology and reports to HP Council

IMRT.....

- ❑ In mid-'90's, several papers described electron beam IMRT
- ❑ No real implementation of this research was done
- ❑ In circa 1999, NOMOS introduced Peacock System-clinical implementation of photon IMRT (Dr. Mark Carol)
- ❑ ASTRO/ACR took IMRT up for reimbursement
- ❑ Were going for new IMRT planning code (inverse planning) and IMRT delivery code (greater precision than 3D)
- ❑ Not many groups doing IMRT then, but sent survey out anyhow.
- ❑ Successful in getting 2 new codes, CPT 77301, IMRT Planning & CPT 77418, IMRT Delivery
- ❑ Two of the highest valued codes in RO CPT
- ❑ Others jumped on the IMRT "bandwagon"!!
- ❑ First patient-specific QA required with reimbursement

IGRT.....

- ❑ When it became clear that precision localization was important for IMRT, IGRT was introduced
- ❑ ASTRO established an "expert panel" to advise what current codes were being used for IGRT and what new one's were necessary
- ❑ ASTRO took CPT 77421 up for CPT Editorial and RUC for approval (Stereotactic X-ray Image Guidance)
- ❑ Also changed 76370 to 77014 (CT Sim and/or Image Guidance)

SRS/SBRT

- ❑ The newest technologies to appear on RO scene
- ❑ Historically, Leksell GammaKnife introduced in '60's
- ❑ Neurosurgeons called it "theirs" with NRC requirement for RO and MP to be "present" at each treatment (1 fx per course)
- ❑ Now with Linac-based SRS (X-Knife, VMAT, Rapid-Arc, etc), multiple fx/course > SBRT
- ❑ Dedicated Linac-based SRS/SBRT also appeared (CyberKnife- John Adler)

SRS/SBRT

- ❑ ASTRO took SBRT up for RUC approval in 2005
- ❑ Required presence (Direct Supervision) of Radiation Oncologist
- ❑ Also, reimbursement such that Medical Physicists had to be present at each treatment
- ❑ Surgeons can be part of SBRT
- ❑ At this point, patient-specific QA not required as in IMRT, but this may change in future

Another Diversion – Names to thank for working for us

- ❑ Two radiation oncologists worked with ACR/ASTRO for our benefit – Drs. Jerry Brickner and Bob Bogardus
- ❑ ACR volunteers like Drs. Max Cloud, Bill Thorwarth, Jim Borgestede were crucial in early days
- ❑ ASTRO volunteers like Drs. Mike Steinberg, Paul Walner, David Beyer, Najeeb Mohideen, helped guide RO & MP reimbursement
- ❑ These were early crafters of ASTRO/ACR RO Coding Guide

Society Staffers who helped

- ❑ ACR's Pam Kassing and Trisha Crishock (now consultant to ASTRO)
- ❑ ASTRO had Wendy Smith Fuss early on (now consultant to AAPM among others)
- ❑ Others: Anita McGlothlin, Diane Hayek @ ACR
- ❑ ASTRO's Marsha Kaufman and Sheila Madhani
- ❑ Outside consultant to ACR/ASTRO –Bart Macann, Moran Group

AAPM/ACMP Efforts

- ❑ Complex Procedure manual published listing all of the new RO procedures and MP's activities in them (Ken Hogstrom et al)
- ❑ AAPM/ACR support the Abt Surveys of Medical Physics work in all of our RO activities (Mike Mills et al)
- ❑ Periodic articles on MP reimbursement have appeared in the Journal of the American College of Radiology and the ACMP Journal
- ❑ Look for them in ASTRO's PRO Journal too.

AAPM's Econ Committee

- ❑ Moved from ACR/ASTRO to AAPM
- ❑ Jim Hevezi & Jerry White chairs
- ❑ Other early volunteer workers – Melissa Martin, Marilyn Wexler and others
- ❑ Currently, Jim Goodwin chairs, Lena Lamel, vice-chair
- ❑ Please consider volunteering for this committee
- ❑ "Its your livelihood!!"

Peering into the Future

- ❑ Accountable Care Organizations (Kaiser, Mayo)
- ❑ Errors in Radiation Oncology (Media interest)
- ❑ "CMS' Bundling of Services"
- ❑ Budget neutrality – Family Practice vs. Specialists
- ❑ Affordable Care Act – What is its effect on us?
- ❑ Wendy will bring us up to date on current situation in Hospital and Free-standing Centers in next talk

