

**RELATIVE VALUE RECOMMENDATIONS  
FOR  
PHYSICIANS' CURRENT PROCEDURAL  
TERMINOLOGY (CPT) 2000**

*Presented by the AMA/Specialty Society RVS  
Update Committee (RUC)  
May 27, 1999*

James G. Hoehn, MD, *Chair*  
Sherry L. Smith, *Director, AMA Relative Value Systems*

**RUC Meetings:  
February 1999 and May 1999**

**AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS**  
**RECOMMENDATIONS FOR CPT 2000**

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**James G. Hoehn, MD**  
Chairman  
AMA/Specialty Society RVS  
Update Committee

515 North State Street  
Chicago, Illinois 60610

312 464-5604  
312 464-5849 Fax

Memo to: Thomas Marciniak, MD

From: James G. Hoehn, MD

Date: May 27, 1999

Subject: Relative Value Recommendations for CPT 2000

---

On behalf of the AMA/Specialty Society RVS Update Committee (RUC), I am pleased to forward relative value recommendations for new and revised CPT codes scheduled to appear in Physicians' Current Procedural Terminology (CPT) for the year 2000.

Based on activities of the February and May 1999 committee meetings, the RUC is providing work relative recommendations for approximately 58 new and revised CPT codes. In addition, this year our submission to the Health Care Financing Administration (HCFA) also includes recommendations regarding practice expense direct inputs.

In some instances, you will note that the RUC was unable to reach a consensus regarding final work and/or practice expense values. In nearly all cases, we have included elements of the RUC's discussion for these issues. We do anticipate that specialty societies will resurvey certain CPT codes in the upcoming months and will present the revised information to the RUC for consideration at the September 1999 meeting.

As you know, the newly incepted Practice Expense Advisory Committee (PEAC) convened for the first time in April 1999, however, the RUC did not approve forwarding the PEAC recommendations to HCFA. The only issue relating to the PEAC recommendations approved by the RUC pertained to correcting the CPEP supply data for code 92012. The RUC recommends that the supplies for code 92012 be changed to match the supplies for three other eye codes, 92002, 92004, and 92014.

We appreciate HCFA representatives' participation and guidance throughout both the RUC and CPT processes. Your assistance this year, as always, has been invaluable to our work.

Should you have any questions regarding the material contained herein, please contact Sherry Smith at (312) 464-5604.

We look forward to receiving your response.

cc: Terry Kay  
Carolyn Mullen  
Sherry Smith  
Mark Segal, PhD

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Memo to: Thomas Marciniak, MD

From: Kay K. Hanley, MD

Date: May 26, 1999

Subject: HCPAC Practice Expense Recommendations for Medicare Fee  
Schedule 2000

---

On behalf of the Health Care Professionals Advisory Committee (HCPAC), I am pleased to forward recommendations regarding practice expense direct inputs. This year the HCPAC will not be submitting any work relative value recommendations. However, at the May 1999 meeting, the HCPAC approved the Practice Expense Advisory Committee (PEAC) recommendations on practice expense direct inputs for four Physical Medicine and Rehabilitation Codes.

We appreciate the Health Care Financing Administration (HCFA)'s representatives' participation in the RUC, CPT and HCPAC processes.

Should you have any questions regarding the material contained herein, please contact Sherry Smith at (312) 464-5604.

cc: Terry Kay  
Carolyn Mullen

## **HCPAC Recommendations on Direct Practice Expense Inputs**

### **Physical Medicine & Rehabilitation**

97022	Whirlpool Therapy
97035	Ultrasound Therapy
97110	Therapeutic Exercises
97530	Therapeutic Activities

## LABOR:

CODE 97022 Application of a modality to one or more areas; whirlpool

Global Period XXX Total Physician Time (in minutes) per HCFA 15

Total Clinical Staff Time in office: 46      Total Clinical Staff Time out office:      Estimate # of Physician Office Visits in Global Period:

CPEPC 1	STAFF	Pre In Office	Intra In Office	Post In Office	Pre Out Office	Intra Out Office	Post Out Office
	Physical Therapy	0	20	0			
	Aide						

CPEPC 3	STAFF	Pre In Office	Intra In Office	Post In Office	Pre Out Office	Intra Out Office	Post Out Office
	Medical Secretary	0	3	0			
	Physical Therapy	0	31	0			
	Aide						
	<b>Medical Secretary</b>		<b>3</b>				
	<b>Physical Therapy</b>	<b>13</b>	<b>10</b>	<b>20</b>			
	<b>Aide</b>						

**SUPPLIES:**

97022

<b>CPEP</b>	<b>C 1</b>	<b>Supply Code</b>	<b>Description</b>	<b>IN OFFICE</b>	<b>OUT OF OFFICE</b>
		11302	gloves, non-sterile	2 pair	pair
		11107	patient gown, disposable	1 item	item
		11111	exam table paper	6 foot	foot
		11112	pillow case, disposable	1 item	item
<b>CPEP</b>	<b>C 3</b>	<b>Supply Code</b>	<b>Description</b>	<b>IN OFFICE</b>	<b>OUT OF OFFICE</b>
		11111	exam table paper	7 foot	foot
		11302	gloves, non-sterile	2 pair	pair
		11112	pillow case, disposable	1 item	item
		11107	patient gown, disposable	1 item	item
		<b>11107</b>	<b>aide's gown, disposable</b>	<b>1 item</b>	<b>item</b>
		<b>14005</b>	<b>gloves, sterile</b>	<b>1 pair</b>	<b>pair</b>
		<b>11302</b>	<b>gloves, non-sterile</b>	<b>1 pair</b>	<b>pair</b>
		<b>11115</b>	<b>patient education booklet</b>	<b>1 item</b>	<b>item</b>
		<b>14001</b>	<b>sterile drape, 22 x 25</b>	<b>1 item</b>	<b>item</b>
		<b>92034</b>	<b>culturette</b>	<b>1 item</b>	<b>item</b>
		<b>92035</b>	<b>culture media</b>	<b>10 ml</b>	<b>10 ml</b>
			<b>sterilizing chemicals (chlorazene)</b>	<b>pack</b>	<b>pack</b>
			<b>(\$2.50 per pack/treatment)</b>		
		<b>31505</b>	<b>Gauze, sterile, 4 x 4</b>	<b>item</b>	<b>item</b>

## PROCEDURE SPECIFIC EQUIPMENT

97022

<del>CPEP</del>	<del>C 1</del>	<del>Equipment Code</del>	<del>Description</del>
		<del>E92005</del>	<del>whirlpool</del>
CPEP	C 3	Equipment Code	Description
		E92005	whirlpool

## OVERHEAD EQUIPMENT

97022

<del>CPEP</del>	<del>C 1</del>	<del>Equipment Code</del>	<del>Description</del>
		<del>E11001</del>	<del>exam table</del>
		<del>E91002</del>	<del>crash cart , no defibrillator</del>
CPEP	C 3	Equipment Code	Description
		E11008	wheelchair
		<del>E51001</del>	<del>X ray View Box 4 panel</del>
		E91002	crash cart , no defibrillator
		<del>E30022</del>	<del>cast cutter</del>
		E11004	autoclave
		<del>E11003</del>	<del>Power Table</del>
		<del>E11005</del>	<del>endoscopy stretcher</del>

## LABOR:

CODE 97035 Application of a modality to one or more areas;ultrasound, each 15 minutes

Global Period XXX Total Physician Time (in minutes) per HCFA 12

Total Clinical Staff Time in office: 13 Total Clinical Staff Time out office: Estimate # of Physician Office Visits in Global Period:

CPEPC 1	STAFF	Pre In Office	Intra In Office	Post In Office	Pre Out Office	Intra Out Office	Post Out Office
	Physical Therapy	0	30	0			
	Aide						

CPEPC 3	STAFF	Pre In Office	Intra In Office	Post In Office	Pre Out Office	Intra Out Office	Post Out Office
	Physical Therapy	0	31	0			
	Aide						
	Medical Secretary	0	3	0			

*Physical Therapy* 5 0 5  
*Aide*

*Medical Secretary* 3 0 0



**SUPPLIES:**

97035

<del>CPEP</del>	<del>C 1</del>	<del>Supply Code</del>	<del>Description</del>	<del>IN OFFICE</del>	<del>OUT OF OFFICE</del>
		<del>11112</del>	<del>pillow case, disposable</del>	<del>1 item</del>	<del>item</del>
		<del>11302</del>	<del>gloves, non-sterile</del>	<del>2 pair</del>	<del>pair</del>
		<del>11111</del>	<del>exam table paper</del>	<del>6 foot</del>	<del>foot</del>
		<del>11107</del>	<del>patient gown, disposable</del>	<del>1 item</del>	<del>item</del>
<b>CPEP</b>	<b>C 3</b>	<b>Supply Code</b>	<b>Description</b>	<b>IN OFFICE</b>	<b>OUT OF OFFICE</b>
		11111	exam table paper	7 foot	foot
		11107	patient gown, disposable	1 item	item
		11112	pillow case, disposable	1 item	item
		11302	gloves, non-sterile	2 pair	pair
		<b>71001</b>	<b><i>aquasonic gel</i></b>	<b><i>10 ml</i></b>	<b><i>10ml</i></b>
		<b>11520</b>	<b><i>transducer wipe</i></b>	<b><i>wipe</i></b>	<b><i>wipe</i></b>
		<b>11115</b>	<b><i>patient education booklet</i></b>	<b><i>1 item</i></b>	<b><i>item</i></b>

## PROCEDURE SPECIFIC EQUIPMENT

97035

CPEP	C 1	Equipment Code	Description
		E92001	therapeutic ultrasound unit
CPEP	C 3	Equipment Code	Description
		E92001	therapeutic ultrasound unit
			utility cart, stainless steel (@\$300 per)

## OVERHEAD EQUIPMENT

97035

CPEP	C 1	Equipment Code	Description
		E91002	crash cart, no defibrillator
		E11001	exam table
CPEP	C 3	Equipment Code	Description
		E91002	crash cart, no defibrillator
		E51001	X-ray View Box 4 panel
		E11004	autoclave
		E11003	Power Table
		E11008	wheelchair
		E11005	endoscopy stretcher
		E30022	cast cutter

## LABOR:

CODE 97110 Therapeutic procedure, one or more areas, each 15 minutes; therapeutic exercises to develop strength and endurance, range of motion and flexibility

Global Period XXX Total Physician Time (in minutes) per HCFA 15 (per APTA 20; HCFA has not responded to comments of Sept 1998)

Total Clinical Staff Time in office: 10 Total Clinical Staff Time out office: Estimate # of Physician Office Visits in Global Period:

CPEPC 1	STAFF	Pre In Office	Intra In Office	Post In Office	Pre Out Office	Intra Out Office	Post Out Office
	Physical Therapy	0	23	0			
	Aide						

CPEPC 3	STAFF	Pre In Office	Intra In Office	Post In Office	Pre Out Office	Intra Out Office	Post Out Office
	Physical Therapy	0	31	0			
	Aide						
	Medical Secretary	0	3	0			

*Physical Therapy* 3 1 3  
*Aide*

*Medical Secretary* 3 0 0

## SUPPLIES:

97110

<del>CPEP</del> C 1	<del>Supply Code</del>	<del>Description</del>	<del>IN OFFICE</del>	<del>OUT OF OFFICE</del>
	11302	gloves, non-sterile	2 pair	pair
	11112	pillow case, disposable	1 item	item
	11107	patient gown, disposable	1 item	item
	11111	exam table paper	6 foot	foot
CPEP C 3	Supply Code	Description	IN OFFICE	OUT OF OFFICE
	11107	patient gown, disposable	1 item	item
	11302	gloves, non-sterile	2 pair	pair
	11112	pillow case, disposable	1 item	item
	11111	exam table paper	7 foot	foot
	<b>52310</b>	<b>mat cleaner/spray (Lysol as substitute)</b>	<b>ounce</b>	<b>ounce</b>
	<b>31514</b>	<b>tape</b>	<b>inch</b>	<b>inch</b>
	<b>31515</b>	<b>ace bandage (25 % of services)</b>	<b>item</b>	<b>item</b>
	<b>11115</b>	<b>patient education booklet</b>	<b>1 item</b>	<b>item</b>

## PROCEDURE SPECIFIC EQUIPMENT

97110

<del>CPEP</del>	<del>C 1</del>	<del>Equipment Code</del>	<del>Description</del>
		<del>E92023</del>	<del>Therapeutic exercise equipment set</del>
CPEP	C 3	Equipment Code	Description
		<del>E92014</del>	<del>isokinetic strengthening equipment</del>

*E92014 isokinetic strengthening equipment (50 % utilization)*

*E92023 Therapeutic exercise equipment set(50 % utilization)*

## OVERHEAD EQUIPMENT

97110

<del>CPEP</del>	<del>C 1</del>	<del>Equipment Code</del>	<del>Description</del>
		<del>E11001</del>	<del>exam table</del>
		<del>E91002</del>	<del>crash cart , no defibrillator</del>
CPEP	C 3	Equipment Code	Description
		<del>E11005</del>	<del>endoscopy stretcher</del>
		<del>E11003</del>	<del>Power Table</del>
		<del>E11004</del>	<del>autoclave</del>
		E11008	wheelchair
		E91002	crash cart , no defibrillator
		E51001	X-ray View Box 4 panel
		<del>E30022</del>	<del>cast cutter</del>

# LABOR:

CODE 97530 Therapeutic activities, direct (one on one) patient contact by the provider (use of dynamic activities to improve functional performance), each 15

Global Period XXX Total Physician Time (in minutes) per HCFA 15 (per APTA 20; HCFA has not responded to comments of Sept 1998)

Total Clinical Staff Time in office: 10 Total Clinical Staff Time out office: Estimate # of Physician Office Visits in Global Period:

CPEPC 1	STAFF	Pre In Office	Intra In Office	Post In Office	Pre Out Office	Intra Out Office	Post Out Office
---------	-------	------------------	--------------------	-------------------	-------------------	---------------------	--------------------

Physical Therapy	0	23	0				
Aide							

CPEPC 3	STAFF	Pre In Office	Intra In Office	Post In Office	Pre Out Office	Intra Out Office	Post Out Office
---------	-------	------------------	--------------------	-------------------	-------------------	---------------------	--------------------

Physical Therapy	0	31	0				
Aide							

Medical Secretary	0	3	0				
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Physical Therapy	3	1	3
Aide			

Medical Secretary	3	0	0
-------------------	---	---	---

## SUPPLIES:

97530

<del>CPEP</del> C 1	<del>Supply Code</del>	<del>Description</del>	<del>IN OFFICE</del>	<del>OUT OF OFFICE</del>
	11302	gloves, non-sterile	2 pair	pair
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	<b>31515</b>	<b>ace bandage (25 % of services)</b>	<b>item</b>	<b>item</b>
	<b>11115</b>	<b>patient education booklet</b>	<b>1 item</b>	<b>item</b>

## PROCEDURE SPECIFIC EQUIPMENT

97530

CPEP	C 1	Equipment Code	Description
		<del>E92023</del>	<del>Therapeutic exercise equipment set</del>
CPEP	C 3	Equipment Code	Description
		<del>E92014</del>	<del>isokinetic strengthening equipment</del>
		<i>E92014</i>	<i>isokinetic strengthening equipment (50 % utilization)</i>
		<i>E92023</i>	<i>Therapeutic exercise equipment set(50 % utilization)</i>

*The American Occupational Therapy Association and American Physical Therapy Association met and have resolved all issues related to practice expense inputs with the exception of an open issue related to the addition of an activity simulator set at a cost of \$100,000. There is still active discussion on inclusion of the activity simulator set.*

## OVERHEAD EQUIPMENT

97530

CPEP	C 1	Equipment Code	Description
		<del>E11001</del>	<del>exam table</del>
		<del>E91002</del>	<del>crash cart , no defibrillator</del>
CPEP	C 3	Equipment Code	Description
		<del>E11005</del>	<del>endoscopy stretcher</del>
		<del>E11003</del>	<del>Power Table</del>
		<del>E11004</del>	<del>autoclave</del>
		<del>E11008</del>	<del>wheelchair</del>
		<del>E91002</del>	<del>crash cart , no defibrillator</del>
		<del>E51001</del>	<del>X-ray View Box 4 panel</del>
		<del>E30022</del>	<del>cast cutter</del>



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cc: Terry Kay  
Carolyn Mullen  
Sherry Smith  
Mark Segal, PhD

CPT Code	Tab number	Median RVW	Median Pre-Service Time	Median Intra-Service Time	75th Percentile Intra-Svc time	25th Percentile Intra-Svc time	low2	high2	Immediate Post Service time	Critical Care time	Other Hospital visit time	Discharge Day Mgmt time	Office Visit time	Immediate Post Service Visits	Critical Care Visits	Other Hospital Visit	Discharge Day Mgmt Visits	Office Visits	Time Estimates Median Pre-Time	Time Estimates Median Intra-Time	Time Estimates Median Post-Time	Global Period
78456	1	1 00	90	110	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	XXX
33410	2	33 50	30	210	270	200	120	330	50	0	100	0	45	2 x 99291		6 x 99231	0	3 x 99213	30	210	60	090
36819	3	14 00	25	120	120	90	90	180	15	0	0	25	25	99231 x 1			99238	99213 x 1 and 99212 x 1	55	120	65	090
99170	4	1 75	0	50	70	35	15	210	0	0	0	0	0	0						50		XXX
61862	5	36 00	30	320	360	300	180	420	25	0	20	25	80	99232 x 1		99231 x 1	99238 x 1	99213 x 4	90	320	150	090
61885	5	11 00	30	60	90	60	30	100	25	0	20	25	80	99232 x 1		99231 x 1	99238 x 1	99213 x 4	50	60	150	090
61886	5	15 00	30	100	120	90	45	180	25	0	28	30	80	99232 x 1		99232 x 1	99238 x 1	99213 x 4	50	100	163	090
64573	5	13 00	30	90	110	85	30	180	20	0	0	30	35	99231			99238	99231 x 2	65	90	85	090
93744	6	1 50	5	33	49	30	15	80	5	0	0	0	34					1	5	33	39	XXX
93743	6	1 30	5	25	48	23	10	280	5	0	0	0	33					1	5	25	38	XXX
93741	6	1 00	5	23	30	19	10	60	5	0	0	0	28					1	5	23	33	XXX
93742	6	1 10	5	30	41	20	15	60	3	0	0	0	32					1	5	30	35	XXX
62310	7	2 20	15	30	40	20	10	60	20	0	0	0	0	99238					35	30	20	000
62311	7	1 78	15	20	30	15	10	60	15	0	0	0	0	99238					35	20	15	000
62318	7	2 35	20	40	60	30	15	120	30	0	0	0	0	99238					50	40	30	000
62319	7	2 15	20	30	50	20	10	90	30	0	0	0	0	99238					48	30	30	000
72275	7	0 83	12 5	30	30	15	0	60	2	0	0	0	0						12 5	30	2	000
90471	10	0 20	0	7	10	5	2	25	0	0	0	0	0						0	7	0	XXX
90472	10	0 18	0	7	10	5	3	25	0	0	0	0	0						0	7	0	ZZZ
33284	11	3 25	30	30	40	26 25	15	60		0	0	0	30					2	30	30	30	090
93727	11	0 74		20	30	15	3	90												20		XXX
33282	11	5 00	60	40	45	30	15	75	0	0	0	0	50					2	60	40	50	090
13132	12	4 00		30	60	25	10	180	0	0	0	0	0							30		ZZZ
13152	12	5 00		45	60	30	15	180	0	0	0	0	0							45		ZZZ
13101	12	3 30	0	25	40	20	10	90	0	0	0	0	0						0	25	0	ZZZ
13121	12	3 60		23	40	20	10	110	0	0	0	0	0							23		ZZZ
33968	13	5 00	20	50	45	30	15	60	20	0	0	0	0	99231 x 1					17 5	50	20	000
92961	14	4 60	60	53	65	44	10	90	20	0	0	0	55					2	60	53	75	
50300	15	25 50	92 5	240	300	220	90	480	45	0	20	30	30			99221 (x2)	99238	99213 (x2)	92 5	240	45	90 -
51992	16	14 01	60	120	180	103 5	75	240	20	0	35	20	30			99231 x 2	99238	99213 x 2	60	120	105	90
54692	16	12 88	60	120	120	75	30	240	15	0	30	15	30			99231 x 2	99238	99213 x 2	60	120	90	90
50541	16	16 00	60	120	180	90	60	180	15	0	32 5	15	22 5			99231 * 2	99238	99231 * 2	60	120	85	90
50544	16	22 40	60	240	262 5	180	110	360	15	0	45	20	30			99231 * 3	99238	99213 * 2	60	240	110	90
50546	16	20 48	60	205	240	180	80	350	17 5	0	45	20	30			99231 x 3	99238	99213 x 2	60	205	112 5	90
50548	16	24 40	60	270	300	240	90	480	20	0	45	20	30			99231 x 3	99238	99213 x 2	60	270	115	90
50945	16	17 00	60	120	175	90	50	240	17 5	0	30	15	30			99231 x 2	99238	99213 x 2	60	120	92 5	90
51990	16	12 50	60	120	135	90	30	240	20	0	30	15	30			99231 x 2	99238	99213 x 2	60	120	95	90
20979	17	0 00	0	0	0	0	0	0	0	0	0	0	0						0	0	0	XXX
35879	18	16 00	30	120	150	90	60	240	25	0	45	30	35	99232 x 1		99231 x 3	99238	99214 x 1 and 99213 x 1	75	120	135	090
35881	18	18 00	30	150	180	120	90	270	25	0	50	30	40	99232 x 1		99231 x 3	99238	99213 x 2 and 99212 x 1	75	150	145	090
33249	19	13 00	60	120	140	90	45	240					77 5					3 visits	60	120	77 5	090
66263	20	12 45	20	75	90	60	30	150	40	0	20	30	20	99233		99232 x 1	99238	99212 x 2	58	75	110	010
33244	19	17 00	60	180	225	120	45	400					190					5 visits	60	180	190	090
76873	22	2 13	20	30	45	20	15	60	10										20	30	10	XXX
39560	23	14 00	15	90	150	60	20	240	30		100		45	1 x 99232		5 x 99231		3 x 99212	15	90	30	090
39561	23	17 50	25	150	210	120	60	300	30		100		45	2 x 99232		5 x 99231		3 x 99214	25	150	30	090
27096	24	1 50	10	25	30	15	0	60	5										10	25	5	000
73542	24	0 64	10	20	30	10	0	60	5										10	20	5	XXX
64470	24	1 85	15	20	30	15	5	75	15	0	0	0	0	99238					38	20	15	000
64472	24	1 41	0	15	25	10	5	60	0	0	0	0	0						0	15	0	ZZZ
64479	24	2 20	15	30	43	20	5	75	20	0	0	0	0	99238					15	30	0	000
64480	24	1 90	0	20	30	15	5	60	0	0	0	0	0						0	20	0	ZZZ
64483	24	1 90	15	28	30	16	5	60											35	28	20	000
64484	24	1 60	0	20	30	15	5	60	0	0	0	0	0						0	20	0	ZZZ
64626	24	3 50	15	30	50	25	5	90	25	0	0		30	99238				99213 x 2	45	30	55	010
64627	24	1 71		30	33	15	5	60												30		ZZZ
76005	24	0 60	10	20	30	10	0	60	5										10	20	5	XXX
22318	25	21 50	60	140	180	120	60	240	28	0	18	20	55	99231 x 1		99231 x 1	99238	99213 x 3 and 99212 x 1	120	140	121	090
22319	25	24 00	60	150	180	101	60	280	30	0	40	30	55	99231 x 1		99231 x 2	99238	99213 x 3 and 99212 x 1	120	150	155	090
33140	26	23 00	30	120	180	100	40	240	45	0	115	0	45	2 x 99291		6 5 x 99231		3 x 99212	30	120	45	090
77427	29	3 73	20	45	82 5	35	13	300	17 5	25	0	12 5	21 5		99231		99238	99213	20	45	21 5	XXX
77427	29	3 70	20	30	42 5	22	10	180	15	0	0	60	15					99213	20	30	15	XXX
77427	29	3 80	30	45	60	20	12	150	25 5	33 75	0	31	20		99231		99238	99213	30	45	20	XXX

CPT Code	Median Pre-Service Time	Median Intra-Service Time	Immediate Post Service time	Critical Care time	Other Hospital visit time	Discharge Day Mgmt time	Office Visit time	Immediate Post Service Visits	Critical Care Visits	Other Hospital Visit	Discharge Day Mgmt Visits	Office Visits	Global Period
13101	0	25	0	0	0	0	0						ZZZ
13121		23	0	0	0	0	0						ZZZ
13132		30	0	0	0	0	0						ZZZ
13152		45	0	0	0	0	0						ZZZ
20979	0	0	0	0	0	0	0						XXX
22318	60	140	28	0	18	20	55	99231 x 1		99231 x 1	99238	99213 x 3 and 99212 x 1	090
22319	60	150	30	0	40	30	55	99231 x 1		99231 x 2	99238	99213 x 3 and 99212 x 1	090
27096	10	25	5										000
33140	30	120	45	0	115	0	45	2 x 99291		6.5 x 99231		3 x 99212	090
33244	60	180					190					5 visits	090
33249	60	120					77.5					3 visits	090
33282	60	40	0	0	0	0	50					2	090
33284	30	30		0	0	0	30					2	090
33410	30	210	50	0	100	0	45	2 x 99291		6 x 99231	0	3 x 99213	090
33968	20	50	20	0	0	0	0	99231 x 1					000
35879	30	120	25	0	45	30	35	99232 x 1		99231 x 3	99238	99214 x 1 and 99213 x 1	090
35881	30	150	25	0	50	30	40	99232 x 1		99231 x 3	99238	99213 x 2 and 99212 x 1	090
36819	25	120	15	0	0	25	25	99231 x 1			99238	99213 x 1 and 99212 x 1	090
39560	15	90	30		100		45	1 x 99232		5 x 99231		3 x 99212	090
39561	25	150	30		100		45	2 x 99232		5 x 99231		3 x 99214	090
50300	92.5	240	45	0	20	30	30			99221 (x2)	99238	99213 (x2)	90
50541	60	120	15	0	32.5	15	22.5			99231 * 2	99238	99231 * 2	90
50544	60	240	15	0	45	20	30			99231 * 3	99238	99213 * 2	90
50546	60	205	17.5	0	45	20	30			99231 x 3	99238	99213 x 2	90
50548	60	270	20	0	45	20	30			99231 x 3	99238	99213 x 2	90
50945	60	120	17.5	0	30	15	30			99231 x 2	99238	99213 x 2	90
51990	60	120	20	0	30	15	30			99231 x 2	99238	99213 x 2	90
51992	60	120	20	0	35	20	30			99231 x 2	99238	99213 x 2	90
54692	60	120	15	0	30	15	30			99231 x 2	99338	99213 x 2	90
61862	30	320	25	0	20	25	80	99232 x 1		99231 x 1	99238 x 1	99213 x 4	090
61885	30	60	25	0	20	25	80	99232 x 1		99231 x 1	99238 x 1	99213 x 4	090
61886	30	100	25	0	28	30	80	99232 x 1		99232 x 1	99238 x 1	99213 x 4	090
62310	15	30	20	0	0	0	0	99238					000
62311	15	20	15	0	0	0	0	99238					000
62318	20	40	30	0	0	0	0	99238					000
62319	20	30	30	0	0	0	0	99238					000
64470	15	20	15	0	0	0	0	99238					000
64472	0	15	0	0	0	0	0						ZZZ
64479	15	30	20	0	0	0	0	99238					000
64480	0	20	0	0	0	0	0						ZZZ
64483	15	28											000
64484	0	20	0	0	0	0	0						ZZZ
64573	30	90	20	0	0	30	35	99231			99238	99231 x 2	090
64626	15	30	25	0	0		30	99238				99213 x 2	010
64627		30											ZZZ
66263	20	75	40	0	20	30	20	99233		99232 x 1	99238	99212 x 2	010
72275	12.5	30	2	0	0	0	0						000
73542	10	20	5										XXX
76005	10	20	5										XXX
76873	20	30	10										XXX
77427	20	40	20		25	23	20	1 99231			99238	99213	XXX
78456	90	110	20	0	0	0	0	0	0	0	0	0	XXX
90471	0	7	0	0	0	0	0						XXX
90472	0	7	0	0	0	0	0						ZZZ
92961	60	53	20	0	0	0	55					2	0
93727		20											XXX
93741	5	23	5	0	0	0	28					1	XXX
93742	5	30	3	0	0	0	32					1	XXX
93743	5	25	5	0	0	0	33					1	XXX
93744	5	33	5	0	0	0	34					1	XXX
99170	0	50	0	0	0	0	0						XXX

# American Medical Association

Physicians dedicated to the health of America



**James G. Hoehn, MD**  
Chairman  
AMA/Specialty Society RVS  
Update Committee

515 North State Street  
Chicago, Illinois 60610

312 464-5604  
312 464-5849 Fax

October 13, 1999

Terry Kay  
Health Care Financing Administration  
C-4-01-15  
7500 Security Blvd.  
Baltimore, MD 21244

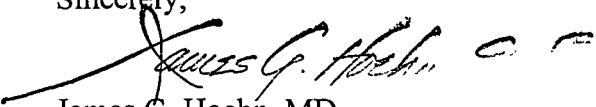
Dear Mr. Kay:

On behalf of the AMA/Specialty Society RVS Update Committee (RUC), I am pleased to forward relative value recommendations for new and revised codes scheduled to appear in Physicians' Current Procedural Terminology (CPT) for the year 2000.

Based on the activities at our September 1999 meeting, the RUC is providing work relative recommendations for approximately 7 new and revised CPT Codes. In addition, our submission to the Health Care Financing Administration (HCFA) also includes recommendations regarding practice expense inputs.

Should you have any questions regarding the content contained herein, please contact Sherry Smith at (312) 464-5604.

Sincerely,

  
James G. Hoehn, MD

cc: Thomas Marciniak, MD  
Carolyn Mullen  
Patrick Gallagher  
Sherry Smith  
Mark Segal, PhD

# Survey - Practice Response

<b>CPT Code</b>	78456	<b>Tracking Number</b>	BB1
<b>Tab number</b>	1	<b>Global Period</b>	XXX
<b>Date</b>	May 1999	<b>Recommended RVW</b>	1.00

**Issue** Acute Thrombosis Imaging

**RUC Rationale** A new Code was developed CPT 78456, to report Acute venous thrombosis imaging, peptide. The new procedure uses a systematically injected radiolabeled peptide that binds to activated platelets for imaging acute thrombosis. Prior to the creation of this code, there were no codes to report this procedure. It was recommended that physicians report the services under CPT 78499 Unlisted cardiovascular procedure, diagnostic nuclear medicine. The services reported under CPT 78456 were recently introduced following FDA approval of the radiopharmaceutical this year. The procedure can be performed in any inpatient or outpatient nuclear medicine facility with a standard scintillation imaging care. The new procedure is imaging of an acute thrombosis. In this way, it is somewhat analogous to CPT code 78455 Venous thrombosis study (eg radioactive fibrinogen) (work RVU=.73). Code 78455 represents another method for finding a venous clot with an agent that binds to an acute clot. The difference between the two procedures is that the new code uses a radioactive contrast agent that does not need to be monitored over several days time after injection for new clot formation, and that is an imaging and no a non-imaging study. When considering potential work relative units, the RUC discussed values for similar reference codes, such as CPT 78278 Acute gastrointestinal blood loss imaging (work RVU=.99) and CPT 78585 Pulmonary perfusion imaging, particulate, with ventilation; rebreathing and washout, with or without single breath (work RVU=1.09). They also considered physician survey results, and agreed that the survey median for physician work was an accurate value for the new procedure. The RUC there for recommends a rvu of 1.00 for the physician work component of the new code.

**Practice Expense Recommendation** Since this is a new code there currently are no direct inputs associated with this code. The specialty developed the direct input recommendations using a small consensus panel that examined CPEP data for similar codes. The RUC accepted the direct input recommendations but deleted three supplies; the saline, I.v. infusion set, and the angiocatheter. See the attached direct input summary of recommendation form.

**CPT Descriptor** Acute venous thrombosis imaging, peptide

**Vignette** 65 year old man with congestive heart failure, pedal edema and right calf pain and tenderness. Ultrasound is equivocal for deep vein thrombosis (DVT). 70 year old women with diabetes, prior history of DVT in left leg, presents with left leg swelling, redness, pain and calf tenderness. Ultrasound shows venous disease in left leg, but one cannot distinguish old vs. new clot from the images

**Pre-Service** Review history and physical exam. Review prior imaging studies. Discuss procedure with patient. Order the radiopharmaceutical. Include the work of injecting the radiopharmaceutical if you perform the injection. Otherwise, include the work of supervising the injection.

**Intra-Service** Supervise image acquisition. Supervise processing of the data. Analyze and reprocess data as necessary. Monitor and interpret results of study. Compare results in relation to current diagnosis and future treatment, if appropriate.

**Post Service** Dictate, correct and sign report. Discuss and communicate report/findings with referring physician(s) and patient.

**Presenters** Society of Nuclear Medicine

**Specialty** Nuclear Medicine

**Sample Size** 147.00 **Response Rate Percentage** 23.00% **Median RVW** 1.00 **Type of Sample** N/A

**Explanation of Sample Size** SNM House of Delegates, list from manufacturer of physicians who have purchased radiopharmaceutical.

**25th Percentile RVW** 0.87 **Low** 0.70

75th Percentile	1.18	high	1.50		
Median Pre-Service Time	0.00	Median Intra-Service Time	0.00		
25th Percentile Intra-Svc time	0.00	low2	0.00	high2	0.00
75th Percentile Intra-Svc time	0.00				
Immediate Post Service time	0.00	Immediate Post Service Visits	0		
Critical Care time	0.00	Critical Care Visits	0		
Other Hospital visit time	0.00	Other Hospital Visit	0		
Discharge Day Mgmt time	0.00	Discharge Day Mgmt Visits	0		
Office Visit time	0.00	Office Visits	0		
Estimates Median Pre-Time	0.00				
Estimates Median Intra-Time	0.00				
Estimates Median Post-Time	0.00				
How was this service previously reported	78499 Unlisted cardiovascular procedure, diagnostic nuclear medicine				
How often do physicians in your specialty perform this service	Commonly				
Times performed in past year	> 100000				
Do many physicians perform this service across the US	Yes				

<b>CPT Code</b>	33410	<b>Tracking Number</b>	V1
<b>Tab number</b>	2	<b>Global Period</b>	090
<b>Date</b>	May 1999	<b>Recommended RVW</b>	33.50

**Issue** Aortic Valve Replacement

**RUC Rationale** A new CPT code, 33410, was adopted to report Replacement, aortic valve, with cardiopulmonary bypass; with stentless tissue valve. This type of procedure is performed on patients with aortic valve stenosis or aortic valve insufficiency. Stentless aortic valves represent a new generation of aortic valve prosthesis. Due to their design, they lack the rigid stent and sewing ring of older valves. Their flexibility and three-dimensional character requires a more complex insertion technique, involving suturing at both the inlet and outlet portions of the valve. The new code reflects new technology in that the stentless valve and the sizing and insertion techniques are new. The procedures are currently being reported under CPT 33405 (with a-22 modifier) and CPT 33405 describes Replacement, aortic valve, with cardiopulmonary bypass; with prosthetic valve other than homograft (work RVU=30.61). CPT code 33405 reflects the insertion of aortic valve prosthesis with a sewing cuff, thus involving only a single interrupted or continuous suture line. Insertion of a stentless aortic valve involves not only a lower annular suture line, but also an upper outlet suture line. The Medicare work values assigned to CPT 33405 are not adequate, thus necessitating the use of Modifier-22. Similarly, CPT 33406 Replacement, aortic valve, with cardiopulmonary bypass; with homograft valve (freehand) (work RVU=32.30) is a more difficult type of insertion involving a freehand style using a homograft valve. Physicians commented and RUC members agreed that the total work, intensity, skill, and time are similar to the stentless implantations, but that the code descriptor does not fit the stentless valve. In developing a final work relative value recommendation, the RUC considered the comparability of CPT 33406, but also agreed that the physician work involved the new code CPT (33410) was more difficult of a procedure to perform. As such, it was the consensus of the RUC that a rvu of 32.30 represented a fair and accurate value for CPT 33410.

CPT 33406  
CPT 33405  
describes

**Practice Expense Recommendation** No practice information was submitted for these codes. As such, the RUC does not have any formal practice expense recommendations at this time.

**CPT Descriptor** Replacement, aortic valve, with cardiopulmonary bypass; with stentless tissue valve

**Vignette** A 62-year-old man is seen complaining of shortness of breath, fatigue, and dizziness. He is found at cardiac catheterization to have calcific aortic stenosis with a 60 mm Hg gradient across the aortic valve and massive left ventricular hypertrophy with normal coronary arteries. The commissure between the left and right cusp was moderately fused. Recommendation is that patient undergo operation for replacement of the aortic valve.

**Pre-Service** The surgical contact with the patient starts with a preoperative history and physical and immediate past history within 24 hours of the operation to reassess the patient's condition prior to taking him/her to the operating room. Medical decision-making involves assessing the patient's immediate surgical risk. In patients with aortic valve disease, this entails a high level of judgement, intensity and risk on the part of the surgeon.

**Intra-Service** The heart is exposed through a complete or partial median sternotomy. Cardiopulmonary bypass is established, and the aorta is cross-clamped. Cardioplegia is administered, either antegrade, retrograde, or a combination of the both. The aorta is opened through a transverse aortotomy placed above the sinotubular junction, and the native aorta is removed in total. The sinotubular junction and annulus are sized, and an appropriate sized stentless valve is chosen and rinsed. As the valve is being rinsed, sutures are placed at the annular level, and then these sutures are played through the inlet portion of the stentless valve, which is lowered and tied into position. Care is taken at this point to orient the valve appropriately to avoid compromise of the left and right coronary ostia. The commissural posts are then sutured to the aortic wall above the sinotubular junction and the remaining outlet portions of the valve are sutured into position. The aortotomy is closed, and following removal of air from the heart, the aortic cross-clamp is released. Following the resumption of normal cardiac function, the patient is weaned from bypass.

**Post Service** With the surgical team in attendance, the patient is transported to the intensive care unit. Bleeding and wound damage are monitored and managed. The patient's respiratory status is carefully monitored as are hemodynamics and vital signs. If stable, in approximately 8-12 hours, the patient is then transferred to the step-down unit where monitoring of drains and drips, cardiorespiratory, and is required. The patient is transferred to the floor where he/she receives daily visits to assess the wound, respiratory status, and hemodynamic status. The surgeon and his team then follow the patient in the office, monitoring pain, infection, wound healing, and respiratory status.

**Presenters** Sidney Levitsky, M.D.

**Specialty** Society of Thoracic Surgeons/American Association for Thoracic Surgery

<b>Sample Size</b>	50.00	<b>Response Rate Percentage</b>	46.00%	<b>Median RVW</b>	33.50	<b>Type of Sample</b>	panel
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**Explanation of Sample Size**

<b>25th Percentile RVW</b>	33.00	<b>Low</b>	32.00
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75th Percentile	35.50	high	65.00
Median Pre-Service 1	30.00	Median Intra-Service Time	210.00
25th Percentile Intra-Svc time	200.00	low2	120 270.00
75th Percentile Intra-Svc time	270.00	high2	330 0.00
Immediate Post Service time	50.00	Immediate Post Service Visits	2 x 99291
Critical Care time	0.00	Critical Care Visits	see above
Other Hospital visit time	100.00	Other Hospital Visit	6 x 99231
Discharge Day Mgmt time	0.00	Discharge Day Mgmt Visits	0
Office Visit time	45.00	Office Visits	3 x 99213
Estimates Median Pre-Time	30.00		
Estimates Median Intra-Time	210.00		
Estimates Median Post-Time	60.00		
How was this service previously reported	33405-22; 33999		
How often do physicians in your specialty perform this service	Sometimes		
Times performed in past year	> 800		
Do many physicians perform this service across the US	No		

<b>CPT Code</b>	36819	<b>Tracking Number</b>	Y1
<b>Tab number</b>	3	<b>Global Period</b>	090
<b>Date</b>	May 1999	<b>Recommended RVW</b>	14.00

**Issue** Arteriovenous Anastomosis (Basilic Vein Transposition)

**RUC Rationale** A new code adopted for inception into CPT 2000: Code 36819 Arteriovenous anastomosis, open; by basilic vein transposition. Creation of an arteriovenous fistula using transposition of the basilic vein above the elbow is a procedure that has been used intermittently for many years. The frequency of this operation is increasing as the dialysis population grows and as clinicians realize the improved utility of all autogenous hemodialysis access. Basilic vein transportation entails much more work that placement of non-autogenous upper arm graft since it requires complete dissection of the entire basilic vein from the antecubital crease up to the axilla. In describing the procedure, the RUC compared the new code to two existing CPT codes, 36821 and 36825. CPT code 36821 Arteriovenous anastomosis, direct, and site (eg, Cimino type) (separate procedure) (work RVU=8.93) involves direct anastomosis of a vein to an artery, usually at the wrist, with only a moderate amount of arterial and venous dissection. The Cimino fistula does not involve extensive dissection, and does the basilic vein transposition. The basilic vein is much deeper in the soft tissue and almost always has overlying nerves that must be preserved. The basilic vein transposition procedures require a complete, longitudinal vein dissection for the entire length of the upper arm, creation of a tunnel, and relocation of the vein into the new, more superficial location. None of these maneuvers are part of CPT 36821. In its review of the new procedure, the RUC also considered CPT code 36825 Creation of arteriovenous fistula by other than direct arteriovenous anastomosis (separate procedure); autogenous graft (work RVU=9.84). CPT code 36825 defines a different service than basilic vein transposition. Code 36825 involves placement of a "graft," and there is no such graft in basilic vein transportation. Also with respect to physician work, the RUC considered the comparison code of 36830 Creation of arteriovenous fistula by other than direct arteriovenous anastomosis (separate procedure); nonautogenous graft (work RVU=12.00). The new service requires 30 minutes more operative time and a few minutes more pre and post time than the comparison code 36830, which is the most commonly performed dialysis access operation. All mental effort, judgement, technical skill and psychological stress parameters are greater in the new code because the basilic vein must be handled with extreme care to avoid injury, while the synthetic conduit in code 36830 is nearly indestructible. In appraising potential work relative values, the RUC considered the survey median of 14.00. Also, given the increase in time and other related factors, the RUC agreed that the relative value units for code 36819 should be approximately 2 rvu's greater than that of CPT 36830. The RUC therefore recommends a work RVU of 14.00 for CPT code 36819.

**Practice Expense Recommendation** Since this is a new code there is currently no direct input data associated with this code. The specialty chose to crosswalk this code to an existing code which is similar not only in the physician work involved but also has direct inputs that the specialty believes is representative of the expenses associated with the new code. The RUC therefore recommends that the direct inputs associated with code 36830 Creation of arteriovenous fistula by other than direct arteriovenous anastomosis (separate procedure); nonautogenous graft also apply to code 36819.

**CPT Descriptor** Arteriovenous anastomosis, open, by basilic vein transposition

**Vignette** A 32-year old diabetic female requires hemodialysis for chronic renal failure due to diabetic nephropathy. She has no superficial veins of adequate size to perform an arteriovenous Cimino-type fistula at the wrist. Pre-service work includes a review of all preoperative studies. At operation a basilic vein transposition is performed to provide a fully autogenous dialysis access. Post-service work includes postoperative in-hospital care plus all related outpatient care for 90 days.

**Pre-Service** Pre-service work begins after the decision to operate is made, from the day before the operation until the time of the procedure. This activity includes obtaining and reviewing the previous work-up, with special attention to potential cardiovascular risks; and consulting with the referring physician, the anesthesiologist to determine the best anesthetic choice for this less common upper arm operation, and other health care professionals as needed within 24 prior to the operation. In addition, the surgeon reviews operative risks and benefits with the patient (and or the patient's family) in order to obtain informed consent. Preoperative work also includes dressing, scrubbing, and waiting to begin the operation; supervising the positioning, prepping, and draping of the patient; and ensuring that the necessary surgical instruments and supplies are present and available in the operative suite.

**Intra-Service** At operation, a skin incision is made over the approximate location of the basilic vein starting at the elbow and proceeding proximally to the axilla. The tissue is dissected until the vein is located, usually deep in the subcutaneous tissue or even under the fascia. Care is taken to avoid the sensory nerves that almost always cross the vein at mid-arm. All vein branches are ligated and divided. The vein is dissected entirely from the surrounding tissue from the antecubital space to the axilla, paying close attention to avoid venous injury. In order to do so, the vein is dissected above and below these nerves. A separate incision is made over the brachial artery just proximal to the antecubital crease. The brachial veins and adjacent soft tissue are dissected from the artery. Small branches of the artery are encircled with silk ties. Intravenous heparin is administered for anticoagulation. The basilic vein is ligated and divided at the antecubital area. It is then passed out from under the nerves at mid-arm, and placed in a more superficial position. A tunnel is created between the brachial artery incision extending towards the axillary end of the incision that was created for the dissection of the basilic vein. The end of basilic vein is clamped and pulled through the tunnel. The brachial artery is temporarily occluded. A longitudinal arteriotomy is performed. The end of the basilic vein is fashioned in order to perform a cobra-head-shaped anastomosis to the artery, and that is carried out with fine polypropylene suture. Upon finishing the anastomosis and before tying the suture, proximal and distal bleeding is allowed to flush the anastomosis. The suture is tied. A good thrill in the basilic vein in the tunnel indicates adequate flow. The wound is irrigated, hemostasis achieved, and the subcutaneous tissue and skin are closed. The wrist pulse is evaluated and the hand checked for adequate perfusion.

**Post Service** Post-work service begins after skin closure and includes application of dressings, supervising transport to the recovery area, writing postoperative orders, and communicating with family and referring physicians. The operative note is dictated. The patient is checked in the recovery area for hemodynamic stability, homeostasis at the surgical site, and patency of the new dialysis access. Close attention is paid to assuring adequate blood flow to the hand beyond the new access. Postoperative in-hospital work also includes pain management and wound care. Discharge management includes the surgeon's final examination of the patient, instructions for outpatient wound care and pain management, and arrangement for follow-up visits. All post-discharge office visits for 90 days are included in post-service work. This includes wound checks, removal of sutures, arrangement for subsequent graft surveillance studies, and whatever other related diagnostic or therapeutic maneuvers may be necessary.

<b>Presenters</b>	Gary Seabrook, MD and Robert Zwolak, MD				
<b>Specialty</b>	Society for Vascular Surgery				
<b>Sample Size</b>	90.00	<b>Response Rate Percentage</b>	43.00%	<b>Median RVW</b>	14.00
				<b>Type of Sample</b>	Panel
<b>Explanation of Sample Size</b>	N/A				
<b>25th Percentile RVW</b>	12.00	<b>Low</b>	8.93		
<b>75th Percentile</b>	17.50	<b>high</b>	22.00		
<b>Median Pre-Service Time</b>	25.00	<b>Median Intra-Service Time</b>	120.00		
<b>25th Percentile Intra-Svc time</b>	90.00	<b>low2</b>	90.00	<b>high2</b>	180.00
<b>75th Percentile Intra-Svc time</b>	120.00				
<b>Immediate Post Service time</b>	15.00	<b>Immediate Post Service Visits</b>	99231 x 1		
<b>Critical Care time</b>	0.00	<b>Critical Care Visits</b>			
<b>Other Hospital visit time</b>	0.00	<b>Other Hospital Visit</b>			
<b>Discharge Day Mgmt time</b>	25.00	<b>Discharge Day Mgmt Visits</b>	99238		
<b>Office Visit time</b>	25.00	<b>Office Visits</b>	99213 x 1 and 99212 x 1		
<b>Estimates Median Pre-Time</b>	55.00				
<b>Estimates Median Intra-Time</b>	120.00				
<b>Estimates Median Post-Time</b>	65.00				
<b>How was this service previously reported</b>	37799 Unlisted procedure, vascular surgery plus a very small but unknown percentage of the following two hemodialysis access codes: 36821 Arteriovenous anastomosis, direct, and site (eg, Cimino type) (separate procedure). 36825 Creation of arteriovenous fistula by other than direct arteriovenous anastomosis (separate procedure); autogenous graft				
<b>How often do physicians in your specialty perform this service</b>	Sometimes				
<b>Times performed in past year</b>	< 1000				
<b>Do many physicians perform this service across the US</b>	No				

<b>CPT Code</b>	99170	<b>Tracking Number</b>	PI
<b>Tab number</b>	4	<b>Global Period</b>	XXX
<b>Date</b>	May 1999	<b>Recommended RVW</b>	1.75
<b>Issue</b>	Colposcopy/Androscopy		

**RUC Rationale** A new CPT code, 99170, was created to describe Anogenital examination with colposcopic magnification in childhood for suspected trauma. The work involved in using a colposcope in young female and male suspected sexual abuse victims had previously been included in the Evaluation and Management Services. The RUC heard compelling evidence regarding the extensive work and intensity involved in providing this service such as the lengthy process of positioning the child to allow a complete inspection. Since the child often does not remain still, the colposcope must be refocused, the child must be repositioned, and the result is an increase in time required for the examination. Additionally, the implications of making the wrong decision based on the evidence collected during this procedure are quite serious and also contribute to the increased time necessary to perform the procedure and document the findings. The RUC examined the median reported time of 50 minutes and the results of the intensity/complexity measures contained in the summary of recommendation form and agreed that the recommended RVU accurately reflects the level of work involved. The RUC therefore recommends the work RVU of 1.75

**Practice Expense Recomm** The RUC tabled discussion of the practice expense direct inputs submitted by the specialty society. The RUC was concerned that the clinical staff recommended times needed further review by the specialty society. The RUC is therefore not forwarding direct input data for this code.

**CPT Descriptor** Anogenital examination with colposcopic magnification in childhood for suspected trauma

**Vignette** A 3-year-old girl, who has disclosed to her mother that her stepfather has been sexually abusing her by performing penile-vaginal and digital-vaginal penetration, presents for evaluation of suspected child abuse. NOTE: The physician performs two services: 1) a comprehensive physical exam, which reveals an enlarged vaginal opening with a hymenal notch at 6:00 and possible scarring of the posterior fourchette; and 2) An anogenital exam with colposcopic magnification - The work of the comprehensive physical exam is billed separately using an appropriate CPT visit code (992XX). The colposcopic exam is billed using the new CPT code 9918X described above. For this survey, you are being asked to consider ONLY the work for the anogenital exam with colposcopic magnification. For the child described above, this may include such work as alleviating the child's fears about the examination; viewing the anogenital area through the colposcope with the child in supine position and then in knee-chest position; measuring the hymenal orifice diameter and noting abnormal findings. It also may include taking and reviewing slides/photos to ensure that the findings seen on the photographs are consistent with what was seen on the initial examination and that no abnormalities were missed. Documentation of finding is also part of the anogenital exam. However, communication of findings with parents, referring physician/social worker, or legal entities. Is part of the comprehensive exam and is NOT part of the colposcopic exam.

**Pre-Service** Prior to the examination process, the colposcope is set up for the procedure. The 35 mm camera or videocamera is placed on the colposcope. Identifying information on the patient is placed on an identifying card and on the databack on the camera. Prior to the anogenital examination, the physician must address the child's anxiety and fears, especially in females because of the necessity for relaxation in conducting an adequate genital examination. Time is necessary for such calming activities as showing the light from the colposcope on the wall with the examiner alternating between the two shades of light, so that the child can view the light and see that it will not hurt. It is appropriate to drape the older child; however, the younger child may be more frightened by a sheet or gown and may actually want to see what is happening during the examination.

**Intra-Service** The child is typically examined first in supine, frog-legged position, which offers relative comfort for the child and provides the physician with a clear view of the genitalia and anus. This position may be done in the lap of a parent or caretaker on the examination table if the child is too apprehensive. The child lies in a frog-legged position with her legs in full abduction and the feet in apposition. The anogenital area is closely inspected with the aid of the magnification provided by the colposcope, which enhances the ability of the examiner to visualize small and delicate tissues, which would otherwise be inadequately observed. The colposcope is slowly and gradually taken close to the genital area to get out of focus; thereby, increasing the amount of time involved in inspecting the genital area. Separation technique consists of separating the labia majora with slight downward traction. The other examination technique that must be performed is traction, which consists of gently pulling the labia majora towards the examiner, which assists in viewing the hymenal edges, especially when redundant hymenal tissue is present. The labia minora, posterior fourchette, perirethral area, and hymen are all closely inspected to detect any erythema, edema, ecchymoses, petechiae, tears, or any other signs of acute trauma. In addition, signs of healed or chronic trauma, such as scarring, notches, clefts, and hymenal narrowing, must be assessed. All suspicious lesions, which may represent venereal warts or herpes, must be closely examined. The hymenal orifice diameter should also be measured using an intraocular scale or an external measuring device placed within the field of vision. The child often does not remain relaxed, causing the hymenal orifice to decrease in size and making it difficult to obtain an accurate measurement. Visualization of the vascular pattern and any interruption of the mucosal surface can be enhanced via the use of the red-free filter, which casts a green light. In addition, scar tissue may become evident due to its avascular appearance. Varying magnification levels are employed throughout the examination, separation, and traction, so as to obtain closer detail of noted findings. The child is then placed in prone, knee-chest position, to view the anus and any redundant hymenal tissue in the inferior quadrants of the hymen. The colposcope is again brought closer to the child and maneuvered so as to bring the anal and genital areas in focus. The labia majora are separated upward in an effort to visualize the hymenal tissue. Again, any abnormalities of the genital area are noted. The prone, knee-chest position also has the advantage of facilitating visualization of the cervix if the hymenal orifice is of sufficient diameter because the anterior wall of the vagina falls forward. Any foreign bodies in the vaginal canal can be detected and often removed with the child in this position. The perianal region is closely examined to detect fissures, scarring, skin tags, or suspicious lesions, such as venereal warts or herpes. In addition, any dilatation of the anus should be measured vertically and horizontally. It should be noted whether or not the stool is present in the rectal vault if anal dilatation is noted. The perineum should also be attached to the colposcope; photographs are attained during all of the various anogenital examination techniques and positions of the child. Prior to photographing, time is necessary for the physician to discuss with the child such issues as the doctor taking pictures of her with her clothing off only with permission of her parent; that the camera is not the type of camera used at home; the pictures from the colposcope can only be interpreted by medical personnel; and that the child's name is not on the photograph, only identifying numbers (i.e. medical record number). When the colposcopic slides or photographs are developed, they must be reviewed by the physician and documented to note that the findings that were present during the examination can be seen. Care is necessary to objectively document evidence and establish base line information for future reference in the event of continued victimization and/or legal proceedings. Accurate and

complete photodocumentation is also necessary if second opinions are required through review by another physician, so that the child is not subjected to another examination.

<b>Post Service</b>	Follow the procedure, review of the 35 mm slides/photographs must be done to document that the findings noted during the examination process can still be visualized. In addition, any findings seen on the slides/photographs that were not noted at the time of the initial examination must be documented.				
<b>Presenters</b>	V. Denise Everett, MD. Steven Krug, MD.				
<b>Specialty</b>	American Academy of Pediatrics				
<b>Sample Size</b>	193.00	<b>Response Rate Percentage</b>	24.00%	<b>Median RVW</b>	1.75
				<b>Type of Sample</b>	Panel
<b>Explanation of Sample Size</b>	N/A				
<b>25th Percentile RVW</b>	1.14	<b>Low</b>	0.85		
<b>75th Percentile</b>	2.18	<b>high</b>	4.00		
<b>Median Pre-Service Time</b>	0.00	<b>Median Intra-Service Time</b>	50.00		
<b>25th Percentile Intra-Svc time</b>	35.00	<b>low2</b>	15.00	<b>high2</b>	210.00
<b>75th Percentile Intra-Svc time</b>	70.00				
<b>Immediate Post Service time</b>	0.00	<b>Immediate Post Service Visits</b>			
<b>Critical Care time</b>	0.00	<b>Critical Care Visits</b>			
<b>Other Hospital visit time</b>	0.00	<b>Other Hospital Visit</b>			
<b>Discharge Day Mgmt time</b>	0.00	<b>Discharge Day Mgmt Visits</b>			
<b>Office Visit time</b>	0.00	<b>Office Visits</b>			
<b>Estimates Median Pre-Time</b>	0.00				
<b>Estimates Median Intra-Time</b>	50.00				
<b>Estimates Median Post-Time</b>	0.00				
<b>How was this service previously reported</b>	57542 Colposcopy (vaginocopy): (separate procedure)				
<b>How often do physicians in your specialty perform this service</b>	Commonly				
<b>Times performed in past year</b>	20,000				
<b>Do many physicians perform this service across the US</b>	No				

<b>CPT Code</b>	61862	<b>Tracking Number</b>	AA2
<b>Tab number</b>	5	<b>Global Period</b>	090
<b>Date</b>	May1999	<b>Recommended RVW</b>	27.34

**Issue** Deep Brain Stimulation

**RUC Rationale** A series of new codes has been established to replace existing deep brain stimulation codes and to reflect new technology and clinical practice advances. These codes will also eliminate individual current codes that emphasize minor differences in the type of skull opening used to place the electrode tray. CTP code 61862 Twist drill, burr hole, craniotomy, or craniectomy for stereotactic implantation of one neurostimulator array in subcortical site (eg, thalamus, globus pallidus, subthalamic nucleus, periventricular, periaqueductal gray) was established to better model the clinical practice for deep brain stimulation. In considering a relative value of this new code, the RUC took into account the following: 1) Elements of new technology; 2) increased work (time and intensity); 3) Building block comparisons; and 4) Survey responses. It was agreed that this procedure represents new technology in its hardware and target sites for stimulation, and disorders to be treated. The RUC also agreed that this new procedure involves more time than in CPT codes 61855 Twist drill or burr hole(s) for implantation of neurostimulator electrodes; subcortical (work RVU=13.39) and 61865 Craniectomy or craniotomy for implantation of neurostimulator electrodes, cerebral; subcortical (work RVU=22.97). CPT code 61855 will now be deleted and crosswalked to the new code. This is due to the addition of stereotactic localization of the target for stimulation and the need to perform intraoperative stimulation as a test of the safety and effectiveness of the electrode placement. Therefore, the RUC supports the specialty society's work recommendation of 27.34. This value was determined using the building block approach: 1) The stereotactic work is similar to CPT 61795 Stereotactic computer assisted volumetric intracranial procedure (work RVU=4.04); 2) The portion of the work done in the operating room includes those services in the deleted codes based on the estimated frequency of 4:1 (eg, 80% 61855 and 20% 61865)=15.30; and lastly, 3) The final intraoperative element to be included is the testing and repositioning of the electrode array. Using the survey median intraoperative time of 320 minutes and subtracting 120 minutes (for stereotactic work) and 60 minutes (for opening the skull, placing the electrode, and closing after testing, = 140 minutes. This number is equivalent to two hours of critical care management (CPT 99291/99292)=8.00. The sum of these estimates equals the recommended value of 27.34.

**Practice Expense Recommendation** The RUC is not making any practice expense recommendations for these codes. The RUC agreed to table the practice expense recommendations since it was not able to fully evaluate the specialties' recommended crosswalk for these codes.

**CPT Descriptor** Twist drill, burr hole, craniotomy or craniectomy for stereotactic implantation of one neurostimulator electrode array in subcortical site (eg, thalamus, globus, pallidus, subthalamic nucleus, periventricular, periaqueductal gray)

**Vignette** A 45-year-old white male presents with essential tremor that has become quite severe and is disabling. He has had the disease for 8 years and has failed to obtain tremor relief using various oral medications and physical therapy. He is not a candidate for direct brain resection or an ablative brain procedure because of the severity of his tremor and the length of symptoms. He undergoes a trial implantation of one stereotactically-guided deep brain stimulator electrode array in the VIM nucleus of the thalamus.

**Pre-Service** Pre-service work includes review of records and any pertinent imaging studies; communicating with other professionals, patient, and family; and obtaining consent.

**Intra-Service** Prior to surgery, a local anesthetic is administered and a stereotactic frame is attached using pins to anchor the frame to the skull. Care is taken to align the frame with the inferior rim of the orbit and the external auditory meatus and to keep the frame level with the head. The surgeon accompanies the patient to the radiology department to obtain a CT or MRI scan. The surgeon aligns patient in the scanner. After the scans are performed, the surgeon plans the stereotactic surgery with computer assistance. This planning may take one to two hours and includes identifying MRI or CT marker points and the desired target; determining the coordinates for the target; measuring the AC-PC line; and calculating angles. Using a computer, various trajectories for the electrode placement to reach the target are examined before choosing one specific trajectory and calculating the entry point through the skull based upon safety and target coverage considerations and an anatomic atlas of the basal ganglia. After planning is complete, the surgeon accompanies the patient to the OR and positions the patient on the operating table. While the patient is prepped and draped, the surgeon scrubs for the procedure. Under IV sedation, the skin is infiltrated with local anesthetic. A linear incision is made just anterior to the coronal suture. The wound edge is retracted and hemostasis is obtained with monopolar electrocautery. A perforator is used to make a single burr hole 2.5 cm from the midline at the level of the coronal suture. The dura is coagulated with monopolar electrocautery and punctured. Next, components of the frame are assembled and coordinates set. The electrode array is marked for the appropriate depth of placement. The electrode array is passed into the pre-determined site. To establish a baseline, a neurologic examination is performed of relevant patient functions. After the electrode array is stimulated to determine the degree of tremor suppression, the electrode array is repositioned and re-stimulated as many times as necessary to obtain the best degree of tremor suppression and least side effects. Absolute hemostasis is obtained. The electrode array is implanted, attaching the plastic ring and grommet to the burr hole in the skull. The wounds are irrigated with antibiotic solution. If this is to be a one-stage operation (i.e., the stimulator generator is placed at the same operative setting), then the lead is coiled in a subgaleal pocket. The subgaleal and subcutaneous tissues are closed with interrupted 2-0 Vicryl suture. If this is to be a two-stage operation (i.e., the stimulator generator is placed at a later date), then the tail of the electrode is subcutaneously tunneled and exits the scalp at a separate site. Either way, the subcutaneous tissues and skin are closed with deep sutures and staples. Sterile dressings are applied, and the stereotactic frame is removed. The four pin sites are dressed.

**Post Service** Postoperative work includes checking the external connections of the electrode to testing cables; communicating with the family and other health care professionals (including written and oral reports and orders); monitoring the patient's neurological condition for any deficits from either electrode placement and/or the stimulation itself; monitoring for wound infection; and antibiotic and pain medication management. Discharge day management includes the surgeon's final examination of the patient; review with the patient and family of post-discharge continuing care and instructions; and preparation of discharge records. Additionally, all post-discharge office visits for this procedure for 90 days after the day of the operation are considered part of the postoperative work of this procedure; including removal of staples and sutures; monitoring wound healing; and examining the patient in the office at appropriate postoperative intervals to ensure adequate healing of all wounds.

**Presenters** Samuel Hassenbusch, MD (AANS/CNS) and Peter Dempsey, MD (AANS)

Specialty	American Association of Neurological Surgeons/Congress of Neurological Surgeons						
Sample Size	1.00	Response Rate Percentage	57.00%	Median RVW	36.00	Type of Sample	Panel
Explanation of Sample Size							
25th Percentile RVW	31.00	Low	17.00				
75th Percentile	45.00	high	75.00				
Median Pre-Service Time	30.00	Median Intra-Service Time		320.00			
25th Percentile Intra-Svc time	300.00	low2	180.00	high2	420.00		
75th Percentile Intra-Svc time	360.00						
Immediate Post Service time	25.00	Immediate Post Service Visits		99232 x 1			
Critical Care time	0.00	Critical Care Visits					
Other Hospital visit time	20.00	Other Hospital Visit		99231 x 1			
Discharge Day Mgmt time	25.00	Discharge Day Mgmt Visits		99238 x 1			
Office Visit time	80.00	Office Visits		99213 x 4			
Estimates Median Pre-Time	90.00						
Estimates Median Intra-Time	320.00						
Estimates Median Post-Time	150.00						
How was this service previously reported	61855 Twist drill or burr hole(s) for implantation of neurostimulator electrodes; subcortical cerebral; subcortical 61865 Craniectomy or craniotomy for implantation of neurostimulator electrodes, 61795 Stereotactic computer assisted volumetric intracranial procedure (List separately in addition to code for primary procedure) 20660 Application of cranial tongs, caliper, or stereotactic frame, including removal (separate procedure) 64999 Unlisted Procedure, nervous system						
How often do physicians in your specialty perform this service	Sometimes						
Times performed in past year	600						
Do many physicians perform this service across the US	No						

<b>CPT Code</b>	61885	<b>Tracking Number</b>	AA3
<b>Tab number</b>	5	<b>Global Period</b>	090
<b>Date</b>	May 1999	<b>Recommended RVW</b>	8.00

**Issue** Deep Brain Stimulation

**RUC Rationale** A series of new codes has been established to replace existing deep brain stimulation codes and to reflect new technology and clinical practice advances. These codes will also eliminate individual current codes that emphasize minor differences in the type of skull opening used to place the electrode tray. The revision to CPT code 61885 Incision and subcutaneous placement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling; with connection to a single electrode tray and the creation of CPT code 61886 (with connection to two or more electrode arrays) were adopted to reflect changes in clinical practices. Although this procedure is done primarily as a on-stage procedure, the RUC was concerned that there would be double counting of post-service and discharge day work. Therefore, the RUC agreed to subtract the following from 61885's median RVU: (Four office visits at 0.67 RVUs & .32 for the Discharge Day Management) for a recommended RVU of 8.00 for revised CPT Code 61885. The RUC used the same methodology to calculate a work RVU for CPT Code 61886 Incision and subcutaneous placement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling; with connection to two or more electrode arrays. However, the RUC unanimously supported using an RVU of 11.00 as a starting point as it more accurately reflects the work of 61886 rather than the median RVU of 15.00. The RUC supports a work RVU of 8.00 for CPT Code 61886.

**Practice Expense Recommendation** The RUC is not making any practice expense recommendations for these codes. The RUC agreed to table the practice expense recommendations since it was not able to fully evaluate the specialties' recommended crosswalk for these codes.

**CPT Descriptor** Incision and subcutaneous placement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling; with connection to a single electrode array.

**Vignette** A 45-year-old male presents with essential tremor that has become quite severe and is disabling. He has had the disease for 8 years and has failed to obtain tremor relief using various oral medications and physical therapy. He is not a candidate for direct brain resection or an ablative brain procedure because of the severity of his tremor and the length of symptoms. His history also includes implantation of a deep brain stimulator electrode array, which upon stimulation, eliminated 80% of the patient's tremor. He undergoes internalization of the tail of the electrode array and placement and connection of a subcutaneous stimulator generator for long-term brain stimulation.

**Pre-Service** Pre-service work includes review of records and any pertinent imaging studies, including previous deep brain stimulation procedures; examining the tail of the stimulation electrode array for any disconnections or other technical problems (if this is a two-stage operation); communicating with other professionals, patient, and family; and obtaining consent. The pre-operative work also includes dressing, scrubbing, preparing the needed equipment for the procedure, and supervising prepping and draping of the patient. [This implies that the tail of the array was available for such exam before going into surgery, therefore had been externalized to the scalp for testing after initial placement.]

**Intra-Service** Under general anesthesia, the cranial lead is recovered from the subgaleal space. A linear incision is made just below the clavicle over a distance of approximately 3 cm. A subcutaneous pocket is created under this incision. The cephalic wound is re-opened where the electrode array had been placed. A small incision is made at approximately the level of the mastoid and the electrode extension passer is passed from the cephalic wound down a subgaleal tract and out the mastoid wound. Using this passer, the lead is pulled through the subcutaneous tract. The same passer is passed from the mastoid wound down another subcutaneous tract and out the clavicular wound, pulling the electrode tail and extension wire through this subcutaneous tract. A sleeve is placed on the distal tail of the electrode array. The array tail is inserted into the proximal end of the extension wire and tightened. The sleeve is placed over the connection and tied in place with 0-silk suture. The boot and connector are placed in the subgaleal space while the proximal end of the extension wire is secured to the skull. The distal end of the extension wire is inserted into the generator and tightened. Excess extension wire is coiled behind the stimulator generator. The stimulator generator is sutured into place in the subcutaneous tissue. The stimulator is tested, under sterile technique, to determine the impedance of the connections and rule-out and electrical short. The skin and subcutaneous tissues of all wounds are closed with deep sutures and skin staples.

**Post Service** Postoperative work includes application of sterile dressings; checking the entire stimulator system for proper function; communicating with the family and other health care professionals (including written and oral reports and orders); monitoring the patient's neurological condition for any deficits; monitoring for infection; and antibiotic and pain medication management. Discharge day management includes the surgeon's final examination of the patient; review with the patient and family of post-discharge continuing care and instructions; and preparation of discharge records. Additionally, all post-discharge office visits for this procedure for 90 days after the day of the operation are considered part of the postoperative work for this procedure; including removal of staples and sutures; monitoring wound healing; and examining the patient in the office at appropriate postoperative intervals to ensure adequate healing of all wounds and functioning/effectiveness of the stimulator system.

**Presenters** Samuel Hassenbusch, MD (AANS/CNS) and Peter Dempsey, MD (AANS)

**Specialty** American Association of Neurological Surgeons/Congress of Neurological Surgeons

**Sample Size** 51.00 **Response Rate Percentage** 57.00% **Median RVW** 11.00 **Type of Sample** Panel

**Explanation of Sample Size** n/k

**25th Percentile RVW** 8.00 **Low** 5.85



75th Percentile	15.00	high	28.00
Median Pre-Service	30.00	Median Intra-Service Time	60.00
25th Percentile Intra-Svc time	60.00	low2	30.00
75th Percentile Intra-Svc time	90.00	high2	100.00
Immediate Post Service time	25.00	Immediate Post Service Visits	99232 x 1
Critical Care time	0.00	Critical Care Visits	
Other Hospital visit time	20.00	Other Hospital Visit	99231 x 1
Discharge Day Mgmt time	25.00	Discharge Day Mgmt Visits	99238 x 1
Office Visit time	80.00	Office Visits	99213 x 4
Estimates Median Pre-Time	500.00		
Estimates Median Intra-Time	60.00		
Estimates Median Post-Time	150.00		
How was this service previously reported	61885 Incision and subcutaneous placement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling 64999 Unlisted Procedure, nervous system		
How often do physicians in your specialty perform this service	Sometimes		
Times performed in past year	n/a		
Do many physicians perform this service across the US	No		

<b>CPT Code</b>	61886	<b>Tracking Number</b>	AA4
<b>Tab number</b>	5	<b>Global Period</b>	090
<b>Date</b>	May 1999	<b>Recommended RVW</b>	8.00

**Issue** Deep Brain Stimulation

**RUC Rationale** A series of new codes has been established to replace existing deep brain stimulation codes and to reflect new technology and clinical practice advances. These codes will also eliminate individual current codes that emphasize minor differences in the type of skull opening used to place the electrode tray. The revision to CPT code 61885 Incision and subcutaneous placement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling; with connection to a single electrode tray and the creation of CPT code 61886 (with connection to two or more electrode arrays) were adopted to reflect changes in clinical practices. Although this procedure is done primarily as a on-stage procedure, the RUC was concerned that there would be double counting of post-service and discharge day work. Therefore, the RUC agreed to subtract the following from 61885's median RVU: (Four office visits at 0.67 RVUs & .32 for the Discharge Day Management) for a recommended RVU of 8.00 for revised CPT Code 61885. The RUC used the same methodology to calculate a work RVU for CPT Code 61886 Incision and subcutaneous placement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling; with connection to two or more electrode arrays. However, the RUC unanimously supported using an RVU of 11.00 as a starting point as it more accurately reflects the work of 61886 rather than the median RVU of 15.00. The RUC supports a work RVU of 8.00 for CPT Code 61886.

**Practice Expense Recommendation** The RUC is not making any practice expense recommendations for these codes. The RUC agreed to table the practice expense recommendations since it was not able to fully evaluate the specialties' recommended crosswalk for these codes.

**CPT Descriptor** Incision and subcutaneous placement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling; with connection to a single electrode array.

**Vignette** A 35-year-old male presents with bilateral essential tremor that has become quite severe and is disabling. He has had the disease for ten years and has failed to obtain tremor relief using various oral medications and physical therapy. He is not a candidate for direct brain resection or an ablative brain procedure because of the severity of his tremor and the length of symptoms. His history also includes implantation of bilaterally-placed deep brain stimulator electrode arrays, which upon stimulation, eliminated 90% of the patient's tremor. Stimulation of either electrode alone, however, provides only about 80% relief on the one side and no relief on the other side. He undergoes internalization of the tails both electrode arrays and placement and connection of a single subcutaneous stimulator generator for a long-term brain stimulation.

**Pre-Service** Pre-service work includes review of records and any pertinent imaging studies, including previous deep brain stimulation procedures (if this is a two-stage operation); examining the tail of the stimulation electrode array for any disconnections or other technical problems; communicating with other professionals, patient, and family; and obtaining consent. The pre-operative work also includes dressing, scrubbing, preparing the needed equipment for the procedure, and supervising prepping and draping of the patient. [This implies that the tail of the array was available for such exam before going into surgery, thence had been externalized to the scalp for testing after initial placement.]

**Intra-Service** Under general anesthesia or local anesthesia with light sedation, the cranial lead for the first electrode array is recovered from subgaleal space and a 3 cm linear incision is made just below the clavicle on the same side. A subcutaneous pocket is created under this incision. The cephalic wound is re-opened where the ipsilateral electrode array had been placed. A small incision is made at approximately the level of the mastoid and the electrode extension passer is passed from the cephalic wound down a subgaleal tract. The same passer is passed from the mastoid wound down another subcutaneous tract and out the clavicular wound, pulling the catheter and extension wire through this subcutaneous tract. The outer boot is placed on the distal tails of the electrode array. The ipsilateral array tail is inserted into the proximal end of one of the leads in the bifurcated extension wire and tightened. The boot is placed over the connection and tied in place with 0-silk suture. The boot and connector are pulled into the subgaleal space and the proximal end of the bifurcated extension wire is secured to the skull. This same procedure is repeated for the electrode array on the other side, except tunneling the tail of this electrode to the second limb of the bifurcated extension wire. The cranial lead for the second electrode array is recovered from subgaleal space by re-opening the wound where the contralateral electrode array had been placed. A tunnel is made in the subgaleal space from this side over the vertex to the opposite side where the initial array has been attached to the bifurcated extension wire. An outer boot is placed on the distal tail of the second electrode array and the array tail is inserted into the proximal end of the second limb of the bifurcated extension wire and tightened. The boot is placed over the connection and tied in place with 0-silk suture. The boot and connector are in the subgaleal space and the proximal end of the second limb of the bifurcated extension wire is sutured to the skull. The distal end of both leads of the bifurcated extension wire is inserted into the generator and tightened. Excess bifurcated extension wire is coiled behind the stimulator generator. The stimulator generator is sutured into place in the subcutaneous tissue. The stimulator is tested, under sterile technique, to determine the impedance of the connections and rule-out any electrical short. The skin and subcutaneous tissues of all wounds are closed with deep sutures and skin staples.

**Post Service** Postoperative work includes application of sterile dressings; checking the entire stimulator system for proper function; communicating with the family and other health care professionals (including written and oral reports and orders); monitoring the patient's neurological condition for any deficits; monitoring for infection; and antibiotic and pain medication management. Discharge day management includes the surgeon's final examination of the patient; review with the patient and family of post-discharge continuing care and instructions; and preparation of discharge records. Additionally, all post-discharge office visits for this procedure for 90 days after the day of the operation are considered part of the postoperative work for this procedure; including removal of staples and sutures; monitoring wound healing; and examining the patient in the office at appropriate postoperative intervals to ensure adequate healing of all wounds and functioning/effectiveness of the stimulator system.

**Presenters** Samuel Hassenbusch, MD (AANS/CNS) and Peter Dempsey, MD (AANS)

Specialty	American Association of Neurological Surgeons/Congress of Neurological Surgeons				
Sample Size	11.00	Response Rate Percentage	51.00%	Median RVW	15.00
Type of Sample	Panel				
Explanation of Sample Size					
25th Percentile RVW	10.05	Low	4.00		
75th Percentile	19.50	high	35.00		
Median Pre-Service Time	30.00	Median Intra-Service Time	100.00		
25th Percentile Intra-Svc time	90.00	low2	45.00	high2	180.00
75th Percentile Intra-Svc time	120.00				
Immediate Post Service time	25.00	Immediate Post Service Visits	99232 x 1		
Critical Care time	0.00	Critical Care Visits			
Other Hospital visit time	28.00	Other Hospital Visit	99232 x 1		
Discharge Day Mgmt time	30.00	Discharge Day Mgmt Visits	99238 x 1		
Office Visit time	80.00	Office Visits	99213 x 4		
Estimates Median Pre-Time	50.00				
Estimates Median Intra-Time	100.00				
Estimates Median Post-Time	163.00				
How was this service previously reported	61885-50 Incision and subcutaneous placement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling 64999 Unlisted Procedure, nervous system				
How often do physicians in your specialty perform this service	Rarely				
Times performed in past year	n/a				
Do many physicians perform this service across the US	No				

<b>CPT Code</b>	64573	<b>Tracking Number</b>	AA6
<b>Tab number</b>	5	<b>Global Period</b>	090
<b>Date</b>	May 1999	<b>Recommended RVW</b>	7.50

**Issue** Deep Brain Stimulation

**RUC Rationale** A series of new codes has been established to replace existing deep brain stimulation codes and to reflect new technology and clinical practice advances. These codes will also eliminate individual current codes that emphasize minor differences in the type of skull opening used to place the electrode tray. The revised CPT Code 64573 Incision for implantation of neurostimulator electrodes; cranial nerve is an outdated code that is no longer in use. For this reason, the code became part of the review and survey for the deep brain stimulation codes. The new procedure now involves an open operation to place a spiral electrode on the vagal nerve and also include a long area of dissection of the carotid artery. The RUC agreed that the work involved in this service was comparable to the work CPT code 35800 Exploration for postoperative hemorrhage, thrombosis or infection; neck (work RVU=7.02). However, 64573 had additional time, complexity and risk of side effects. The RUC supports the specialty society's recommendation of 7.5 for CPT code 64573.

**Practice Expense Recomm** The RUC is not making any practice expense recommendations for these codes. The RUC agreed to table the practice expense recommendations since it was not able to fully evaluate the specialties' recommended crosswalk for these codes.

**CPT Descriptor** Incision for implantation of neurostimulator electrodes; cranial nerve

**Vignette** A 31-year-old male with a 21 year history of partial complex epilepsy is experiencing 10 to 12 seizures per month and considerable side effects from maximal doses of carbamazepine and sodium valproate. His history includes previous single drug and poly pharmacy drug regimens, but in each case, the number, intensity, and duration of seizures were intolerable. His history also indicates no evidence for non-epileptic seizures under video EEG recording. He undergoes an open operation to implant a neurostimulator electrode on the vagal nerve.

**Pre-Service** Review of records and any pertinent imaging studies, including previous treatments for seizure disorder; communicating with other professionals, patient, and family; and obtaining consent. The pre-operative work also includes dressing, scrubbing, preparing the needed equipment for the procedure, and supervising prepping and draping of the patient.

**Intra-Service** After induction of anesthesia, a curvilinear incision is made on the side of the neck over the sternocleidomastoid (SCM) muscle. The wound edges are retracted with a self-retaining retractor. Hemostasis is obtained. The external jugular vein and SCM muscle are dissected. The carotid sheath is exposed and carefully opened. The vagus nerve is exposed, being careful not to damage either the jugular vein, carotid artery, and laryngeal nerve. Dissection is carried out along the posterior carotid sheath and vagus nerve to expose about 6 cm of the nerve. The stimulator electrode coil is placed by spiraling it around the vagus nerve. The electrode array is tested for good contact with the nerve by measuring electrode impedance. The electrode array is repositioned, as necessary. Absolute hemostasis is obtained and the wound is irrigated with antibiotic solution. The electrode placement and efficacy are tested. The wound is inspected for any bleeding or damage to nerves, veins, and/or arteries. The tail of the electrode is tunneled subcutaneously to permit connection to a neurostimulator generator. The wound is irrigated and closed in layers.

**Post Service** Postoperative work includes application of sterile dressings; checking the entire stimulator system for proper function; communicating with the family and other health care professionals (including written and oral reports and orders); monitoring the patient's neurological condition for any deficits; monitoring for wound infection; and antibiotic and pain medication management. Frequently during the postoperative period, the patient's neurological condition is monitored for any deficits from either electrode placement and/or the stimulation itself and/or from carotid artery, jugular vein, or vagal nerve damage. Discharge day management includes the surgeon's final examination of the patient; review with the patient and family of post-discharge continuing care and instructions; and preparation of discharge records. Additionally, all post-discharge office visits for this procedure for 90 days after the day of the operation are considered part of the postoperative work for this procedure; including removal of staples and sutures; monitoring wound healing; and examining the patient in the office at the appropriate postoperative intervals to ensure adequate healing of all wounds and functioning/effectiveness of the implant.

**Presenters** Samuel Hassenbusch, MD (AANS/CNS) and Peter Dempsey, MD (AANS)

**Specialty** American Association of Neurological Surgeons/Congress of Neurological Surgeons

**Sample Size** 62.00 **Response Rate Percentage** 47.00% **Median RVW** 13.00 **Type of Sample** Panel

**Explanation of Sample Size**

**25th Percentile RVW** 10.50 **Low** 6.00

75th Percentile	16.00	high	18.70		
Median Pre-Service 1	30.00	Median Intra-Service Time	90.00		
25th Percentile Intra-Svc time	85.00	low2	30.00	high2	180.00
75th Percentile Intra-Svc time	110.00	Immediate Post Service Visits	99231		
Immediate Post Service time	20.00	Critical Care Visits			
Critical Care time	0.00	Other Hospital Visit			
Other Hospital visit time	0.00	Discharge Day Mgmt Visits	99238		
Discharge Day Mgmt time	30.00	Office Visits	99231 x 2		
Office Visit time	35.00				
Estimates Median Pre-Time	65.00				
Estimates Median Intra-Time	90.00				
Estimates Median Post-Time	85.00				
How was this service previously reported	64573-22				
How often do physicians in your specialty perform this service	Rarely				
Times performed in past year	>30				
Do many physicians perform this service across the US	No				

<b>CPT Code</b>	93743	<b>Tracking Number</b>	B6
<b>Tab number</b>	6	<b>Global Period</b>	XXX
<b>Date</b>	May 1999	<b>Recommended RVW</b>	1.30
<b>Issue</b>	Electronic Analysis of Pacing Cardioverter-Defibrillator Pacemaker Systems		
<b>RUC Rationale</b>	<p>A series of new CPT codes, 93741-93744 was established to describe the electronic analysis of pacing cardioverter-defibrillator single and dual chamber pacemaker systems (with and without reprogramming). The FDA recently approved a new implantable cardioverter-defibrillator that combines the features of a typical defibrillator with a dual-chamber pacemaker into one device. The current codes do not reflect the more extensive follow-up and additional time and expertise required in the electronic analysis of this combined device. The work involved in CPT Code 93743 Electronic analysis of pacing cardioverter-defibrillator (includes interrogation, evaluation of pulse generator status, evaluation of programmable parameters at rest and during activity where applicable, using electrocardiographic recordings and interpretation of recordings at rest and during exercise, analysis of event markers and device response); dual chamber without reprogramming is very similar to a combination of existing codes 93738 (work RVU=0.92) plus 50% of 93735 (work RVU=0.74) for the additional work. The RUC agreed that the 30% increase in time from CPT 93741 to 93743 supported a 30% increase in work RVU for a dual chamber and that the increase in time between 93743 and 93744 was considered equivalent to 93741 and 93742. Therefore, the RUC supports a work RVU of 1.17 for 93743 and 1.33 for 93744.</p>		
<b>Practice Expense Recommendation</b>	The special society did not offer any recommendations regarding direct practice expense inputs for these codes. As such, no practice expense recommendations will be forwarded by the RUC at this time.		
<b>CPT Descriptor</b>	Electronic analysis of combination ICD/dual-chamber pacemaker system without reprogramming.		
<b>Vignette</b>	A 66-year-old male with coronary artery disease, ischemic cardiomyopathy, cardiac arrest, and sinus node dysfunction has a combination ICD/dual-chamber pacemaker system placed. He returns after experiencing three shocks from the device and shortness of breath with exertion. The device is interrogated and the patient is observed during walking to assess heart-rate response. Stored electrograms from the device are reviewed to determine the cause and appropriateness of the shocks. The findings are reviewed with the patient and family, and the results are documented in the patient's history. A report is generated and sent to the referring physician.		
<b>Pre-Service</b>	A careful history and appropriate physical examination are performed along with review of any pertinent laboratory testing including the results of blood tests, ECG, chest x-ray, and drug levels. The indication and benefits of interrogating the ICD are reviewed with the patient and family, and verbal consent is obtained.		
<b>Intra-Service</b>	The procedure is performed under continuous ECG recording. The device is interrogated to assess program parameters and stored data. The battery voltage and/or charge time may be assessed to confirm adequate battery reserve. The sensing, pacing, and impedance characteristics of the atrial and ventricular lead are assessed. The stored electrograms are reviewed to assess the appropriateness of the shock. The programmed antitachycardia and defibrillation therapies are reviewed. The rate responsiveness aspect of the pacemaker is also assessed while the patient is exercising. The findings are documented in the patient's history, a report is generated, and the results are communicated with the patient, family members, and referring physician.		
<b>Post Service</b>	None.		
<b>Presenters</b>	James D. Maloney - American College of Cardiology		
<b>Specialty</b>	Cardiology		
<b>Sample Size</b>	46.00	<b>Response Rate Percentage</b>	3500.00%
		<b>Median RVW</b>	1.30
<b>Type of Sample</b>			
<b>Explanation of Sample Size</b>	Two hundred randomly selected American members of the North American Society for Pacing and Electrophysiology were asked if they were willing to respond to a survey on the relative value of this procedure. Forty-six responded that they would and they were subsequently sent the survey documents.		
<b>25th Percentile RVW</b>	1.00	<b>Low</b>	0.50
<b>75th Percentile</b>	1.50	<b>high</b>	3.00
<b>Median Pre-Service Time</b>	5.00	<b>Median Intra-Service Time</b>	25.00
<b>25th Percentile Intra-Svc time</b>	23.00	<b>low2</b>	10.00
<b>75th Percentile Intra-Svc time</b>	48.00	<b>high2</b>	280.00
<b>Immediate Post Service time</b>	5.00	<b>Immediate Post Service Visits</b>	
<b>Critical Care time</b>	0.00	<b>Critical Care Visits</b>	
<b>Other Hospital visit time</b>	0.00	<b>Other Hospital Visit</b>	

Discharge Day Mgmt time	0.00	Discharge Day Mgmt Visits	
Office Visit time	33.00	Office Visits	1
Estimates Median Pre-Time	5.00		
Estimates Median Intra-Time	25.00		
Estimates Median Post-Time	38.00		
How was this service previously reported	93737		
How often do physicians in your specialty perform this service	Commonly		
Times performed in past year	32,000		
Do many physicians perform this service across the US	Yes		

<b>CPT Code</b>	93744	<b>Tracking Number</b>	B5
<b>Tab number</b>	6	<b>Global Period</b>	XXX
<b>Date</b>	May 1999	<b>Recommended RVW</b>	1.50
<b>Issue</b>	Electronic Analysis of Pacing Cardioverter-Defibrillator Pacemaker Systems		
<b>RUC Rationale</b>	<p>A series of new CPT codes, 93741-93744 was established to describe the electronic analysis of pacing cardioverter-defibrillator single and dual chamber pacemaker systems (with and without reprogramming). The FDA recently approved a new implantable cardioverter-defibrillator that combines the features of a typical defibrillator with a dual-chamber pacemaker into one device. The current codes do not reflect the more extensive follow-up and additional time and expertise required in the electronic analysis of this combined device. The work involved in CPT Code 93743 Electronic analysis of pacing cardioverter-defibrillator (includes interrogation, evaluation of pulse generator status, evaluation of programmable parameters at rest and during activity where applicable, using electrocardiographic recordings and interpretation of recordings at rest and during exercise, analysis of event markers and device response); dual chamber without reprogramming is very similar to a combination of existing codes 93738 (work RVU=0.92) plus 50% of 93735 (work RVU=0.74) for the additional work. The RUC agreed that the 30% increase in time from CPT 93741 to 93743 supported a 30% increase in work RVU for a dual chamber and that the increase in time between 93743 and 93744 was considered equivalent to 93741 and 93742. Therefore, the RUC supports a work RVU of 1.17 for 93743 and 1.33 for 93744.</p>		
<b>Practice Expense Recommendation</b>	The special society did not offer any recommendations regarding direct practice expense inputs for these codes. As such, no practice expense recommendations will be forwarded by the RUC at this time.		
<b>CPT Descriptor</b>	Electronic analysis of combination ICD/dual-chamber pacemaker system with reprogramming.		
<b>Vignette</b>	<p>A 66-year-old male with coronary artery disease, ischemic cardiomyopathy, cardiac arrest, and sinus node dysfunction has a combination ICD/dual-chamber pacemaker system placed. He returns after experiencing three shocks from the device and shortness of breath with exertion. The device is interrogated and the patient is observed during walking to assess heart-rate response. Stored electrograms from the device are reviewed to determine the cause and appropriateness of the shocks which are found to be due to sinus tachycardia. The ICD and pacemaker are reprogrammed to enhance sensing by using sudden onset criteria and improve exercise performance by adjusting the rate responsive parameters of the dual-chamber pacemaker. The findings are reviewed with the patient and family, and the results are documented in the patient's history. A report is generated and sent to the referring physician.</p>		
<b>Pre-Service</b>	A careful history and appropriate physical examination are performed along with review of any pertinent laboratory testing including the results of blood tests, ECG, chest x-ray, and drug levels. The indication and benefits of interrogation the ICD are reviewed with the patient and family, and verbal consent is obtained.		
<b>Intra-Service</b>	<p>The procedure is performed under continuous ECG recording. The device is interrogated to assess program parameters and stored data. The battery voltage and/or charge time may be assessed to confirm adequate battery reserve. The sensing, pacing, and impedance characteristics of the atrial and ventricular lead are assessed. The stored electrograms are reviewed to assess the appropriateness of the shock and the programmed detection criteria and antitachycardia and defibrillation therapies. The rate responsive aspect of the pacemaker is also assessed while the patient is exercising. The device is reprogrammed to optimize the tachycardia detection criteria, antitachycardia treatment parameters, atrial and ventricular lead sensing and pacing thresholds, and rate responsive characteristics. The patient is then observed during light exercise to assess heart rate response. The findings are documented in the patient's history, a report is generated and the results are communicated with the patient, family members, and referring physician.</p>		
<b>Post Service</b>	None.		
<b>Presenters</b>	James D. Maloney - American College of Cardiology		
<b>Specialty</b>	Cardiology		
<b>Sample Size</b>	46.00	<b>Response Rate Percentage</b>	35.00%
		<b>Median RVW</b>	1.50
		<b>Type of Sample</b>	
<b>Explanation of Sample Size</b>	Two hundred randomly selected American members of the North American Society for Pacing and Electrophysiology were asked if they were willing to respond to a survey on the relative value of this procedure. Forty-six responded that they would and they were subsequently sent the survey documents.		
<b>25th Percentile RVW</b>	1.20	<b>Low</b>	0.50



75th Percentile	<input type="text" value="1.80"/>	high	<input type="text" value="3.40"/>
Median Pre-Service	<input type="text" value="5.00"/>	Median Intra-Service Time	<input type="text" value="33.00"/>
25th Percentile Intra-Svc time	<input type="text" value="30.00"/>	low2	<input type="text" value="15.00"/>
75th Percentile Intra-Svc time	<input type="text" value="49.00"/>	high2	<input type="text" value="80.00"/>
Immediate Post Service time	<input type="text" value="5.00"/>	Immediate Post Service Visits	<input type="text"/>
Critical Care time	<input type="text" value="0.00"/>	Critical Care Visits	<input type="text"/>
Other Hospital visit time	<input type="text" value="0.00"/>	Other Hospital Visit	<input type="text"/>
Discharge Day Mgmt time	<input type="text" value="0.00"/>	Discharge Day Mgmt Visits	<input type="text"/>
Office Visit time	<input type="text" value="34.00"/>	Office Visits	<input type="text" value="1"/>
Estimates Median Pre-Time	<input type="text" value="5.00"/>		
Estimates Median Intra-Time	<input type="text" value="33.00"/>		
Estimates Median Post-Time	<input type="text" value="39.00"/>		
How was this service previously reported	<input type="text" value="93738"/>		
How often do physicians in your specialty perform this service	<input type="text" value="Commonly"/>		
Times performed in past year	<input type="text" value="48,000"/>		
Do many physicians perform this service across the US	<input type="text" value="Yes"/>		

<b>CPT Code</b>	93742	<b>Tracking Number</b>	B4
<b>Tab number</b>	6	<b>Global Period</b>	XXX
<b>Date</b>	May 1999	<b>Recommended RVW</b>	1.10
<b>Issue</b>	Electronic Analysis of Pacing Cardioverter-Defibrillator Pacemaker Systems		
<b>RUC Rationale</b>	<p>A series of new CPT codes, 93741-93744 was established to describe the electronic analysis of pacing cardioverter-defibrillator single and dual chamber pacemaker systems (with and without reprogramming). The FDA recently approved a new implantable cardioverter-defibrillator that combines the features of a typical defibrillator with a dual-chamber pacemaker into one device. The current codes do not reflect the more extensive follow-up and additional time and expertise required in the electronic analysis of this combined device. CPT Code 93742 Electronic analysis of pacing cardioverter-defibrillator (includes interrogation, evaluation of pulse generator status, evaluation of programmable parameters at rest and during activity where applicable, using electrocardiographic recording and interpretation of recordings at rest and during exercise, analysis of event markers and device response); single chamber, with reprogramming is very similar in work to several existing CPT codes, such as CPT 93738 Electronic analysis of cardioverter/defibrillator only (interrogation, evaluation of pulse generator status); with reprogramming (work RVU=0.92) plus 50% of 93735 Electronic analysis of single chamber pacemaker system (includes evaluation of programmable parameters at rest and during activity where applicable, using electrocardiographic recording and interpretation of recordings at rest and during exercise, analysis of event markers and device response); with reprogramming (work RVU=0.74) for the additional work. According to survey data, there is a 14% increase in total time between 93741 and 93742. Therefore, the RUC agreed that 14% should be added to the work value of 93741 to arrive at a recommended work RVU of 1.03 for CPT code 93742.</p>		
<b>Practice Expense Recommendation</b>	The special society did not offer any recommendations regarding direct practice expense inputs for these codes. As such, no practice expense recommendations will be forwarded by the RUC at this time.		
<b>CPT Descriptor</b>	Electronic analysis of combination ICD/single chamber pacemaker system with reprogramming.		
<b>Vignette</b>	<p>A 72-year-old female with spontaneous and electrically inducible ventricular tachycardia and chronic atrial fibrillation has previously undergone insertion of a combination implantable cardioverter defibrillator (ICD)/rate-responsive, single-chamber pacemaker. Because of recurrent ventricular tachycardia, an antiarrhythmic drug is initiated. In follow-up analysis, the device is interrogated to determine the number of defibrillator shocks delivered, the associated shock impedance, and review of the electrograms documenting episodes of tachycardia treated with either antitachycardia pacing or an internal shock. The sensing, pacing, and impedance characteristics along with the rate responsive characteristics of the lead are evaluated. Capacitors are reformed and charge times assessed. Interrogation of the device documents that one shock was delivered for atrial fibrillation, and the maximum heart rate achieved with moderate exercise today is only 80 beats per minute. Therefore, stability criteria is programmed on to help discriminate between atrial fibrillation and ventricular tachycardia, and the rate response parameters are readjusted to allow a more rapid heart rate during exercise. The results of the interrogation are reviewed with the patient and family, documented in the patient's history, and a report is sent to the referring physician.</p>		
<b>Pre-Service</b>	A careful history and appropriate physical examination are performed along with review of any pertinent laboratory testing including the results of blood tests, ECG, chest x-ray, and drug levels. The indication and benefits of interrogating the ICD are reviewed with the patient and family, and verbal consent is obtained.		
<b>Intra-Service</b>	The procedure is performed under continuous ECG recording. The device is interrogated to assess program parameters and stored data. The battery voltage and/or charge time is assessed to confirm adequate battery reserve. The pacing lead impedance, sensing, and pacing thresholds are determined. The patient is walked to assess the rate-responsive settings of the defibrillator/pacemaker. Stored electrogram data documenting treated episodes of ventricular tachycardia or ventricular fibrillation are reviewed to make certain that the device is functioning properly. The device is reprogrammed to optimize the antitachycardia treatment parameters, tachycardia detection criteria, atrial and ventricular lead sensing and pacing thresholds, and rate responsive characteristics. The patient is then observed during light exercise to assess heart rate response. The services are documented, a report is generated, and the results are communicated with the referring physician, patient, and the patient's family.		
<b>Post Service</b>	None.		
<b>Presenters</b>	James D. Maloney - American College of Cardiology		
<b>Specialty</b>	Cardiology		
<b>Sample Size</b>	46.00	<b>Response Rate Percentage</b>	35.00%
		<b>Median RVW</b>	1.10
		<b>Type of Sample</b>	
<b>Explanation of Sample Size</b>	Two hundred randomly selected American members of the North American Society for Pacing and Electrophysiology were asked if they were willing to respond to a survey on the relative value of this procedure. Forty-six responded that they would and they were subsequently sent the survey documents.		
<b>25th Percentile RVW</b>	0.90	<b>Low</b>	0.50

75th Percentile	1.50	high	2.60		
Median Pre-Service Time	5.00	Median Intra-Service Time	30.00		
25th Percentile Intra-Service time	20.00	low2	15.00	high2	60.00
75th Percentile Intra-Service time	41.00	Immediate Post Service Visits			
Immediate Post Service time	3.00	Critical Care Visits			
Critical Care time	0.00	Other Hospital Visits			
Other Hospital visit time	0.00	Discharge Day Mgmt Visits			
Discharge Day Mgmt time	0.00	Office Visits	1		
Office Visit time	32.00				
Estimates Median Pre-Time	5.00				
Estimates Median Intra-Time	30.00				
Estimates Median Post-Time	35.00				
How was this service previously reported	93738				
How often do physicians in your specialty perform this service	Commonly				
Times performed in past year	182,000				
Do many physicians perform this service across the US	Yes				

<b>CPT Code</b>	93741	<b>Tracking Number</b>	B3
<b>Tab number</b>	6	<b>Global Period</b>	XXX
<b>Date</b>	May 1999	<b>Recommended RVW</b>	1.00
<b>Issue</b>	Electronic Analysis of Pacing Cardioverter-Defibrillator Pacemaker Systems		
<b>RUC Rationale</b>	A series of new CPT codes, 93741-93744 was established to describe the electronic analysis of pacing cardioverter-defibrillator single and dual chamber pacemaker systems (with and without reprogramming). The FDA recently approved a new implantable cardioverter-defibrillator that combines the features of a typical defibrillator with a dual-chamber pacemaker into one device. The current codes do not reflect the more extensive follow-up and additional time and expertise required in the electronic analysis of this combined device. The work described by 93741 Electronic analysis of pacing cardioverter-defibrillator (includes interrogation, evaluation of pulse generator status, evaluation of programmable parameters at rest and during activity where applicable, using electrocardiographic recording and interpretation of recordings at rest and during exercise, analysis of event markers and device response); without reprogramming is most similar to the work of 93737 Electronic analysis of cardioverter/defibrillator only (interrogation, evaluation of pulse generator status); without reprogramming (work RVU=0.45) plus 50% of 93734 Electronic analysis of single chamber pacemaker system (includes evaluation of programmable parameters at rest and during activity where applicable, using electrocardiographic recording and interpretation of recording at rest and during exercise, analysis of event markers and device response); without reprogramming (work RVU=0.38) for the additional work. Based on the additional work of 93741 compared to 93737, the RUC commends a work RVU at twice the value of 93737 for a recommendation of .90.		
<b>Practice Expense Recommendation</b>	The special society did not offer any recommendations regarding direct practice expense inputs for these codes. As such, no practice expense recommendations will be forwarded by the RUC at this time.		
<b>CPT Descriptor</b>	Electronic analysis of combination ICD/single-chamber pacemaker system; without reprogramming.		
<b>Vignette</b>	A 72-year-old female with ventricular tachycardia and chronic atrial fibrillation has previously undergone insertion of a combination implantable cardioverter defibrillator (ICD)/rate-responsive, single-chamber pacemaker. Because of recurrent ventricular tachycardia, an antiarrhythmic drug is initiated. In follow-up analysis, the device is interrogated to determine the number of defibrillator shocks delivered, the associated shock impedance, and review of the electrograms documenting episodes of tachycardia treated with either antitachycardia pacing or an internal shock. The sensing, pacing, and impedance characteristics along with the rate responsive characteristics of the lead are evaluated. Capacitors are reformed and charge times assessed. The results of the interrogation are reviewed with the patient and family, documented in the patient's history, and a report is sent to the referring physician.		
<b>Pre-Service</b>	A careful history and appropriate physical examination are performed along with review of any pertinent laboratory testing including the results of blood tests, ECG, chest x-ray, and drug levels. The indication and benefits of interrogating the ICD are reviewed with the patient and family, and verbal consent is obtained.		
<b>Intra-Service</b>	The procedure is performed under continuous ECG recording. The device is interrogated to assess program parameters and stored data. The battery voltage and/or charge time is assessed to confirm adequate battery reserve. The pacing lead impedance, sensing, and pacing thresholds are determined. The patient is walked to assess the rate-responsive settings of the defibrillator/pacemaker. Stored electrogram data documenting treated episodes of ventricular tachycardia or ventricular fibrillation are reviewed to make certain that the device is functioning properly. The services are documented, a report is generated, and the results are communicated with the referring physician, patient, and the patient's family.		
<b>Post Service</b>	None.		
<b>Presenters</b>	James D. Maloney - American College of Cardiology		
<b>Specialty</b>	Cardiology		
<b>Sample Size</b>	46.00	<b>Response Rate Percentage</b>	35.00%
		<b>Median RVW</b>	1.00
		<b>Type of Sample</b>	
<b>Explanation of Sample Size</b>	Two hundred randomly selected American members of the North American Society for Pacing and Electrophysiology were asked if they were willing to respond to a survey on the relative value of this procedure. Forty-six responded that they would and they were subsequently sent the survey documents.		
<b>25th Percentile RVW</b>	0.80	<b>Low</b>	0.50

75th Percentile	1.40	high	2.60		
Median Pre-Service time	5.00	Median Intra-Service Time	23.00		
25th Percentile Intra-Svc time	19.00	low2	10.00	high2	60.00
75th Percentile Intra-Svc time	30.00	Immediate Post Service Visits			
Immediate Post Service time	5.00	Critical Care Visits			
Critical Care time	0.00	Other Hospital Visit			
Other Hospital visit time	0.00	Discharge Day Mgmt Visits			
Discharge Day Mgmt time	0.00	Office Visits	1		
Office Visit time	28.00				
Estimates Median Pre-Time	5.00				
Estimates Median Intra-Time	23.00				
Estimates Median Post-Time	33.00				
How was this service previously reported	93737				
How often do physicians in your specialty perform this service	Commonly				
Times performed in past year	138,000				
Do many physicians perform this service across the US	Yes				

<b>CPT Code</b>	72275	<b>Tracking Number</b>	K5
<b>Tab number</b>	7	<b>Global Period</b>	000
<b>Date</b>	May 1999	<b>Recommended RVW</b>	0.83

**Issue** Epidural or Subarachnoid Spine Injection Procedures

**RUC Rationale** New codes 62310-62319 were developed to systematically organize different routes for injection (subarachnoid, epidural), at different levels (cervical, thoracic, lumbar, caudal), for different substances (narcotic, anesthetic, steroid, antispasmodic). The most difficult of these four procedures is 62318, followed by 62310 and 62319 (approximately equal), and then 62311. Nine current CPT codes were deleted and crosswalked into these four new codes. Additionally, three of the codes include procedures that did not have specific codes assigned: 62310 now includes injection, epidural, cervical of steroid or narcotic; 62318 now includes infusion, epidural, cervical antispasmodic, narcotic or steroid; and 62319 now includes infusion, epidural, lumbar of steroid. It should also be noted that with respect to this codes series, the Harvard post-service data for each of the nine codes being deleted was predicted at 7 to 9 minutes. These services, whether performed in a facility or non-facility, will require frequent post service monitoring of the patient and discharge management. The survey median post-service time for four of the codes (62310 - 62319) ranges from 15-30 minutes, which is two to three times more than Harvard's predicted estimates. Harvard's pre-service time is also lower by 5 to 15 minutes. Harvard's intra service times is only slightly lower than the new codes. Also implemented as a change for CPT 2000 was adoption of a new code to reflect Epidurography, radiological supervision and interpretation. This code was developed to allow for the reporting of radiologic component of epidurography. In evaluating potential relative work value units, the RUC referenced CPT code 72265 Myelography, lumbosacral, radiological supervision and interpretation (work RVU=.83) and also considered survey results. The RUC recommends the median survey value,.83, which is also the same value as the key reference code, though the intensity and complexity values are consistently slightly higher.

**Practice Expense Recommendation** The RUC recommends that the direct inputs associated with code 72265 Myelography, lumbosacral, radiological supervision and interpretation be applied to code 72275.

**CPT Descriptor** Epidurography, radiological supervision and interpretation

**Vignette** 1) A 45-year-old male with extensive rectal carcinoma involving the left lumbosacral plexus has intractable left perirectal pain but has lost much of his control of both bladder and bowel function. Various systemic medications (oral narcotic and non-narcotic), physical therapy, radiation therapy, chemotherapy have all failed to provide significant long-term pain relief. There are no further operative resection possible for the tumor. This patient is a good candidate for a neurolytic injection because of the severity of the pain and the diminished control of bladder and bowel function. A neurolytic injection to ablate the left S2-4 nerve roots is recommended. The injection could be performed subarachnoid or epidural and an epidural approach is selected. A diagnostic epidurogram is performed to define the anatomic extent of the epidural space in this patient, and exclude adhesions or other reasons that the neurolytic substance cannot be delivered to the selected nerve roots. 2) A 62-year-old female with chronic low back pain and a left L4 radiculopathy who is status post multiple lumbar surgeries. She has had a prior epidural steroid injection without significant response. She is referred for a diagnostic epidurogram to exclude epidural adhesion/fibrosis, and possible repeat therapeutic injection.

**Pre-Service** The patient's prior imaging examinations (Radiographs, CT scans, MRI exams, etc.) of the level to be studied are reviewed in order to be familiar with the anatomy, anatomic variants, prior surgery and pathology.

**Intra-Service** The patient is placed on an x-ray table in the prone, oblique or decubitus position. Preliminary fluoroscopy is performed to identify the appropriate level and approach for the initial needle placement, and the skin entry site marked. During the needle/catheter placement (the needle/catheter placement is a separate procedure and separately codeable and should not be considered in your assessment of physician work or practice for this code), Intermittent fluoroscopy is used to confirm the correct, a small test dose of radiographic contrast is injected to confirm proper position. If position is not correct (eg, subarachnoid or venous opacification), additional fluoroscopic guidance is provided during repositioning until proper position is achieved. If catheter is to be placed, additional fluoroscopic guidance is provided during and after the catheter placement to confirm proper position for injection of the full diagnostic dose of contrast. Following epidural space injection of appropriate radiographic contrast (separately codeable and not included in the physician work for this code), multiple radiographic images are obtained from different angles. These images are formally interpreted. The results are discussed with the physician performing the injection procedure (if different than the interpreting physician) to determine if there is any abnormality of the epidural space that would limit the desired distribution of therapeutic substances to be injected.

**Post Service** A report is dictated for the medical record. The findings are discussed with the referring physician and patient.

**Presenters** William T. Thornwarth Jr., M.D. (ACR RUC Advisor) and J. Arliss Pollock, M.D. (ASNR RUC Advisor)

**Specialty** Radiology

**Sample Size** 357.00 **Response Rate Percentage** 11.00% **Median RVW** 0.83 **Type of Sample** Panel

**Explanation of Sample Size**

**25th Percentile RVW** 0.80 **Low** 0.20

75th Percentile	1.28	high	7.50		
Median Pre-Service time	12.50	Median Intra-Service Time	30.00		
25th Percentile Intra-Svc time	15.00	low2	0.00	high2	60.00
75th Percentile Intra-Svc time	30.00	Immediate Post Service Visits			
Immediate Post Service time	2.00	Critical Care Visits			
Critical Care time	0.00	Other Hospital Visit			
Other Hospital visit time	0.00	Discharge Day Mgmt Visits			
Discharge Day Mgmt time	0.00	Office Visits			
Office Visit time	0.00				
Estimates Median Pre-Time	12.50				
Estimates Median Intra-Time	30.00				
Estimates Median Post-Time	2.00				
How was this service previously reported	72265-52 Lumbar Myelography; Supervision and Interpretation-Reduced Service Note: 72240-52 and 72255-52 are used for cervical and thoracic injection; respectively.				
How often do physicians in your specialty perform this service	Sometimes				
Times performed in past year	2,424				
Do many physicians perform this service across the US	Yes				

<b>CPT Code</b>	62310	<b>Tracking Number</b>	K1
<b>Tab number</b>	7	<b>Global Period</b>	000
<b>Date</b>	May 1999	<b>Recommended RVW</b>	2.20

**Issue** Epidural or Subarachnoid Spine Injection Procedures

**RUC Rationale** New codes 62310-62319 were developed to systematically organize different routes for injection (subarachnoid, epidural), at different levels (cervical, thoracic, lumbar, caudal), for different substances (narcotic, anesthetic, steroid, antispasmodic). The most difficult of these four procedures is 62318, followed by 62310 and 62319 (approximately equal), and then 62311. Nine current CPT codes were deleted and crosswalked into these four new codes. Additionally, three of the codes include procedures that did not have specific codes assigned: 62310 now includes injection, epidural, cervical of steroid or narcotic; 62318 now includes infusion, epidural, cervical antispasmodic, narcotic or steroid; and 62319 now includes infusion, epidural, lumbar of steroid. It should also be noted that with respect to this codes series, the Harvard post-service data for each of the nine codes being deleted was predicted at 7 to 9 minutes. These services, whether performed in a facility or non-facility, will require frequent post service monitoring of the patient and discharge management. The survey median post-service time for four of the codes (62310 - 62319) ranges from 15-30 minutes, which is tow to three times more that Harvard's predicted estimates. Harvard's pre-service time is also lower by 5 to 15 minutes. Harvard's intra service times is only slightly lower than the new codes. CPT Code 62310 was createc to report Injection, single (not via indwelling catheter), not including neurolytic substances, with or without contrast (for eith localization or epidurography), of diagnostic or therapeutic substance(s) (including anesthetic, antispasmodic, opioid, steroid, other solution), epidural or subarachnoid; cervical or thoracic. Survey median of 2.20 is recommended for 62310. This is the current RVU for deleted code 62298, most closely related to the new code as it is used in current practice. The RVW is slightly more than the other three codes (62274, 62275, 62288) being crosswalked to this new code, but less than the amount of work for the cervical procedures, which previously would have been coded using 64999. The RUC agreed that the survey median represented a fair balance of the portions of all codes combined.

**Practice Expense Recomm** The RUC commends that the direct inputs associated with code 62298 Injection of substance other than anesthetic, contrast, or neurolytic solutions, epidural, cervical or thoracic (separate procedure) be applied to code 62310.

**CPT Descriptor** Injection, single (no via indwelling catheter), not including neurolytic substances, with or without contrast (for either localization or epidurography), of diagnositic or therapeutic substance(s) (including anesthetic, antispasmodic, opioid, steroid, other solution), epidural or subarachnoid; cervical or thoracic.

**Vignette** A 45-year-old male has severe pain (rated at 8/10) involving both arms and the neck after multipule neck operations over a 10-year period. Various systematic medications (oral narcotic and non-narcotic) and physical therapy have failed to provide significant long-term pain relief. The patient is given a single subarachnoid or epidural narcotic injection in the cervical or thoracic space.

**Pre-Service** Pre-service work includes review of records and any pertinent imaging studies; communicating with other professionals, patient, and family; and obtaining consent. The pre-operative work also includes dressing, scrubbing, and waiting before the procedure, preparing the patient and need equipment for the procedure, positioning the patient on the x-ray table, and draping of the injection site.

**Intra-Service** An injection needle is directed into the subarachnoid or epidural space at the proper vertebral level, possibly under x-ray fluoroscopy. Care has to be taken to aviod damdaging any nerve roots or spinal cord. A contrast injection is performed as necessary to confirm needle tip or catheter location and determine degree of free flow of liquid in the space to assure both safety and accuracy. The theraputic injection(s) is performed through the same needle. The injection needle is removed and dressing is applied.

**Post Service** The patient is closely observed for two to eight hours post-procedure in a monitored setting for any new, unexpected neurologic deficts and/or any change in vital signs (respiratory depression, bradycardia, altered mental status). The physician communicates findings with the patient and other professionals (inlcuding written and telephone reports and orders).

**Presenters** Michael Ashburn, MD (AAPM); Karl Becker, MD (ASA); Peter Dempsey, MD (AANS); Paul Dreyfuss, MD (AAPM&R); Thomas Faciszewski, MD (NASS); Samuel Hassenbusch, MD (AANS/CNS)

**Specialty** American Academy of Pain Medicine, American Academy of Physical Medicine and Rehabilitation, American Society of Anesthesiologists, American Association of Neurological Surg

<b>Sample Size</b>	205.00	<b>Response Rate Percentage</b>	31.00%	<b>Median RVW</b>	2.20	<b>Type of Sample</b>	Random and Panel
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**Explanation of Sample Size**

<b>25th Percentile RVW</b>	1.88	<b>Low</b>	1.51
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75th Percentile	2.50	high	6.00		
Median Pre-Service Time	15.00	Median Intra-Service Time	30.00		
25th Percentile Intra-Service time	20.00	low2	10.00	high2	60.00
75th Percentile Intra-Service time	40.00	Immediate Post Service Visits	99238		
Immediate Post Service time	20.00	Critical Care Visits			
Critical Care time	0.00	Other Hospital Visits			
Other Hospital visit time	0.00	Discharge Day Mgmt Visits			
Discharge Day Mgmt time	0.00	Office Visits			
Office Visit time	0.00				
Estimates Median Pre-Time	35.00				
Estimates Median Intra-Time	30.00				
Estimates Median Post-Time	20.00				
How was this service previously reported	62274 Injection of diagnostic or therapeutic anesthetic or antispasmodic substance (including narcotics); subarachnoid or subdural, single therapeutic anesthetic, antispasmodic, contrast, or neurolytic solutions; subarchnoid (separate procedure) 62275 Injection of diagnostic or therapeutic anesthetic, antispasmodic, contrast, or neurolytic solutions; subarchnoid (separate procedure) 62288 Injection of substance other than anesthetic, contrast, or neurolytic solutions, epidural, cervical or thoracic (separate procedure) 62298 Injection of substance other than anesthetic, contrast, or neurolytic solutions, epidural, cervical or thoracic (separate procedure) 64999 Unlisted procedure, nervous system				
How often do physicians in your specialty perform this service	Sometimes				
Times performed in past year	60,000				
Do many physicians perform this service across the US	Yes				

<b>CPT Code</b>	62311	<b>Tracking Number</b>	K2
<b>Tab number</b>	7	<b>Global Period</b>	000
<b>Date</b>	May 1999	<b>Recommended RVW</b>	1.78

**Issue** Epidural or Subarachnoid Spine Injection Procedures

**RUC Rationale** New codes 62310-62319 were developed to systematically organize different routes for injection (subarachnoid, epidural), at different levels (cervical, thoracic, lumbar, caudal), for different substances (narcotic, anesthetic, steroid, antispasmodic). The most difficult of these four procedures is 62318, followed by 62310 and 62319 (approximately equal), and then 62311. Nine current CPT codes were deleted and crosswalked into these four new codes. Additionally, three of the codes include procedures that did not have specific codes assigned: 62310 now includes injection, epidural, cervical of steroid or narcotic; 62318 now includes infusion, epidural, cervical antispasmodic, narcotic or steroid; and 62319 now includes infusion, epidural, lumbar of steroid. It should also be noted that with respect to this codes series, the Harvard post-service data for each of the nine codes being deleted was predicted at 7 to 9 minutes. These services, whether performed in a facility or non-facility, will require frequent post service monitoring of the patient and discharge management. The survey median post-service time for four of the codes (62310 - 62319) ranges from 15-30 minutes, which is tow to three times more that Harvard's predicted estimates. Harvard's pre-service time is also lower by 5 to 15 minutes. Harvard's intra service times is only slightly lower than the new codes. The CPT Editorial Panel adopted 62311 to describe Injection, single (not via indwelling catheter), not including neurolytic substances, with or without contrast (for either localization or epidurography), of diagnostic or therapeutic substance(s) (including anesthetic, antispasmodic, opioid, steroid, other solution), epidural or subarachnoid; lumbar, sacral (caudal). The survey median of 1.78 is recommended for CPT code 62311. This is the current value for deleted code 62274, which has time and intensity/complexity measure closely related to the new code. The second referenced code 62278 has lower time and intensity/complexity measures across the board as compared with the new code 62311.

**Practice Expense Recommendation** The RUC recommends tha the direct inputs associated with code 62289 Injection of substance other than anesthetic, antispasmodic, contrast, or neurolytic solutions; lumbar or caudal epidural (separate procedure) be applied to code 62311.

**CPT Descriptor** Injection, single (no via indwelling catheter), not including neurolytic substances, with or without contrast (for either localization or epidurography), of diagnostic or therapeutic substance(s) (including anesthetic, antispasmodic, opioid, steroid, other solution), epidural or subarachnoid; lumbar, sacral (caudal)

**Vignette** A 45-year-old male has severe pain (rated at 8/10) involving bith legs and the lower back after multiple back operations over a 10-year period. Various systemic medications (oral narcotic and non-narcotic) and physical therapy have failed to provide significant long-term pain relief. The patient is given a single subarachnoid or epidural narcotic injection in the lumbar or sacral space.

**Pre-Service** Pre-service work includes review of records and any pertinent imaging studies; communicating with other professionals, patient, and family; and obtaining consent. The pre-operative work also includes dressing, scrubbing and waiting before the procedure, preparing the patient and need equipment for the procedure, positioning the patient on the x-ray table, and draping of the injection site.

**Intra-Service** An injection needle is directed into the subarachnoid or epidural space at the proper vertebral level, under x-ray fluoroscopy, as necessary. Care has to be taken to avoid damaging any nerve roots, cauda equina, or spinal cord. A contrast injection is performed as necessary to confirm needle tip or catheter location and determine degree of free flow of liquid in the space to assure both safety and accuracy. The therapeutic injection(s) is performed through the same needle. The injection needle is removed and dressing applied.

**Post Service** The patient is closely observed for two to eight hours post-procedure in a monitored setting for an new, unexpected neurologic deficits and/or any change in vital signs (respiratory depression, bradycardia, altered mental status). The physician communicates findings with the patient and other professionals (including written and telephone reports and orders).

**Presenters** Michael Ashburn, MD (AAPM); Karl Becker, MD (ASA); Peter Dempsey, MD (AANS); Paul Dreyfuss, MD (AAPM&R); Thomas Faciszewski, MD (NASS); Samuel Hassenbusch, MD (AANS/CNS)

**Specialty** American Academy of Pain Medicine, American Academy of Physical Medicine and Rehabilitation, American Society of Anesthesiologists, American Association of Neurological Surgeons

<b>Sample Size</b>	199.00	<b>Response Rate Percentage</b>	32.00%	<b>Median RVW</b>	1.78	<b>Type of Sample</b>	Random and Panel
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**Explanation of Sample Size**

<b>25th Percentile RVW</b>	1.70	<b>Low</b>	1.36
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75th Percentile	<input type="text" value="2.00"/>	high	<input type="text" value="3.20"/>
Median Pre-Service	<input type="text" value="15.00"/>	Median Intra-Service Time	<input type="text" value="20.00"/>
25th Percentile Intra-Svc time	<input type="text" value="15.00"/>	low2	<input type="text" value="10.00"/>
75th Percentile Intra-Svc time	<input type="text" value="30.00"/>	high2	<input type="text" value="60.00"/>
Immediate Post Service time	<input type="text" value="15.00"/>	Immediate Post Service Visits	<input type="text" value="99238"/>
Critical Care time	<input type="text" value="0.00"/>	Critical Care Visits	<input type="text"/>
Other Hospital visit time	<input type="text" value="0.00"/>	Other Hospital Visit	<input type="text"/>
Discharge Day Mgmt time	<input type="text" value="0.00"/>	Discharge Day Mgmt Visits	<input type="text"/>
Office Visit time	<input type="text" value="0.00"/>	Office Visits	<input type="text"/>
Estimates Median Pre-Time	<input type="text" value="35.00"/>		
Estimates Median Intra-Time	<input type="text" value="20.00"/>		
Estimates Median Post-Time	<input type="text" value="15.00"/>		
How was this service previously reported	<div style="border: 1px solid black; padding: 5px;">         62274 Injection of diagnostic or therapeutic anesthetic or antispasmodic substance (including narcotics); subarachnoid or subdural, single          62278 Injection of diagnostic or therapeutic anesthetic or antispasmodic substance (including narcotics); epidural, lumbar or caudal, single          62288 Injection of substance other than anesthetic, contrast, or neurolytic solutions; subarachnoid (separate procedure)          62298 Injection of substance other than anesthetic, antispasmodic, contrast, or neurolytic solutions; lumbar or caudal epidural (separate procedure)       </div>		
How often do physicians in your specialty perform this service	<input type="text" value="Sometimes"/>		
Times performed in past year	<input type="text" value="560,000"/>		
Do many physicians perform this service across the US	<input type="text" value="Yes"/>		

# CPT 2000 RUC Recommendations

<i>CPT Code</i>	<i>Global Period</i>	<i>Coding Change</i>	<i>CPT Date</i>	<i>Main Tab</i>	<i>Issue</i>	<i>Tracking Number</i>	<i>RUC Date</i>	<i>RUC Tab</i>	<i>Specialty Rec</i>	<i>RUC Rec</i>	<i>Same RVU as last year?</i>	<i>MFS</i>	<i>Comments</i>
00100		R	FEB99	R	Anesthesia Procedures							No	
00102		R	FEB99	R	Anesthesia Procedures							No	
00103		R	FEB99	R	Anesthesia Procedures							No	
00214		R	FEB99	R	Anesthesia Procedures							No	
00300		R	FEB99	R	Anesthesia Procedures							No	
00400		R	FEB99	R	Anesthesia Procedures							No	
00420		D	FEB99	R	Anesthesia Procedures							No	
00520		R	FEB99	R	Anesthesia Procedures							No	
00528		R	FEB99	R	Anesthesia Procedures							No	
00740		R	FEB99	R	Anesthesia Procedures							No	
00810		R	FEB99	R	Anesthesia Procedures							No	
00857		R	APR99		Anesthesia Procedures							No	
00918		R	APR99		Anesthesia Procedures							No	
00952		R	APR99		Anesthesia Procedures							No	
00955		R	APR99		Anesthesia Procedures							No	
01000		D	FEB99	R	Anesthesia Procedures							No	
01110		D	FEB99	R	Anesthesia Procedures							No	
01240		D	FEB99	R	Anesthesia Procedures							No	
01300		D	FEB99	R	Anesthesia Procedures							No	
01460		D	FEB99	R	Anesthesia Procedures							No	
01600		D	FEB99	R	Anesthesia Procedures							No	
01700		D	FEB99	R	Anesthesia Procedures							No	
01800		D	FEB99	R	Anesthesia Procedures							No	

<i>CPT Code</i>	<i>Global Period</i>	<i>Coding Change</i>	<i>CPT Date</i>	<i>Main Tab</i>	<i>Issue</i>	<i>Tracking Number</i>	<i>RUC Date</i>	<i>RUC Tab</i>	<i>Specialty Rec</i>	<i>RUC Rec</i>	<i>Same RVU as last year?</i>	<i>MFS</i>	<i>Comments</i>
01900		D	FEB99	R	Anesthesia Procedures		Deletion					No	
01902		D	FEB99	R	Anesthesia Procedures		Deletion					No	
11901	000	R	FEB99	T	Integumentary System/Injectio		Editorial		0.80	0.80	Yes	Yes	
11980		A	DEC98		Hormone Pellet Implantation							Yes	No Recommendation
13102	ZZZ	A	FEB99	2	Integumentary System Repair	A1	MAY99	6	1.24	1.24		Yes	
13122	ZZZ	A	FEB99	2	Integumentary System Repair	A2	MAY99	6	1.44	1.44		Yes	
13133	ZZZ	A	FEB99	2	Integumentary System Repair	A3	MAY99	6	2.19	2.19		Yes	
13153	ZZZ	A	FEB99	2	Integumentary System Repair	A4	MAY99	6	2.38	2.38		Yes	
13300	010	D	MAY98	I	Integumentary System Repair		Deletion					Yes	
15580	090	D	MAY98	I	Integumentary System Repair		Deletion					Yes	
15625	090	D	MAY98	I	Integumentary System Repair		Deletion					Yes	
20926	090	R	NOV98	K	Tissue Grafts		Editorial		5.53	5.53	Yes	Yes	
20979	XXX	A	AUG98	M	Low Intensity Ultrasound Bon	F1	MAY99	27				Yes	No Recommendation
22318	090	A	NOV98	K	Spine Surgery	J1	MAY99	14	21.50	21.50		Yes	
22319	090	A	NOV98	K	Spine Surgery	J2	MAY99	14	24.00	24.00		Yes	
22630	090	R	NOV98	K	Spine Surgery		Editorial	14	20.84	20.84	Yes	Yes	
22840	ZZZ	R	NOV98	K	Spine Surgery		Editorial	14	12.54	12.54	Yes	Yes	
22851	ZZZ	R	NOV98	K	Spine Surgery		Editorial	14	6.71	6.71	Yes	Yes	
26416	090	R	FEB99	6	Extensor Tendon Repair		Editorial		9.37	9.37	Yes	Yes	
27096	000	A	FEB99	11	Sacroiliac Joint/Paravertebral	M1	Editorial	16	1.40	1.40	Yes	Yes	
27429	090	A	APR99	AM	Intra-Articular Repair of Ligam		Editorial		15.52	15.52	Yes	Yes	
29879	090	R	MAY99		Abrasion Arthroplasty		Editorial		8.04	8.04	Yes	Yes	
31505	000	R	MAR99		Diagnostic Laryngoscopy		Editorial		0.61	0.61	Yes	Yes	
31622	000	R	MAR99	F	Bronchoscopy		Editorial		2.67	2.67	Yes	Yes	
31641	000	R	MAR99	T	Bronchoscopy		Editorial		5.03	5.03	Yes	Yes	

<i>CPT Code</i>	<i>Global Period</i>	<i>Coding Change</i>	<i>CPT Date</i>	<i>Main Tab</i>	<i>Issue</i>	<i>Tracking Number</i>	<i>RUC Date</i>	<i>RUC Tab</i>	<i>Specialty Rec</i>	<i>RUC Rec</i>	<i>Same RVU as last year?</i>	<i>MFS</i>	<i>Comments</i>
32001	000	D	FEB99	EC	Total Lung Lavage		Editorial				Yes	Yes	
32997		A	FEB99	22	Total Lung Lavage		Editorial				Yes	Yes	Code Renumbering
33140	090	A	FEB99	J	Transmyocardial Revasculariz	R1	MAY99		20.00	20.00	Yes	Yes	
33208	090	A	MAY99		Insertion of Heart Pacemaker		Editorial		8.13	8.13	Yes	Yes	
33216	090	R	MAY99		Cardioverter, Defibrillator, Pac		Editorial		5.39	5.39	Yes	Yes	
33217	090	R	MAY99		Cardioverter, Defibrillator, Pac		Editorial		5.75	5.75	Yes	Yes	
33218	090	R	MAY99		Cardioverter, Defibrillator, Pac		Editorial		5.44	5.44	Yes	Yes	
33220	090	R	MAY99		Cardioverter, Defibrillator, Pac		Editorial		5.52	5.52	Yes	Yes	
33223	090	R	MAY99		Cardioverter, Defibrillator, Pac		Editorial		6.46	6.46	Yes	Yes	
33240	090	R	MAY99		Cardioverter, Defibrillator, Pac		Editorial		7.60	7.60	Yes	Yes	
33241	090	R	MAY99		Cardioverter, Defibrillator, Pac		Editorial		3.24	3.24	Yes	Yes	
33242	090	D	MAY99		Cardioverter, Defibrillator, Pac		Deletion					Yes	
33243	090	R	MAY99		Cardioverter, Defibrillator, Pac		Editorial		22.64	22.64	Yes	Yes	
33244	090	R	MAY99		Cardioverter, Defibrillator, Pac		MAY99	7	17.00	13.76		Yes	
33245	090	R	MAY99		Cardioverter, Defibrillator, Pac		Editorial		14.30	14.30	Yes	Yes	
33246	090	R	MAY99		Cardioverter, Defibrillator, Pac		Editorial		20.71	20.71	Yes	Yes	
33247	090	D	MAY99		Cardioverter, Defibrillator, Pac		Deletion					Yes	
33249	090	R	MAY99		Cardioverter, Defibrillator, Pac		MAY99	7	15.41	14.23		Yes	
33250	090	A	NOV98		Ablate Heart Dysrhythm Focu		Editorial		21.85	21.85	Yes	Yes	
33251	090	A	NOV98		Ablate Heart Dysrhythm Focu		Editorial		24.88	24.88	Yes	Yes	
33282	090	A	FEB99	Y	Implantation and Removal of	U1	MAY99	8	5.00	4.17		Yes	
33284	090	A	FEB99	Y	Implantation and Removal of	U2	MAY99	8	3.25	2.50		Yes	
33405	090	R	FEB99	Z	Aortic Valve Replacement	V2	MAY99	21	30.61	30.61	Yes	Yes	
33410	090	A	FEB99	Z	Aortic Valve Replacement	V1	MAY99	21	32.46	32.46		Yes	
33968	000	A	AUG98	I	Removal of Intra-Aortic Balloo	D1	FEB99	10	4.00	2.00		Yes	

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35550	000	R	MAY99	EC	Harvest for Vein Bypass		Editorial		0.00	0.00	Yes	Yes	
35879	090	A	FEB99	1	Lower Extremity Arterial Bypa	W1	MAY99	22	16.00	16.00		Yes	
35881	090	A	FEB99	1	Lower Extremity Arterial Bypa	W2	MAY99	22	19.00	18.00		Yes	
36520	000	R	FEB99	2	Extracorporeal Immunadsorpti		Editorial	28	1.74	1.74	Yes	Yes	
36521	000	A	FEB99	2	Extracorporeal Immunadsorpti	X1	MAY99	28				Yes	No Recommendation
36533	010	R	FEB99	3	Central Venous Access		Editorial		5.32	5.32	Yes	Yes	
36534	010	R	FEB99	3	Central Venous Access		Editorial		2.80	2.80	Yes	Yes	
36535	010	R	FEB99	3	Central Venous Access		Editorial		2.27	2.27	Yes	Yes	
36550	XXX	A	FEB99	Q	Vascular Access Device	T1	MAY99	24				Yes	No Recommendation
36819	090	A	FEB99	4	Arteriovenous Anastomosis	Y1	MAY99	23	14.00	14.00		Yes	
36821	090	R	FEB99	4	Arteriovenous Anastomosis	Y2	Editorial		8.93	8.93		Yes	
37250	ZZZ	R	AUG98	S	Intravascular Ultrasound		Editorial		2.10	2.10		Yes	
38120		A	NOV98	I	Laparoscopy/Hemic and Lymph		Editorial					Yes	Code Renumbering
38129		A	NOV98	I	Laparoscopy/Hemic and Lymph		Editorial					Yes	Code Renumbering
38241	XXX	R	FEB99	EC	Bone Marrow/Stem Transplan		Editorial		2.24	2.24	Yes	Yes	
38570		A	NOV98	I	Laparoscopy/Hemic and Lymph		Editorial					Yes	Code Renumbering
38571		A	NOV98	I	Laparoscopy/Hemic and Lymph		Editorial					Yes	Code Renumbering
38572		A	NOV98	I	Laparoscopy/Hemic and Lymph		Editorial					Yes	Code Renumbering
38589		A	NOV98	I	Laparoscopy/Hemic and Lymph		Editorial					Yes	Code Renumbering
39560	090	A	FEB99	I	Resection of Diaphragm	Q1	MAY99		12.00	12.00		Yes	
39561	090	A	FEB99	I	Resection of Diaphragm	Q2	MAY99		17.50	17.50		Yes	
43228	000	R	AUG98	T	Esophagus Endoscopy		Editorial		3.77	3.77	Yes	Yes	
43280		A	NOV98	I	Laparoscopy/Esophagus		Editorial					Yes	Code Renumbering
43289		A	NOV98	I	Laparoscopy/Esophagus		Editorial					Yes	Code Renumbering
43324	090	A	NOV98	I	Revises Esophagus & Stomach		Editorial		16.58	16.58	Yes	Yes	

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43331	090	A	NOV98	I	Revise Esophagus & Stomac				16.23	16.23	Yes	Yes	
43651		A	NOV98	I	Laparoscopy/Stomach							Yes	Code Renumbering
43652		A	NOV98	I	Laparoscopy/Stomach							Yes	Code Renumbering
43653		A	NOV98	I	Laparoscopy/Stomach							Yes	Code Renumbering
43659		A	NOV98	I	Laparoscopy/Stomach							Yes	Code Renumbering
43761	000	R	FEB99	5	Repositioning of Gastric Feedi				2.01	2.01	Yes	Yes	
43830	090	R	NOV98	I	Gastrostomy				7.28	7.28	Yes	Yes	
43832	090	R	NOV98	I	Gastrostomy				11.92	11.92	Yes	Yes	
44005	090	R	NOV98	I	Freeing of Bowel Adhesion				13.84	13.84	Yes	Yes	
44200		A	NOV98	I	Laparoscopy/Enterolysis							Yes	Code Renumbering
44201		A	NOV98	I	Laparoscopy/Jejunostomy							Yes	Code Renumbering
44202		A	NOV98	I	Laparoscopy/Anastomosis							Yes	Code Renumbering
44209		A	NOV98	I	Laparoscopy/Intestine							Yes	Code Renumbering
44970		A	NOV98	I	Laparoscopy/Appendectomy							Yes	Code Renumbering
44979		A	NOV98	I	Laparoscopy/Unlisted							Yes	Code Renumbering
47560		A	NOV98	I	Laparoscopy/Biliary Tract							Yes	Code Renumbering
47561		A	NOV98	I	Laparoscopy/Biliary Tract							Yes	Code Renumbering
47562		A	NOV98	I	Laparoscopy/Biliary Tract							Yes	Code Renumbering
47563		A	NOV98	I	Laparoscopy/Biliary Tract							Yes	Code Renumbering
47564		A	NOV98	I	Laparoscopy/Biliary Tract							Yes	Code Renumbering
47570		A	NOV98	I	Laparoscopy/Biliary Tract							Yes	Code Renumbering
47579		A	NOV98	I	Laparoscopy/Biliary Tract							Yes	Code Renumbering
47605	090	R	NOV98	I	Gallbladder Removal				12.36	12.36	Yes	Yes	
47720	090	R	NOV98	I	Fuse Gallbladder & Bowel				13.38	13.38	Yes	Yes	
49061	090	A	NOV98	I	Percutaneous Drainage of Ab				3.70	3.70	Yes	Yes	



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49320		A	NOV98	I	Laparoscopy/Abdomen								Yes	Code Renumbering
49321		A	NOV98	I	Laparoscopy/Abdomen								Yes	Code Renumbering
49322		A	NOV98	I	Laparoscopy/Abdomen								Yes	Code Renumbering
49323		A	NOV98	I	Laparoscopy/Abdomen								Yes	Code Renumbering
49329		A	NOV98	I	Laparoscopy/Abdomen								Yes	Code Renumbering
49650		A	NOV98	I	Laparoscopy/Repair								Yes	Code Renumbering
49651		A	NOV98	I	Laparoscopy/Repair								Yes	Code Renumbering
49659		A	NOV98	I	Laparoscopy/Repair								Yes	Code Renumbering
50280	090	A	NOV98	I	Removal of Kidney Lesion				15.67	15.67	Yes		Yes	
50300	XXX	R	FEB99	7	Removal of Donor Kidney				0.00	0.00	Yes		Yes	
50320	090	R	FEB99	7	Donor Nephrectomy				21.22	21.22	Yes		Yes	
50405	090	R	MAR99		Removal of Donor Kidney				23.93	23.93	Yes		Yes	
50541	090	A	FEB99	7	Laparoscopic Urological Proc	Z6	MAY99	13	16.00	16.00			Yes	
50544	090	A	FEB99	7	Laparoscopic Urological Proc	Z5	MAY99	13	22.40	22.40			Yes	
50546	090	A	FEB99	7	Laparoscopic Urological Proc	Z8	MAY99	13	20.48	20.48			Yes	
50547	090	A	NOV98	I	Laparoscopic Donor Nephrect		FEB99	12	25.50	25.50			Yes	
50548	090	A	FEB99	7	Laparoscopic Urological Proc	Z7	MAY99	13	24.40	24.40			Yes	
50549	090	A	NOV98	I	Laparoscopic Urological Proc								Yes	Code Renumbering
50630	090	R	MAR99		Removal of Ureter Stone				14.94	14.94	Yes		Yes	
50945	090	A	FEB99	7	Laparoscopic Urological Proc	Z1	MAY99	13	17.00	17.00	Yes		Yes	
51990	090	A	FEB99	7	Laparoscopic Urological Proc	Z2	MAY99	13	12.50	12.50	Yes		Yes	
51992	090	A	FEB99	7	Laparoscopic Urological Proc	Z3	MAY99	13	14.01	14.01	Yes		Yes	
54100	000	R	FEB99	6	Penile Biopsy				1.90	1.90	Yes		Yes	
54690	090	A	NOV98	I	Laparoscopic Urological Proc				10.96	10.96	Yes		Yes	Code Renumbering
54692	090	A	FEB99	7	Laparoscopic Urological Proc	Z4	MAY99	13	12.88	12.88	Yes		Yes	

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54699	090	A	NOV98	I	Laparoscopic Urological Proc		MAY99	13				Yes	Code Renumbering
55550		A	NOV98	I	Laparoscopy/Spermatic Cord		Editorial				Yes	Yes	Code Renumbering
55559		A	NOV98	I	Laparoscopy/Spermatic Cord		Editorial				Yes	Yes	Code Renumbering
56300		D	NOV98	I	Laparoscopy/Hysteroscopy		Editorial					Yes	Code Renumbering
56301		D	NOV98	I	Laparoscopy/Hysteroscopy		Editorial					Yes	Code Renumbering
56302		D	NOV98	I	Laparoscopy/Hysteroscopy		Editorial					Yes	Code Renumbering
56303		D	NOV98	I	Laparoscopy/Hysteroscopy		Editorial					Yes	Code Renumbering
56304		D	NOV98	I	Laparoscopy/Hysteroscopy		Editorial					Yes	Code Renumbering
56305		D	NOV98	I	Laparoscopy/Hysteroscopy		Editorial					Yes	Code Renumbering
56306		D	NOV98	I	Laparoscopy/Hysteroscopy		Editorial					Yes	Code Renumbering
56307		D	NOV98	I	Laparoscopy/Hysteroscopy		Editorial					Yes	Code Renumbering
56308		D	NOV98	I	Laparoscopy/Hysteroscopy		Editorial					Yes	Code Renumbering
56309		D	NOV98	I	Laparoscopy/Hysteroscopy		Editorial					Yes	Code Renumbering
56310		D	NOV98	I	Laparoscopy/Hysteroscopy		Editorial					Yes	Code Renumbering
56311		D	NOV98	I	Laparoscopy/Hysteroscopy		Editorial					Yes	Code Renumbering
56312		D	NOV98	I	Laparoscopy/Hysteroscopy		Editorial					Yes	Code Renumbering
56313		D	NOV98	I	Laparoscopy/Hysteroscopy		Editorial					Yes	Code Renumbering
56314		D	NOV98	I	Laparoscopy/Hysteroscopy		Editorial					Yes	Code Renumbering
56315		D	NOV98	I	Laparoscopy/Hysteroscopy		Editorial					Yes	Code Renumbering
56316		D	NOV98	I	Laparoscopy/Hysteroscopy		Editorial					Yes	Code Renumbering
56317		D	NOV98	I	Laparoscopy/Hysteroscopy		Editorial					Yes	Code Renumbering
56318		D	NOV98	I	Laparoscopy/Hysteroscopy		Editorial					Yes	Code Renumbering
56320		D	NOV98	I	Laparoscopy/Hysteroscopy		Editorial					Yes	Code Renumbering
56321		D	NOV98	I	Laparoscopy/Hysteroscopy		Editorial					Yes	Code Renumbering
56322		D	NOV98	I	Laparoscopy/Hysteroscopy		Editorial					Yes	Code Renumbering

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56323		D	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
56324		D	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
56340		D	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
56341		D	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
56342		D	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
56343		D	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
56344		D	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
56345		D	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
56346		D	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
56347		D	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
56348		D	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
56349		D	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
56350		D	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
56351		D	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
56352		D	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
56353		D	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
56354		D	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
56355		D	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
56356		D	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
56362		D	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
56363		D	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
56399		D	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
57288	090	A	MAR99		Laparoscopic Urological				13.02	13.02	Yes	Yes	
58550		A	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
58551		A	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering

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58555		A	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
58558		A	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
58559		A	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
58560		A	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
58561		A	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
58562		A	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
58563		A	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
58578		A	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
58579		A	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
58605	090	R	NOV98	I	Division of Fallopian Tubes				3.34	3.34	Yes	Yes	
58615	010	R	NOV98	I	Division of Fallopian Tubes				3.90	3.90	Yes	Yes	
58660		A	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
58661		A	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
58662		A	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
58670		A	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
58671		A	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
58672		A	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
58673		A	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
58679		A	NOV98	I	Laparoscopy/Hysteroscopy							Yes	Code Renumbering
58740	090	R	NOV98	I	Lysis of Adhesions				5.83	5.83	Yes	Yes	
58760	090	A	NOV98	I	Lysis of Adhesions				13.13	13.13	Yes	Yes	
58770	090	A	NOV98	I	Lysis of Adhesions				13.97	13.97	Yes	Yes	
58900	090	A	NOV98	I	Biopsy of Ovary				5.99	5.99	Yes	Yes	
59898		A	NOV98	I	Maternity Care and Delivery							Yes	Code Renumbering
60650		A	NOV98	21	Laparoscopic Adrenalectomy							Yes	Code Renumbering

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60659		A	NOV98	21	Laparoscopic Procedure		Editorial						Yes	Code Renumbering
61751	090	R	FEB99	10	Deep Brain Stimulation	AA1	Editorial		17.62	17.62	Yes		Yes	
61795	ZZZ	R	FEB99	10	Deep Brain Stimulation		Editorial		4.04	4.04	Yes		Yes	
61850	090	R	MAR99		Deep Brain Stimulation		Editorial		12.39	12.39	Yes		Yes	
61855	090	D	FEB99		Deep Brain Stimulation		Deletion						Yes	
61860	090	R	MAR99		Deep Brain Stimulation		Editorial		20.87	20.87	Yes		Yes	
61862	090	A	FEB99	10	Deep Brain Stimulation	AA2	MAY99	18		27.34	Yes		Yes	
61865	090	D	FEB99	10	Deep Brain Stimulation		Deletion						Yes	
61885	090	R	FEB99	10	Deep Brain Stimulation	AA3	MAY99	18	8.00	8.00	Yes		Yes	
61886	090	A	FEB99	10	Deep Brain Stimulation	AA4	MAY99	18	8.00	8.00	Yes		Yes	
62263	010	A	FEB99	K	Percutaneous Lysis of Epidur	S1	MAY99	17	7.20	7.20	Yes		Yes	
62273	000	R	NOV98	X	Epidural or Subarachnoid Spi		Editorial	15	2.15	2.15	Yes		Yes	
62274		D	NOV98	X	Spine Injection Procedures		Deletion						Yes	
62275		D	NOV98	X	Spine Injection Procedures		Deletion						Yes	
62276		D	NOV98	X	Spine Injection Procedures		Deletion						Yes	
62277		D	NOV98	X	Spine Injection Procedures		Deletion						Yes	
62278		D	NOV98	X	Spine Injection Procedures		Deletion						Yes	
62279		D	NOV98	X	Spine Injection Procedures		Deletion						Yes	
62280	090	R	NOV98	X	Epidural or Subarachnoid Spi		Editorial	15	2.63	2.63	Yes		Yes	
62282	010	R	NOV98	X	Epidural or Subarachnoid Spi		Editorial	15	2.33	2.33	Yes		Yes	
62287		R	NOV98	X	Spine Surgery		Editorial							
62288		D	NOV98	X	Spine Injection Procedures		Deletion						Yes	
62289		D	NOV98	X	Spine Injection Procedures		Deletion						Yes	
62291		R	FEB99	11	Sacroiliac Joint/Paravertebral		Editorial		2.91	2.91	Yes		Yes	
62298		D	NOV98	X	Spine Injection Procedures		Deletion						Yes	

<i>CPT Code</i>	<i>Global Period</i>	<i>Coding Change</i>	<i>CPT Date</i>	<i>Main Tab</i>	<i>Issue</i>	<i>Tracking Number</i>	<i>RUC Date</i>	<i>RUC Tab</i>	<i>Specialty Rec</i>	<i>RUC Rec</i>	<i>Same RVU as last year?</i>	<i>MFS</i>	<i>Comments</i>
62310	000	A	NOV98	X	Epidural or Subarachnoid Spi	K1	MAY99	15		2.20		Yes	
62311	000	A	NOV98	X	Epidural or Subarachnoid Spi	K2	MAY99	15	1.78	1.78		Yes	
62318	000	A	NOV98	X	Epidural or Subarachnoid Spi	K3	MAY99	15	2.35	2.35		Yes	
62319	000	A	NOV98	X	Epidural or Subarachnoid Spi	K4	MAY99	15	2.15	2.15		Yes	
63030	090	R	NOV98	K	Spine Surgery		Editorial		12.00	12.00	Yes	Yes	
63056		R	NOV98	K	Spine Surgery		Editorial		20.36	20.36	Yes	Yes	
64400	000	D	FEB99	11	Sacroiliac Joint/Paravertebral		Deletion					Yes	
64441	000	D	FEB99	11	Sacroiliac Joint/Paravertebral		Deletion					Yes	
64442	000	D	FEB99	11	Sacroiliac Joint/Paravertebral		Deletion					Yes	
64443	ZZZ	D	FEB99	11	Sacroiliac Joint/Paravertebral		Deletion					Yes	
64450	000	R	NOV98	X	Sacroiliac Joint/Paravertebral		Editorial		1.27	1.27	Yes	Yes	
64470	000	A	FEB99	11	Sacroiliac Joint Paravertebral	M3	MAY99	16	1.85	1.85		Yes	
64472	ZZZ	A	FEB99	11	Sacroiliac Joint Paravertebral	M4	MAY99	16	1.29	1.29		Yes	
64475	000	A	FEB99	11	Sacroiliac Joint Paravertebral	M5	MAY99	16	1.41	1.41	Yes	Yes	Code Renumbering
64476	ZZZ	A	FEB99	11	Sacroiliac Joint Paravertebral	M6	MAY99	16	0.98	0.98	Yes	Yes	Code Renumbering
64479	000	A	FEB99	11	Sacroiliac Joint Paravertebral	M7	MAY99	16	2.20	2.20	Yes	Yes	
64480	ZZZ	A	FEB99	11	Sacroiliac Joint Paravertebral	M8	MAY99	16	1.54	1.54	Yes	Yes	
64483	000	A	FEB99	11	Sacroiliac Joint Paravertebral	M9	MAY99	16	1.90	1.90	Yes	Yes	
64484	ZZZ	A	FEB99	11	Sacroiliac Joint Paravertebral	M10	MAY99	16	1.33	1.33	Yes	Yes	
64573	090	R			Deep Brain Stimulation	AA6	MAY99	18	4.43	7.50		Yes	
64622	010	R	FEB99	11	Sacroiliac Joint Paravertebral		Editorial	16	3.00	3.00	Yes	Yes	
64623	ZZZ	R	FEB99	11	Sacroiliac Joint Paravertebral		Editorial	16	0.99	0.99	Yes	Yes	
64626	010	A	FEB99	11	Sacroiliac Joint Paravertebral	M11	MAY99	16	3.50	3.28	Yes	Yes	
64627	ZZZ	A	FEB99	11	Sacroiliac Joint Paravertebral	M12	MAY99	16	1.16	1.16	Yes	Yes	
67220	000	R	FEB99	X	Destruction of Localized Lesio		Editorial		1.13	1.13	Yes	Yes	

<i>CPT Code</i>	<i>Global Period</i>	<i>Coding Change</i>	<i>CPT Date</i>	<i>Main Tab</i>	<i>Issue</i>	<i>Tracking Number</i>	<i>RUC Date</i>	<i>RUC Tab</i>	<i>Specialty Rec</i>	<i>RUC Rec</i>	<i>Same RVU as last year?</i>	<i>MFS</i>	<i>Comments</i>
72275	000	A	NOV98	X	Sacroiliac Joint Paravertebral		Editorial		0.83	0.83	Yes	Yes	
72285	XXX	R	FEB99	X	Sacroiliac Joint Paravertebral		MAY99	16		1.16	Yes	Yes	
73542	XXX	A	FEB99	11	Sacroiliac Joint Paravertebral	M2	MAY99	16	0.64	0.64	Yes	Yes	
76005	XXX	A	FEB99	11	Sacroiliac Joint Paravertebral	M13	MAY99	16		0.60	Yes	Yes	
76513	XXX	R	FEB99	13	Ophthalmic Ultrasound		Editorial		0.66	0.66	Yes	Yes	
76873	XXX	A	NOV98	N	Prostate Volume Study	NI	MAY99	12	2.13	1.92		Yes	
77380	XXX	D	FEB99	9	Proton Beam Delivery		Deletion					Yes	
77381	XXX	D	FEB99	9	Proton Beam Delivery		Deletion					Yes	
77419	XXX	D	MAY98	O	Radiation Treatment		Deletion					Yes	
77420	XXX	D	MAY98	O	Radiation Treatment		Deletion					Yes	
77425	XXX	D	MAY98	O	Radiation Treatment		Deletion					Yes	
77427	XXX	A	MAY98	O	Radiation Treatment	C1	FEB99	13	3.31	3.31		Yes	
77430	XXX	D	MAY98	O	Radiation Treatment		Deletion					Yes	
77499	XXX	R	MAR99		Radiation Treatment		Editorial		0.00	0.00	Yes	Yes	
77520		A	FEB99	9	Proton Beam Delivery		Editorial					No	Renumbering of Code
77523		A	APR99		Proton Beam Delivery		Editorial					No	Renumbering of Code
78195	XXX	R	FEB99	11	Lymph Glands Imaging		Editorial		1.20	1.20	Yes	Yes	
78267		A	MAY99		Urea Breath Test -C-14						Yes	No	September 1999 RUC meeting
78268		A	MAY99		Urea Breath Test -C-14						Yes	No	September 1999 RUC meeting
78456	XXX	A	FEB99	14	Acute Thrombosis Imaging		MAY99	25	1.00	1.00		Yes	
78457	XXX	R	FEB99	14	Acute Thrombosis Imaging		Editorial		0.77	0.77	Yes	Yes	
80048	XXX	A	MAY99	N	Basic Metabolic Panel							No	Medicare Clinical Lab Fee Sched
80049		D	MAY99		Basic Metabolic panel		Deletion					No	Medicare Clinical Lab Fee Sched
80053		A	MAY99	N	Comprehensive Metabolic Pa							No	Medicare Clinical Lab Fee Sched
80054		D	MAY99		Comprehensive Metabolic Pa		Deletion					No	Medicare Clinical Lab Fee Sched

<i>CPT Code</i>	<i>Global Period</i>	<i>Coding Change</i>	<i>CPT Date</i>	<i>Main Tab</i>	<i>Issue</i>	<i>Tracking Number</i>	<i>RUC Date</i>	<i>RUC Tab</i>	<i>Specialty Rec</i>	<i>RUC Rec</i>	<i>Same RVU as last year?</i>	<i>MFS</i>	<i>Comments</i>
80058		D	FEB99	N	Hepatic Panel							No	Medicare Clinical Lab Fee Sched
80059		D	FEB99	N	Hepatitis Panel		Deletion					No	Medicare Clinical Lab Fee Sched
80069		A	NOV98	P	Renal Function Panel							No	Medicare Clinical Lab Fee Sched
80074		A	FEB99	N	Acute Hepatitis Panel							No	Medicare Clinical Lab Fee Sched
80076		A	MAY99		Hepatic Function Panel							No	Medicare Clinical Lab Fee Sched
80091		D	AUG98		Thyroid Panel		Deletion					No	Medicare Clinical Lab Fee Sched
80092		D	MAY99		Thyroid Panel		Deletion					No	Medicare Clinical Lab Fee Sched
82120		A	FEB99	22	Vaginal pH and Amines Test							No	Medicare Clinical Lab Fee Sched
83013	XXX	R	MAY99		Helicobacter pylori, breath test		Editorial					No	Medicare Clinical Lab Fee Sched
86588		D	MAY99		Streptococcus Screen -							No	Medicare Clinical Lab Fee Sched
86915		R	FEB99	24	Bone Marrow		Editorial					No	Medicare Clinical Lab Fee Sched
87338		A	FEB99	16	Helicobacter Pylori							No	Medicare Clinical Lab Fee Sched
88148		R	FEB99	13	Cytopathology Smears		Editorial					No	Medicare Clinical Lab Fee Sched
90378		A	FEB99	26	Immune Globulin		Editorial					No	Medicare Clinical Lab Fee Sched
90471	XXX	R	FEB99	25	Immunization Administration	CC1			0.20	0.17		Yes	
90472	ZZZ	R	MAY99	25	Immunization Administration	CC2			0.18	0.15		Yes	
90744		R	MAR99		Hepatitis Vaccine							No	Medicare Clinical Lab Fee Sched
90745		D	FEB99	26	Vaccines		Deletion					No	Medicare Clinical Lab Fee Sched
90782		R	FEB99	26	Prophylactic/Intramuscular Inj							No	Medicare Clinical Lab Fee Sched
90799		R	MAY99	26	Prophylactic or diagnostic inje		Editorial					No	Medicare Clinical Lab Fee Sched
92961	000	A	AUG98	R	IntraCardiac Cardioversion	G1	FEB99	9	4.60	4.60		Yes	
92978	ZZZ	R	AUG98	S	Intravascular Ultrasound		Editorial		1.80	1.80	Yes	Yes	
93640	000	R	MAR99		Cardioverter Defibrillator Pace		Editorial		3.52	3.52	Yes	Yes	
93641	000	R	MAR99		Cardioverter Defibrillator Pace		Editorial		5.93	5.93	Yes	Yes	
93642	000	R	MAR99		Cardioverter Defibrillator Pace		Editorial		4.89	4.89	Yes	Yes	



<i>CPT Code</i>	<i>Global Period</i>	<i>Coding Change</i>	<i>CPT Date</i>	<i>Main Tab</i>	<i>Issue</i>	<i>Tracking Number</i>	<i>RUC Date</i>	<i>RUC Tab</i>	<i>Specialty Rec</i>	<i>RUC Rec</i>	<i>Same RVU as last year?</i>	<i>MFS</i>	<i>Comments</i>
93727	XXX	A	FEB99	Y	Cardioverter Defibrillator Pace	U3	MAY99	8	0.63	0.52		Yes	
93741	XXX	A	MAR99	X	Electronic Analysis of Pacing	B3	FEB99	8	1.00	0.90		Yes	
93742	XXX	A	MAY98	X	Electronic Analysis of Pacing	B4	FEB99	8	1.10	1.03		Yes	
93743	XXX	A	MAR99	X	Electronic Analysis of Pacing	B5	FEB99	8	1.30	1.17		Yes	
93744	XXX	A	MAY98	X	Electronic Analysis of Pacing	B6	FEB99	8	1.50	1.33		Yes	
95816	XXX	R	FEB99	16	Neurology & Neuromuscular P		Editorial		1.08	1.08	Yes	Yes	
95819	XXX	R	FEB99	16	Neurology & Neuromuscular P		Editorial		1.08	1.08	Yes	Yes	
95831	XXX	R	MAR99		Neurology & Neuromuscular P		Editorial		0.28	0.28	Yes	Yes	
95870	XXX	R	FEB99	17	Needle EMG		Editorial		0.37	0.37	Yes	Yes	
95900	XXX	R	FEB99	1B	Nerve Conduction Studies		Editorial		0.42	0.42	Yes	Yes	
95904	XXX	R	FEB99	1B	Nerve Conduction Studies		Editorial		0.34	0.34	Yes	Yes	
95961	XXX	R	FEB99	1C	Deep Brain Stimulation		Editorial		2.97	2.97	Yes	Yes	
95962	ZZZ	R	FEB99	1C	Deep Brain Stimulation		Editorial		3.21	3.21	Yes	Yes	
95970	XXX	R	FEB99	23	Electronic Analysis of Implant		Editorial		0.45	0.45	Yes	Yes	
95971	XXX	R	FEB99	23	Electronic Analysis of Implant		Editorial		0.78	0.78	Yes	Yes	
95972	XXX	R	FEB99	23	Electronic Analysis of Implant		Editorial		1.50	1.50	Yes	Yes	
95973	XXX	R	FEB99	23	Electronic Analysis of Implant		Editorial		0.92	0.92	Yes	Yes	
96570	ZZZ	A	AUG98	T	Photodynamic Therapy	H1	MAY99	26				Yes	No Recommendation
96571	ZZZ	A	AUG98	T	Photodynamic Therapy	H2	MAY99	26				Yes	No Recommendation
99170	XXX	A	NOV98	H	Colposcopy/Androscopy	P1	MAY99	10	1.75	1.75		Yes	
99173	XXX	A	NOV98	G	Vision Screening Test	O1	MAY99	9	0.20			Yes	No Recommendation
99199		R	NOV98	H	Unlisted Special Service		Editorial					Yes	
99285	XXX	R	AUG98	U	Emergency Dept. Visit		Editorial		3.06	3.06	Yes	Yes	
99291	XXX	R	MAY99	12	Critical Care							Yes	September 1999 RUC meeting
99292	ZZZ	R	MAY99	12	Critical Care							Yes	September 1999 RUC meeting

<i>CPT Code</i>	<i>Global Period</i>	<i>Coding Change</i>	<i>CPT Date</i>	<i>Main Tab</i>	<i>Issue</i>	<i>Tracking Number</i>	<i>RUC Date</i>	<i>RUC Tab</i>	<i>Specialty Rec</i>	<i>RUC Rec</i>	<i>Same RVU as last year?</i>	<i>MFS</i>	<i>Comments</i>
99295	XXX	R	MAY99	12	Neonatal Critical Care							Yes	September 1999 RUC meeting
99296	XXX	R	MAY99	12	Neonatal Critical Care							Yes	September 1999 RUC meeting
99297	XXX	R	MAY99	12	Neonatal Critical Care							Yes	September 1999 RUC meeting

**AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE**  
**SUMMARY OF RECOMMENDATIONS**  
**May 1999**

**ACUTE THROMBOSIS IMAGING**

***Work Relative Value Recommendations***

A new code was developed CPT 78456, to report *Acute venous thrombosis imaging, peptide*. The new procedure uses a systematically injected radiolabeled peptide that binds to activated platelets for imaging acute thrombosis. Prior to the creation of this code, there were no codes to report this procedure. It was recommended that physicians report the services under CPT 78499 *Unlisted cardiovascular procedure, diagnostic nuclear medicine*.

The services reported under CPT 78456 were recently introduced following FDA approval of the radiopharmaceutical this year. The procedure can be performed in any inpatient or outpatient nuclear medicine facility with a standard scintillation imaging camera. The new procedure is imaging of an acute thrombosis. In this way, it is somewhat analogous to CPT code 78455 *Venous thrombosis study (eg radioactive fibrinogen)* (work RVU= .73). Code 78455 represents another method for finding a venous clot with an agent that binds to an acute clot. The difference between the two procedures is that the new code uses a radioactive contrast agent that does not need to be monitored over several days time after injection for new clot formation, and that it is an imaging and not a non-imaging study.

When considering potential work relative units, the RUC discussed values for similar reference codes, such as CPT 78278 *Acute gastrointestinal blood loss imaging* (work RVU=.99) and CPT 78585 *Pulmonary perfusion imaging, particulate, with ventilation; rebreathing and washout, with or without single breath* (work RVU=1.09). They also considered physician survey results, and agreed that the survey median for physician work was an accurate value for the new procedure.

The RUC therefore recommends a rvu of 1.00 for the physician work component of the new code.

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### ***Practice Expense Recommendations***

Since this is a new code there currently are no direct inputs associated with this code. The specialty developed the direct input recommendations using a small consensus panel that examined CPEP data for similar codes. The RUC accepted the direct input recommendations but deleted three supplies; the saline, i.v. infusion set, and the angiocatheter. See the attached direct input summary of recommendation form.

<b>CPT Code (•New)</b>	<b>Tracking Number</b>	<b>CPT Descriptor</b>	<b>Global Period</b>	<b>Work RVU Recommendation</b>
●78456	BB1	Acute venous thrombosis imaging, peptide	XXX	1.00
▲78457		Venous thrombosis imaging, (eg, venogram); unilateral	XXX	.77 (No Change)
▲78458		bilateral	XXX	.90 (No Change)

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## Physician Work Data

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF RECOMMENDATION

CPT Code: 784XX Tracking Number: BB1 Global Period: XXX Recommended RVW: 1.00

CPT Descriptor: Acute venous thrombosis imaging, peptide

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey:

65-year-old man with congestive heart failure, pedal edema and right calf pain and tenderness. Ultrasound is equivocal for deep vein thrombosis (DVT).

70-year-old woman with diabetes, prior history of DVT in left leg, presents with left leg swelling, redness, pain and calf tenderness. Ultrasound shows venous disease in left leg, but one cannot distinguish old vs. new clot from the images.

Description of Pre-Service Work:

- \*Review history and physical exam.
- \*Review prior imaging studies.
- \*Discuss procedure with patient.
- \*Order the radiopharmaceutical
- \*Include the work of injecting the radiopharmaceutical if you perform the injection. Otherwise, include the work of supervising the injection.

Description of Intra-Service Work:

- \*Supervise image acquisition.
- \*Supervise processing of the data.
- \*Analyze and reprocess data as necessary.
- \*Monitor and interpret results of study.
- \*Compare results in relation to current diagnosis and future treatment, if appropriate.

Description of Post-Service Work:

- \*Dictate, correct and sign report.
- \*Discuss and communicate report/findings with referring physician(s) and patient.

SURVEY DATA:

Presenter(s) Society of Nuclear Medicine

Specialty(s): Nuclear Medicine

Sample Size: 147 Response Rate: (%) 23% Median RVW: 1.00

Type of Sample (Circle One): random, panel, convenience. Explanation of sample size: SNM House of Delegates, list from manufacturer of physicians who have purchased radiopharmaceutical.

25th Percentile RVW: 0.87 75th Percentile RVW: 1.18 Low: 0.70 High: 1.50

**KEY REFERENCE SERVICE:**

<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
78278	Acute gastrointestinal blood loss imaging	0.99
78585	Pulmonary perfusion imaging, particulate, with ventilation; rebreathing and washout, with or without single breath	1.09

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Compare the total physician time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. Make certain that you are including the data from the service that you are rating as well as the key reference services.

**TIME ESTIMATES (Median)**

	<u>CPT Code</u>	<u>Reference Service 78278</u>	<u>Reference Service 78585</u>
Median Physician Time	30.00	27.50	20.00

**INTENSITY/COMPLEXITY MEASURES (Mean)****Mental Effort and Judgement (Mean)**

The number of possible diagnosis and/or the number of management options that must be considered	2.94	3.25	3.14
--	------	------	------

The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.35	3.38	3.57
--	------	------	------

Urgency of medical decision making	4.09	4.63	4.43
------------------------------------	------	------	------

**Technical Skill/Physical Effort (Mean)**

Technical skill required	3.53	3.63	3.71
--------------------------	------	------	------

Physical effort required	2.65	2.88	3.00
--------------------------	------	------	------

**Psychological Stress (Mean)**

The risk of significant complications, morbidity and/or mortality	3.41	3.63	3.43
---	------	------	------

Outcome depends on the skill and judgement of physician	4.09	4.50	4.29
---	------	------	------

Estimated risk of malpractice suit with poor outcome	3.76	3.88	4.43
--	------	------	------

Time Segments (Mean)

Intensity/complexity	3.53	3.63	3.43
----------------------	------	------	------

**ADDITIONAL RATIONALE**

Describe the process by which your specialty society reached your final recommendation.

The recommended RVW (1.00) represents the median final RVW based on the data received from the survey sample. The SNM Reimbursement Sub-committee reviewed the data and determined that the data from the sample was valid.

**FREQUENCY INFORMATION**

How was this service previously reported? 78499 Unlisted cardiovascular procedure, diagnostic nuclear medicine

How often do physicians in your specialty perform this service? XXX Commonly        Sometimes  
       Rarely

Estimate the number of times this service might be provided nationally in a one-year period? > 100,000

Do many physicians perform this service across the United States? XXX Yes     No



## Practice Expense Data

**AMA/SPECIALTY SOCIETY UPDATE PROCESS  
SUMMARY OF RECOMMENDATION**

Tracking Number: BB1 Global Period: XXX  
 Sample Size: \_\_\_\_\_ Response Rate (%): \_\_\_\_\_ Data determined by consensus panel  
 Reference Code 1 78806 Reference Code 2 78585

**IN-OFFICE**

CLINICAL LABOR	Pre-Service Time	Intra-Service Time	Total Post-Service Time*	Number of Office Visits	Total Time of Office Visits
RN					
LPN					
MA					
Other (list) Nuclear Medicine Technician	90**	110*	20†		
Other (list)					
Other (list)					

\*Including visit time

\*\*Pre-service includes 75 minutes of radiopharmaceutical preparation and quality control and 15 minutes for greeting and positioning the patient, explaining the procedure and room preparation.

\*Intra-service includes injecting and positioning the patient, and imaging time.

†Post-services includes processing data, verifying the study with the physician, discharging the patient, radiation monitoring, and cleaning the room.

MEDICAL SUPPLIES	Quantity of Supplies	Units Used for Purchase	Included in HCFA list?*
Gloves, non-sterile	1	pair	Yes
Chux	1		Yes
Film 8 x 10	4		Yes
Patient gown, disposable	1		Yes
Swab, alcohol	2		Yes
Band aid, ½" x 3"	2		Yes
Gauze, 2" x 2"	2		Yes
<del>Saline, 9%, 500 ml</del>	<del>1</del>	<del>100 ml</del>	<del>Yes</del>
Syringe, 3cc, 20 to 20 gauge needle	2		Yes
<del>i.v. infusion set</del>	<del>1</del>		<del>Yes</del>
<del>Angiocatheter 20 to 26g</del>	<del>1</del>		<del>Yes</del>
Film developer/cost per exposure	4		Yes
Syringe, 20 cc	1		Yes

MEDICAL SUPPLIES	Quantity of Supplies	Units Used for Purchase	Included in HCFA list?*
Drape, sheet	2		Yes
Folder, patient	1		No - \$.34
ID tabs, patient	2		No - \$.10
Film, jacket	1		Yes
Scan (manila) folder	1		No - \$.05
Forms	2		No - \$.02
Labels, film	4		No - \$.02
Floppy diskette	1		Yes
3-way stopcock	1		Yes

\*If supply is not included in HCFA list, please estimate a price.

PROCEDURE SPECIFIC MEDICAL EQUIPMENT	Minutes of Use per Procedure	Number of Hours per Week in Operation
Single head or dual head camera	110	36
Dose calibrator w/ lead glass shield & Ce-137 standard	5	40
Laser printer	1	40
Bar phantom		
Heavy duty imaging table	120	36

OVERHEAD MEDICAL EQUIPMENT	Minutes of Use per Procedure	Number of Hours per Week in Operation
Crash cart, with defibrillator		
X-ray view box 4 panel		
Processor (wet or dry)		
Lead safe		
Cobalt-57 sheet flood source		
Survey meter		
Dictation equipment		
Wheelchair		

**AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE**  
**SUMMARY OF RECOMMENDATIONS**  
**May 1999**

**AORTIC VALVE REPLACEMENT**

***Work Relative Value Recommendations***

A new CPT code, 33410, was adopted to report *Replacement, aortic valve, with cardiopulmonary bypass; with stentless tissue valve*. This type of procedure is performed on patients with aortic valve stenosis or aortic valve insufficiency.

Stentless aortic valves represent a new generation of aortic valve prosthesis. Due to their design, they lack the rigid stent and sewing ring of older valves. Their flexibility and three-dimensional character requires a more complex insertion technique, involving suturing at both the inlet and outlet portions of the valve. The new code reflects new technology in that the stentless valve and the sizing and insertion techniques are new.

The procedures are currently being reported under CPT 33405 (with a-22 modifier) and CPT 33406. CPT 33405 describes *Replacement, aortic valve, with cardiopulmonary bypass; with prosthetic valve other than homograft* (work RVU=30.61). CPT code 33405 reflects the insertion of aortic valve prosthesis with a sewing cuff, thus involving only a single interrupted or continuous suture line. Insertion of a stentless aortic valve involves not only a lower annular suture line, but also an upper outlet suture line. The Medicare work values assigned to CPT 33405 are not adequate, thus necessitating the use of Modifier -22.

Similarly, CPT 33406 *Replacement, aortic valve, with cardiopulmonary bypass; with homograft valve (freehand)* (work RVU=32.30) is a more difficult type of insertion involving a freehand style using a homograft valve. Physicians commented and RUC members agreed that the total work, intensity, skill, and time are similar to the stentless implantations, but that the code descriptor does not fit the stentless valve insertion.

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In developing a final work relative value recommendation, the RUC considered the comparability of CPT 33406, but also agreed that the physician work involved in the new code CPT (33410) was more difficult of a procedure to perform. As such, it was the consensus of the RUC that a rvu of 32.46 represented a fair and accurate value for CPT 33410.

### ***Practice Expense Recommendations***

No practice information was submitted for these codes. As such, the RUC does not have any formal practice expense recommendations at this time.

<b>CPT Code (•New)</b>	<b>Tracking Number</b>	<b>CPT Descriptor</b>	<b>Global Period</b>	<b>Work RVU Recommendation</b>
▲33405	V2	Replacement, aortic valve, with cardiopulmonary bypass; with prosthetic valve other than homograft <u>or stentless valve</u>	090	30.61 (No Change)
●33410	V1	with stentless tissue valve	090	<b>32.46</b>

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## Physician Work Data

**AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF RECOMMENDATION**

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CPT Code: 3341X Tracking Number: V1 Global Period: 090 Recommended RVW: 33.50

CPT Descriptor: Replacement, aortic valve, with cardiopulmonary bypass; with stentless tissue valve

Typical Patient/Service: A 62-year-old man is seen complaining of shortness of breath, fatigue, and dizziness. He is found at cardiac catheterization to have calcific aortic stenosis with a 60 mm Hg gradient across the aortic valve and massive left ventricular hypertrophy with normal coronary arteries. The commissure between the left and right cusp was moderately fused. Recommendation is that patient undergo operation for replacement of the aortic valve.

Description of Pre-Service Work: The surgical contact with the patient starts with a preoperative history and physical and immediate past history within 24 hours of the operation to reassess the patient's condition prior to taking him/her to the operating room. Medical decision-making involves assessing the patient's immediate surgical risk. In patients with aortic valve disease, this entails a high level of judgment, intensity and risk on the part of the surgeon.

Description of Intra-Service Work: The heart is exposed through a complete or partial median sternotomy. Cardiopulmonary bypass is established, and the aorta is cross-clamped. Cardioplegia is administered, either antegrade, retrograde, or a combination of both. The aorta is opened through a transverse aortotomy placed above the sinotubular junction, and the native aortic valve is removed in total. The sinotubular junction and annulus are sized, and an appropriate sized stentless valve is chosen and rinsed. As the valve is being rinsed, sutures are placed at the annular level, and then these sutures are placed through the inlet portion of the stentless valve, which is lowered and tied into position. Care is taken at this point to orient the valve appropriately to avoid compromise of the left and right coronary ostia. The commissural posts are then sutured to the aortic wall above the sinotubular junction and the remaining outlet portions of the valve are sutured into position. The aortotomy is closed, and following removal of air from the heart, the aortic cross-clamp is released. Following the resumption of normal cardiac function, the patient is weaned from bypass.

Description of Post-Service Work: With the surgical team in attendance, the patient is transported to the intensive care unit. Bleeding and wound drainage are monitored and managed. The patient's respiratory status is carefully monitored as are hemodynamics and vital signs. If stable, in approximately 8-12 hours, the patient is then transferred to the step-down unit where monitoring of drains and drips, cardiorespiratory, and is required. The patient is transferred to the floor where he/she receives daily visits to assess the wound, respiratory status, and hemodynamic status. The surgeon and his team then follow the patient in the office, monitoring pain, infection, wound healing, and respiratory status.

**SURVEY DATA:**

Presenter(s) Sidney Levitsky, M.D.

Specialty(s): Society of Thoracic Surgeons/American Association for Thoracic Surgery

Sample Size: 50 Response Rate: (%): 46% (23) Final Median RVW: 33.50

Type of Sample (Circle One): random, panel, convenience. Explanation of sample size: Cardiac surgeons specializing in this type of procedure

25th Percentile RVW: 33 75th Percentile RVW: 35.50 Low: 32.0 High: 65

Median Pre-Service Time: 30 min Median Intra-Service Time: 210 min

25th Percentile Intra-Svc Time: 200 min 75th Percentile Intra-Svc Time: 270 min Low: 120 min  
High: 330 min

Median Post-Service Time: Total Time Level of Service by CPT Code  
(List # of Visits)

Day of Procedure: 50 min 2 x 99291

Critical care: see above

Other Hospital Visit: 100 min 6 x 99231

Discharge Day Mgmt: \_\_\_\_\_

Office: 45 min 3 x 99213

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**KEY REFERENCE SERVICE:**

<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
33411	Replacement, aortic valve; with aortic annulus enlargement, noncoronary cusp	32.47
33405	Replacement, aortic valve, with cardiopulmonary bypass	30.61

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including the data from the service that you are rating as well as the key reference services.**

**TIME ESTIMATES (Median)**

	<u>CPT Code</u>	<u>Reference Service 1</u>	<u>Reference Service 2</u>
	395X1	33411	33405
Median Pre-Time (day of procedure)	30 min	30 min	30 min
Median Intra-Time	210 min	205 min	210 min
Median Post-Time (day of procedure)	60 min	30 min	60 min

**INTENSITY/COMPLEXITY MEASURES (Mean)****Mental Effort and Judgement (Mean)**

The number of possible diagnosis and/or the number of management options that must be considered	4.00	3.83	3.78
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.74	3.67	3.89
Urgency of medical decision making	3.22	3.50	3.33

**Technical Skill/Physical Effort (Mean)**

Technical skill required	4.78	4.17	4.44
Physical effort required	4.39	4.00	4.11

**Psychological Stress (Mean)**

The risk of significant complications, morbidity and/or mortality	4.39	4.17	4.11
Outcome depends on the skill and judgement of physician	4.65	4.25	4.11
Estimated risk of malpractice suit with poor outcome	3.70	3.42	3.89

#### INTENSITY/COMPLEXITY MEASURES

	<u>CPT Code</u>	<u>Reference Service 1</u>	<u>Reference Service 2</u>
<u>Time Segments (Mean)</u>			
Pre-Service intensity/complexity	3.36	3.00	3.67
Intra-Service intensity/complexity	4.59	3.92	4.56
Post-Service intensity/complexity	3.45	3.08	3.78

#### ADDITIONAL RATIONALE

Describe the process by which your specialty society reached your final recommendation. The consensus committee recommends the median RVW of 33.50. We felt that this was a very tight survey with small differences between the 25<sup>th</sup> and 75<sup>th</sup> percentile rankings.

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#### FREQUENCY INFORMATION

How was this service previously reported? 33405-22; 33999

How often do physicians in your specialty perform this service? Commonly Sometimes Rarely

Estimate the number of times this service might be provided nationally in a one-year period? >800 cases/year

Do many physicians perform this service across the United States? Yes x No

**AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE**  
**SUMMARY OF RECOMMENDATIONS**  
**May 1999**

**ARTERIOVENOUS ANASTOMOSIS (BASILIC VEIN TRANSPOSITION)**

***Work Relative Value Recommendations***

A new code was adopted for inception into CPT 2000: Code 36819 *Arteriovenous anastomosis, open; by basilic vein transposition*. Creation of an arteriovenous fistula using transposition of the basilic vein above the elbow is a procedure that has been used intermittently for many years. The frequency of this operation is increasing as the dialysis population grows and as clinicians realize the improved utility of all autogenous hemodialysis access. Basilic vein transposition entails much more work than placement of non-autogenous upper arm graft since it requires complete dissection of the entire basilic vein from the antecubital crease up to the axilla.

In describing the procedure, the RUC compared the new code to two existing CPT codes: 36821 and 36825. CPT code 36821 *Arteriovenous anastomosis, direct, any site (eg, Cimino type) (separate procedure)* (work RVU= 8.93) involves direct anastomosis of a vein to an artery, usually at the wrist, with only a moderate amount of arterial and venous dissection. The Cimino fistula does not involve extensive dissection, as does the basilic vein transposition. The basilic vein is much deeper in the soft tissue and almost always has overlying nerves that must be preserved. The basilic vein transposition procedures require a complete, longitudinal vein dissection for the entire length of the upper arm, creation of a tunnel, and relocation of the vein into the new, more superficial location. None of these maneuvers are part of CPT 36821.

In its review of the new procedure, the RUC also considered CPT code 36825 *Creation of arteriovenous fistula by other than direct arteriovenous anastomosis (separate procedure); autogenous graft* (work RVU= 9.84). CPT code 36825 defines a different service than basilic vein transposition. Code 36825 involves placement of a “graft,” and there is no such graft in basilic vein transposition.

Also with respect to physician work, the RUC considered the comparison code of 36830 *Creation of arteriovenous fistula by other than direct arteriovenous anastomosis (separate procedure); nonautogenous graft* (work RVU = 12.00). The new service requires 30 minutes more operative time and a few minutes more pre and post time than the comparison code 36830, which is the most commonly performed dialysis access operation. All mental effort, judgement, technical skill and psychological stress parameters are greater in the new code because the basilic vein must be handled with extreme care to avoid injury, while the synthetic conduit in code 36830 is nearly indestructible.

In appraising potential work relative values, the RUC considered the survey median of 14.00. Also, given the increase in time and other related factors, the RUC agreed that the relative value units for code 36819 should be approximately 2 rvu's greater than that of CPT 36830.

The RUC therefore recommends a work RVU of 14.00 for CPT code 36819.

### ***Practice Expense Recommendations***

Since this is a new code there is currently no direct input data associated with this code. The specialty chose to crosswalk this code to an existing code which is similar not only in the physician work involved but also has direct inputs that the specialty believes is representative of the expenses associated with the new code. The RUC therefore recommends that the direct inputs associated with code 36830 *Creation of arteriovenous fistula by other than direct arteriovenous anastomosis (separate procedure); nonautogenous graft* also apply to code 36819.

<b>CPT Code (•New)</b>	<b>Tracking Number</b>	<b>CPT Descriptor</b>	<b>Global Period</b>	<b>Work RVU Recommendation</b>
●36819	Y1	Arteriovenous anastomosis, open; by basilic vein transposition	090	14.00
▲36821	Y2	<del>Arteriovenous anastomosis</del> , direct, any site (eg, Cimino type) (separate procedure)	090	8.93 ( No Change)

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## Physician Work Data

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF WORK RECOMMENDATION

April 1999

Recommended RVW: 14.00

CPT (tracking): 3681X (Y1)

Global: 090

Descriptor: Arteriovenous anastomosis, open, by basilic vein transposition

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**Vignette Used in Survey:**

A 38-year-old diabetic female requires hemodialysis for chronic renal failure due to diabetic nephropathy. She has no superficial veins of adequate size to perform an arteriovenous Cimino-type fistula at the wrist. Pre-service work includes review of all preoperative studies. At operation a basilic vein transposition is performed to provide a fully autogenous dialysis access. Post-service work includes postoperative in-hospital care plus all related outpatient care for 90 days.

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**CLINICAL DESCRIPTION OF SERVICE** (This work description was NOT provided on the survey.):

**Description of Pre-Service Work:**

Pre-service work begins after the decision to operate is made, from the day before the operation until the time of the procedure. This activity includes obtaining and reviewing the previous work-up, with special attention to potential cardiovascular risks; and consulting with the referring physician, the anesthesiologist to determine the best anesthetic choice for this less common upper arm operation, and other health care professionals as needed within 24 hours prior to the operation. In addition, the surgeon reviews operative risks and benefits with the patient (and/or the patient's family) in order to obtain informed consent. Preoperative work also includes dressing, scrubbing, and waiting to begin the operation; supervising the positioning, prepping, and draping of the patient; and ensuring that the necessary surgical instruments and supplies are present and available in the operative suite.

**Description of Intra-Service Work:**

At operation, a skin incision is made over the approximate location of the basilic vein starting at the elbow and proceeding proximally to the axilla. The tissue is dissected until the vein is located, usually deep in the subcutaneous tissue or even under the fascia. Care is taken to avoid the sensory nerves that almost always cross the vein at mid-arm. All vein branches are ligated and divided. The vein is dissected entirely from the surrounding tissue from the antecubital space to the axilla, paying close attention to avoid venous injury. In order to do so, the vein is dissected above and below these nerves. A separate incision is made over the brachial artery just proximal to the antecubital crease. The brachial veins and adjacent soft tissue are dissected from the artery. Small branches of the artery are encircled with silk ties. Intravenous heparin is administered for anticoagulation. The basilic vein is ligated and divided at the antecubital area. It is then passed out from under the nerves at mid-arm, and placed in a more superficial position. A tunnel is created between the brachial artery incision extending towards the axillary end of the incision that was created for the dissection of the basilic vein. The end of the basilic vein is clamped and pulled through the tunnel. The brachial artery is temporarily occluded. A longitudinal arteriotomy is performed. The end of the basilic vein is fashioned in order to perform a cobra-head-shaped anastomosis to the artery, and that is carried out with fine polypropylene suture. Upon finishing the anastomosis and before tying the suture, proximal and distal bleeding is allowed to flush the anastomosis. The suture is tied. A good thrill in the basilic vein in the tunnel indicates adequate flow. The wound is irrigated, hemostasis achieved, and the subcutaneous tissue and skin are closed. The wrist pulse is evaluated and the hand checked for adequate perfusion.

**Description of Post-Service Work:**

Post-service work begins after skin closure and includes application of dressings, supervising transport to the recovery area, writing postoperative orders, and communicating with family and referring physicians. The operative note is dictated. The patient is checked in the recovery area for hemodynamic stability, homeostasis at the surgical site, and patency of the new dialysis access. Close attention is paid to assuring adequate blood flow to the hand beyond the new access. Postoperative in-hospital work also includes pain management and wound care. Discharge management includes the surgeon's final examination of the patient, instructions for outpatient wound care and pain management, and arrangement for follow-up visits. All post-discharge office visits for 90 days are included in post-service work. This includes wound checks, removal of sutures, arrangement for subsequent graft surveillance studies, and whatever other related diagnostic or therapeutic maneuvers may be necessary.

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**SURVEY DATA****Presenters:** Gary Seabrook, MD and Robert Zwolak, MD**Specialty:** Society for Vascular Surgery**Sample Size:** 90      **Response Rate (No. and %):** 39 (43%)**Type of Sample:** ~~random~~ Panel ~~convenience~~

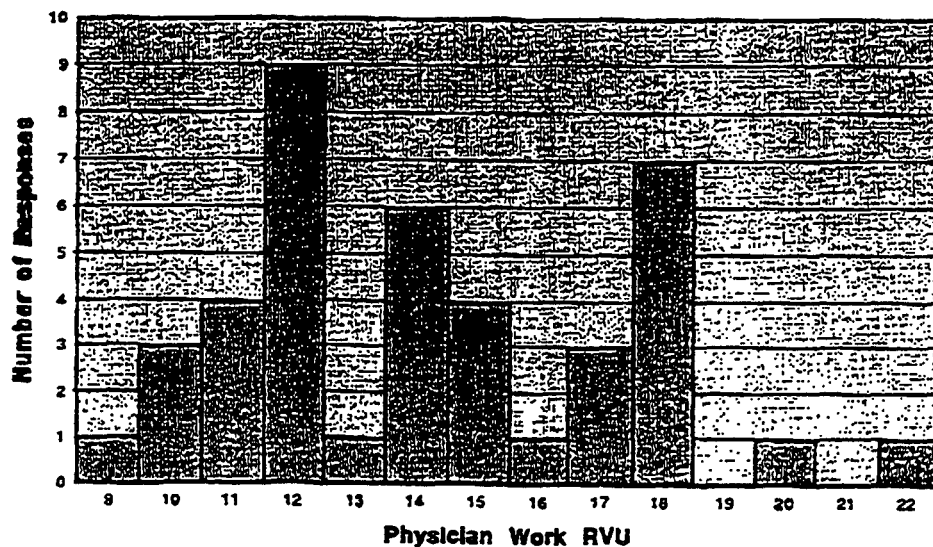

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<b><u>Survey RVW</u></b>	Low: 8.93	25th%: 12.00	Med: 14.00	75th%: 17.50	High: 22.00
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**TIME (min) AND VISITS****24 Hr Preceding Service:** Med: 30**Day of Service****Pre-service time:** Med: 25**Intra-service time:** Low: 90      25th%: 90      Med: 120      75th%: 120      High: 180

<b><u>Post Service</u></b>	<b><u>Total Time</u></b>	<b><u>CPT Code / # of visits</u></b>
Same Day	15	99231 x 1
After Same Day		
Critical Care	0	
Other Hospital	0	
Discharge Mgmt	25	99238
Office	25	99213 x 1 and 99212 x 1

**3681X RVU Data Histogram**



**KEY REFERENCE SERVICE(S):****1999 RVW Global CPT Descriptor**

12.00 090 36830 Creation of arteriovenous fistula by other than direct arteriovenous anastomosis (separate procedure); nonautogenous graft

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Time Estimates (Median)	Mean Intensity/Complexity Measures		
	3681X	36830	N/A
PRE-service time	55	50	-
INTRA-service time	120	90	-
POST-service time	65	50	-
<b>Mental Effort and Judgment</b>			
The number of possible diagnosis and/or the number of management options that must be considered	3.31	2.50	-
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	3.31	2.72	-
Urgency of medical decision making	2.72	2.50	-
<b>Technical Skill/physical Effort</b>			
Technical skill required	3.98	3.20	-
Physical effort required	3.31	2.80	-
<b>Psychological Stress</b>			
The risk of significant complications, morbidity and/or mortality	3.28	2.93	-
Outcome depends on skill and judgment of physician	3.97	3.47	-
Estimated risk of malpractice suit with poor outcome	2.79	2.47	-
<b>Time Segments</b>			
PRE-service intensity/complexity	3.18	2.87	-
INTRA-service intensity complexity	3.62	3.00	-
POST-service intensity complexity	2.64	2.40	-

**ADDITIONAL RATIONALE (describe the process by which your specialty society reached your final recommendation):** The new service requires 30 minutes more operative time and a few minutes more pre and post time than the comparison code, 36830, which is the most commonly performed dialysis access operation. All mental effort, judgement, technical skill and psychological stress parameters are greater in the new code because the basilic vein must be handled with extreme care to avoid injury, while the synthetic conduit in 36830 is nearly indestructible. Thus, the new code easily merits 2 RVUs more than 36830.

**FREQUENCY INFORMATION****How was this service previously reported?**

- 37799 Unlisted procedure, vascular surgery plus a very small but unknown percentage of the following two hemodialysis access codes:  
36821 Arteriovenous anastomosis, direct, any site (eg, Cimino type) (separate procedure).  
36825 Creation of arteriovenous fistula by other than direct arteriovenous anastomosis (separate procedure); autogenous graft

**How often do physicians in your specialty perform this service?**~~Commonly~~Sometimes~~Rarely~~**Estimate the number of times this service might be provided nationally in a one-year period?**

A small percentage of the claims for 36821 and 36825 will now be coded accurately using 3681X.  
Overall, it is impossible to estimate true frequency, but most likely < 1,000 per year

**Is this service performed by many physicians across the United States?**~~Yes~~ No

**AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE  
SUMMARY OF RECOMMENDATIONS  
May 1999**

**COLPOSCOPY/ANDROSCOPY**

***Work Relative Value Recommendations***

A new CPT code, 99170, was created to describe *Anogenital examination with colposcopic magnification in childhood for suspected trauma*. The work involved in using a colposcope in young female and male suspected sexual abuse victims had previously been included in the Evaluation and Management Services. The RUC heard compelling evidence regarding the extensive work and intensity involved in providing this service such as the lengthy process of positioning the child to allow a complete inspection. Since the child often does not remain still, the colposcope must be refocused, the child must be repositioned, and the result is an increase in time required for the examination. Additionally, the implications of making the wrong decision based on the evidence collected during this procedure are quite serious and also contribute to the increased time necessary to perform the procedure and document the findings. The RUC examined the median reported time of 50 minutes and the results of the intensity/complexity measures contained in the summary of recommendation form and agreed that the recommended RVU accurately reflects the level of work involved. The RUC therefore recommends the work RVU of 1.75.

***Practice Expense Recommendations***

The RUC tabled discussion of the practice expense direct inputs submitted by the specialty society. The RUC was concerned that the clinical staff recommended times needed further review by the specialty society. The RUC is therefore not forwarding direct input data for this code.

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
•99170	P1	Anogenital examination with colposcopic magnification in childhood for suspected trauma ( <u>For conscious sedation, use 99141, 99142</u> )	XXX	1.75

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## Physician Work Data

Recommended RVW: 1.75

CPT Code/ Tracking: 9918X (P1)

Global Period: XXX

CPT Descriptor: Anogenital examination with colposcopic magnification in childhood for suspected trauma

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**Vignette Used in Survey:**

A 3-year-old girl, who has disclosed to her mother that her stepfather has been sexually abusing her by performing penile-vaginal and digital-vaginal penetration, presents for evaluation of suspected child abuse. NOTE: The physician performs two services: 1) a comprehensive physical exam, which reveals an enlarged vaginal opening with a hymenal notch at 6:00 and possible scarring of the posterior fourchette; and 2) An anogenital exam with colposcopic magnification. The work of the comprehensive physical exam is billed separately using an appropriate CPT visit code (992XX). The colposcopic exam is billed using the new CPT code 9918X described above. For this survey, you are being asked to consider ONLY the work for the anogenital exam with colposcopic magnification.

For the child described above, this may include such work as alleviating the child's fears about the examination; viewing the anogenital area through the colposcope with the child in supine position and then in knee-chest position; measuring the hymenal orifice diameter and noting abnormal findings. It also may include taking and reviewing slides/photos to ensure that the findings seen on the photographs are consistent with what was seen on the initial examination and that no abnormalities were missed. Documentation of findings is also part of the anogenital exam. However, communication of findings with parents, referring physician/social worker, or legal entities is part of the comprehensive exam and is NOT part of the colposcopic exam.

(Please remember that we are only asking you to review the work involved in performing the colposcopic examination, not the work involved in evaluating/diagnosing child sexual abuse which is considered part of an evaluation and management visit).

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**CLINICAL DESCRIPTION OF SERVICE (This work description was NOT provided on the survey.):**

**Description of Pre-service Work:**

Prior to the examination process, the colposcope is set up for the procedure. The 35 mm camera or videocamera is placed on the colposcope. Identifying information on the patient is placed on an identifying card and on the databack on the camera. Prior to the anogenital examination, the physician must address the child's anxiety and fears, especially in females because of the necessity for relaxation in conducting an adequate genital examination. Time is necessary for such calming activities as showing the light from the colposcope on the wall with the examiner alternating between the two shades of light, so that the child can view the light and see that it will not hurt. It is appropriate to drape the older child; however, the younger child may be more frightened by a sheet or gown and may actually want to see what is happening during the examination.

**Description of Intra-service Work:**

The child is typically examined first in supine, frog-legged position, which offers relative comfort for the child and provides the physician with a clear view of the genitalia and anus. This position may be done in the lap of a parent or caretaker on the examination table if the child is too apprehensive. The child lies in a frog-legged position with her legs in full abduction and the feet in apposition. The anogenital area is closely inspected with the aid of the magnification provided by the colposcope, which enhances the ability of the examiner to visualize small and delicate tissues, which would otherwise be inadequately observed. The colposcope is slowly and gradually taken close to the genital area in an effort to get the genital area in focus. Often, the child does not remain still, causing the genital area to get out of focus; thereby, increasing the amount of time involved in inspecting the genital area.

Separation technique consists of separating the labia majora with slight downward traction. The other examination technique that must be performed is traction, which consists of gently pulling the labia majora

towards the examiner, which assists in viewing the hymenal edges, especially when redundant hymenal tissue is present. The labia minora, posterior fourchette, periurethral area, and hymen are all closely inspected to detect any erythema, edema, ecchymoses, petechiae, tears, or any other signs of acute trauma. In addition, signs of healed or chronic trauma, such as scarring, notches, clefts, and hymenal narrowing, must be assessed. All suspicious lesions, which may represent venereal warts or herpes, must be closely examined. The hymenal orifice diameter should also be measured using an intraocular scale or an external measuring device placed within the field of vision. The child often does not remain relaxed, causing the hymenal orifice to decrease in size and making it difficult to obtain an accurate measurement. Visualization of the vascular pattern and any interruption of the mucosal surface can be enhanced via the use of the red-free filter, which casts a green light. In addition, scar tissue may become evident due to its avascular appearance. Varying magnification levels are employed throughout the examination, separation, and traction, so as to obtain closer detail of noted findings.

The child is then placed in prone, knee-chest position, to view the anus and any redundant hymenal tissue in the inferior quadrants of the hymen. The colposcope is again brought closer to the child and maneuvered so as to bring the anal and genital areas in focus. The labia majora are separated upward in an effort to visualize the hymenal tissue. Again, any abnormalities of the genital area are noted.

The prone, knee-chest position also has the advantage of facilitating visualization of the cervix if the hymenal orifice is of sufficient diameter because the anterior wall of the vagina falls forward. Any foreign bodies in the vaginal canal can be detected and often removed with the child in this position. The perianal region is closely examined to detect fissures, scarring, skin tags, or suspicious lesions, such as venereal warts or herpes. In addition, any dilatation of the anus should be measured vertically and horizontally. It should be noted whether or not the stool is present in the rectal vault if anal dilatation is noted. The perineum should also be attached to the colposcope; photographs are obtained during all of the various anogenital examination techniques and positions of the child. Prior to photographing, time is necessary for the physician to discuss with the child such issues as the doctor taking pictures of her with her clothing off only with permission of her parent; that the camera is not the type of camera used at home; the pictures from the colposcope can only be interpreted by medical personnel; and that the child's name is not on the photograph, only identifying numbers (i.e. medical record number). When the colposcopic slides or photographs are developed, they must be reviewed by the physician and documented to note that the findings that were present during the examination can be seen. Care is necessary to objectively document evidence and establish baseline information for future reference in the event of continued victimization and/or legal proceedings. Accurate and complete photodocumentation is also necessary if second opinions are required through review by another physician, so that the child is not subjected to another examination.

#### **Description of Intra-service Work:**

Following the procedure, review of the 35 mm slides/photographs must be done to document that the findings noted during the examination process can still be visualized. In addition, any findings seen on the slides/photographs that were not noted at the time of the initial examination must be documented.

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**SURVEY DATA:**

**Presenter(s):** V. Denise Everett, MD  
Steven Krug, MD

**Specialty(s):** American Academy of Pediatrics

**Sample Size:** 193    **Response Rate (No. and %):** 46 (24%)

**Type of Sample (✓ one):** ~~random~~    ✓ ~~panel~~    ~~convenience~~

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<b>Survey RVW</b>	<b>Low:</b> 0.85	<b>25th%:</b> 1.14	<b>Med:</b> 1.75	<b>75th%:</b> 2.18	<b>High:</b> 4.00
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<b>Survey Total Time</b>	<b>Low:</b> 15	<b>25th%:</b> 35	<b>Med:</b> 50	<b>75th%:</b> 70	<b>High:</b> 210
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**KEY REFERENCE SERVICE(S):**

<u>1999 RVW</u>	<u>Global</u>	<u>CPT</u>	<u>Descriptor</u>
0.99	000	57452*	Colposcopy (vaginocopy): (separate procedure)

A ?



**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

	<i>Mean</i> Intensity/Complexity Measures		
<b>Time Estimates (Median)</b>	<b>9918X</b>	<b>57452</b>	<b>N/A*</b>
PRE-service time	n/a	10	—
INTRA-service time (TOTAL time for XXX global)	50	15	—
POST-service time	n/a	15	—
<b>Mental Effort and Judgment</b>			
The number of possible diagnosis and/or the number of management options that must be considered	3.89	3.54	—
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	3.61	3.08	—
Urgency of medical decision making	4.09	3.54	—
<b>Technical Skill/physical Effort</b>			
Technical skill required	4.22	3.92	—
Physical effort required	3.09	3.15	—
<b>Psychological Stress</b>			
The risk of significant complications, morbidity and/or mortality	3.46	3.15	—
Outcome depends on skill and judgment of physician	4.61	3.69	—
Estimated risk of malpractice suit with poor outcome	3.02	3.31	—
<b>Time Segments</b>			
PRE-service intensity/complexity	n/a	2.73	—
INTRA-service intensity complexity	4.24	3.55	—
POST-service intensity complexity	n/a	2.45	—

\*No other code was reported with a high enough frequency to report a meaningful mean measure of intensity/complexity.

**ADDITIONAL RATIONALE :**

The time and complexity/intensity data presented above indicate that 9918X (P1) is more work than 57542, the reference procedure. Additionally, the recommended RVW of 1.75 for 9918X (P1) compares well with other services that have an XXX global and are tedious/complex/intense services, for example: 99215 (total time=55-59min; RVW=1.77) or 99239 (total time=43-45min; RVW=1.75).

**FREQUENCY INFORMATION**

**How was this service previously reported?**

57542 Colposcopy (vaginocopy): (separate procedure)

**How often do physicians in your specialty perform this service? (✓ one)**

✓ Commonly                      Sometimes                      Rarely

**Estimate the number of times this service might be provided nationally in a one-year period?**

Based on one child abuse center per state and 400 cases per center, a conservative estimate would be at least 20,000 children requiring this procedure annually. However, some states have more than one center and see more than 400 cases annually.

**Is this service performed by many physicians across the United States? (✓ one)**

Yes                      ✓ No

**AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE  
SUMMARY OF RECOMMENDATIONS**

**May 1999**

**DEEP BRAIN STIMULATION**

***Work Relative Value Recommendations***

A series of new codes has been established to replace existing deep brain stimulation codes and to reflect new technology and clinical practice advances. These codes will also eliminate individual current codes that emphasize minor differences in the type of skull opening used to place the electrode tray.

**CPT Code 61862**

CPT code 61862 *Twist drill, burr hole, craniotomy, or craniectomy for stereotactic implantation of one neurostimulator array in subcortical site (eg, thalamus, globus pallidus, subthalamic nucleus, periventricular, periaqueductal gray)* was established to better model the clinical practice for deep brain stimulation. In considering a relative value for this new code, the RUC took into account the following: 1) Elements of new technology; 2) Increased work (time and intensity); 3) Building block comparisons; and 4) Survey responses. It was agreed that this procedure represents new technology in its hardware and target sites for stimulation, and disorders to be treated. The RUC also agreed that this new procedure involves more time than in CPT codes 61855 *Twist drill or burr hole(s) for implantation of neurostimulator electrodes; subcortical* (work RVU = 13.39) and 61865 *Craniectomy or craniotomy for implantation of neurostimulator electrodes, cerebral; subcortical* (work RVU = 22.97). CPT code 61855 will now be deleted and crosswalked to the new code. This is due to the addition of stereotactic localization of the target for stimulation and the need to perform intraoperative stimulation as a test of the safety and effectiveness of the electrode placement.

Therefore, the RUC supports the specialty society's work recommendation of 27.34. This value was determined using the building block approach: 1) The stereotactic work is similar to CPT 61795 *Stereotactic computer assisted volumetric intracranial procedure* (work RVU = 4.04); 2) The portion of the work done in the operating room includes those services in the deleted

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codes based on an estimated frequency of 4:1 (eg, 80% 61855 and 20% 61865)= 15.30; and lastly, 3) The final intraoperative element to be included is the testing and repositioning of the electrode array. Using the survey median intraoperative time of 320 minutes and subtracting 120 minutes (for stereotactic work) and 60 minutes (for opening the skull, placing the electrode, and closing after testing, = 140 minutes. This number is equivalent to two hours of critical care management (CPT 99291/99292) = 8.00. The sum of these estimates equals the recommended value of 27.34.

### **CPT Codes 61885 & 61886**

The revision to CPT code 61885 *Incision and subcutaneous placement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling; with connection to a single electrode tray* and the creation of CPT code 61886 (*with connection to two or more electrode arrays*) were adopted to reflect changes in clinical practices. Although this procedure is done primarily as a one-stage procedure, the RUC was concerned that there would be double counting of post-service and discharge day work. Therefore, the RUC agreed to subtract the following from 61885's median RVU: (Four office visits at 0.67 RVUs & .32 for the Discharge Day Management) for a recommended RVU of 8.00 for revised CPT Code 61885.

The RUC used the same methodology to calculate a work RVU for CPT Code 61886 *Incision and subcutaneous placement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling; with connection to two or more electrode arrays*. However, the RUC unanimously supported using an RVU of 11.00 as a starting point as it more accurately reflects the work of 61886 rather than the median RVU of 15.00. The RUC supports a work RVU of 8.00 for CPT Code 61886.

### **CPT Code 64573**

The revised CPT Code 64573 *Incision for implantation of neurostimulator electrodes; cranial nerve* is an outdated code that is no longer in use. For this reason, the code became part of the review and survey for the deep brain stimulation codes. The new procedure now involves an open operation to place a spiral electrode on the vagal nerve and also include a long area of dissection of the carotid artery. The RUC agreed that the work involved in this service was comparable to the work of CPT code 35800 *Exploration for postoperative hemorrhage, thrombosis or infection; neck* (work RVU= 7.02). However, 64573 had additional time, complexity and risk of side effects. The RUC supports the specialty society's recommendation of 7.50 for CPT code 64573.

### *Practice Expense Recommendation*

The RUC is not making any practice expense recommendations for these codes. The RUC agreed to table the practice expense recommendations since it was not able to fully evaluate the specialties' recommended crosswalk for these codes.

CPT Code (•New)	Track- ing Number	CPT Descriptor	Global Period	Work RVU Recommendation
61750		Stereotactic biopsy, aspiration, or excision, including burr hole(s), for intracranial lesion;	090	18.20 (No Change)
▲61751	AA1	with computerized axial tomography <u>and/or magnetic resonance imaging guidance</u>  (For radiological supervision and interpretation of computerized tomography, see 70450, 70460, or 70470, as appropriate)  (For radiological supervision and interpretation of magnetic resonance imaging, see 70551, 70552, or 70553, as appropriate)	090	17.62 (No Change)
▲61795		Stereotactic computer assisted volumetric ( <u>navigational</u> ) <u>intracranial</u> procedure, <u>intracranial, extracranial, or spinal</u> (List separately in addition to code for primary procedure)	ZZZ	4.04 (No Change)
61855		<del>Twist drill or burr hole(s) for implantation of neurostimulator electrodes; subcortical</del>  (61855 has been deleted. To report, use 61862)	090	13.39  <b>Deleted Code</b>
61865		<del>Craniectomy or craniotomy for implantation of neurostimulator electrodes; cerebral; subcortical</del>  (61865 has been deleted. To report, use 61862)	090	22.97  <b>Deleted Code</b>

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CPT Code (•New)	Track- ing Number	CPT Descriptor	Global Period	Work RVU Recommendation
•61862	AA2	Twist drill, burr hole, craniotomy or craniectomy for stereotactic implantation of one neurostimulator electrode array in subcortical site (eg, thalamus, globus pallidus, subthalamic nucleus, periventricular, periaqueductal gray)	090	27.34
61870		Craniectomy for implantation of neurostimulator electrodes, cerebellar; cortical	090	14.94 (No Change)
61875		subcortical  (For intraoperative identification of vital brain structures using depth electrodes, use 95961 and 95962 as appropriate)	090	15.06 (No Change)
▲61885	AA3	Incision and subcutaneous placement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling; <u>with connection to a single electrode array</u>	090	8.00
•61886	AA4	with connection to two or more electrode arrays  (For open placement of cranial nerve (eg, vagal, trigeminal) neurostimulator electrode(s), use code 64573)  (For percutaneous placement of cranial nerve (eg, vagal, trigeminal) neurostimulator electrode(s), use code 64553)  (For revision or removal of cranial nerve (eg vagal, trigeminal) neurostimulator electrode (s) use code 64585)	090	8.00
▲64553	AA5	Percutaneous implantation of neurostimulator electrodes; cranial nerve (For open placement of cranial nerve (eg, vagal, trigeminal), neurostimulator pulse generator or receiver, see 61885, 61886, as appropriate)	010	2.31 (No Change)

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CPT Code (•New)	Track- ing Number	CPT Descriptor	Global Period	Work RVU Recommendation
▲64573	AA6	Incision for implantation of neurostimulator electrodes; cranial nerve  (For open placement of cranial nerve (eg, vagal, trigeminal,) neurostimulator pulse generator or receiver, see 61885, 61886, as appropriate)  For revision or removal of cranial nerve (eg vagal, trigeminal) neurstimulatory pulse generator or receiver, use 61888.)	090	7.50
▲95961		Functional cortical <u>and subcortical</u> mapping by stimulation <u>and/or recording</u> of electrodes on brain surface, or of depth electrodes, to provoke seizures or identify vital <del>cortex</del> <u>brain structures</u> ; initial hour of physician attendance	XXX	2.97 (No Change)
▲95962		each additional hour of physician attendance (List separately in addition to code for primary procedure)	ZZZ	3.21 (No Change)

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## Physician Work Data

**Recommended RVW:** 27.34

**CPT Code/ Tracking:** 6186X1 (AA2)      **Global Period:** 090

**CPT Descriptor:** Twist drill, burr hole, craniotomy or craniectomy for stereotactic implantation of one neurostimulator electrode array in subcortical site (eg, thalamus, globus pallidus, subthalamic nucleus, periventricular, periaqueductal gray)

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**Vignette Used in Survey:**

A 45-year-old white male presents with essential tremor that has become quite severe and is disabling. He has had the disease for 8 years and has failed to obtain tremor relief using various oral medications and physical therapy. He is not a candidate for direct brain resection or an ablative brain procedure because of the severity of his tremor and the length of symptoms. He undergoes a trial implantation of one stereotactically-guided deep brain stimulator electrode array in the VIM nucleus of the thalamus.

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**CLINICAL DESCRIPTION OF SERVICE** (This work description was NOT provided on the survey.):

**Description of Pre-Service Work:**

Pre-service work includes review of records and any pertinent imaging studies; communicating with other professionals, patient, and family; and obtaining consent.

**Description of Intra-Service Work:**

Prior to surgery, a local anesthetic is administered and a stereotactic frame is attached using pins to anchor the frame to the skull. Care is taken to align the frame with the inferior rim of the orbit and the external auditory meatus and to keep the frame level with the head. The surgeon accompanies the patient to the radiology department to obtain a CT or MRI scan. The surgeon aligns patient in the scanner. After the scans are performed, the surgeon plans the stereotactic surgery with computer assistance. This planning may take one to two hours and includes identifying MRI or CT marker points and the desired target; determining the coordinates for the target; measuring the AC-PC line; and calculating angles. Using a computer, various trajectories for the electrode placement to reach the target are examined before choosing one specific trajectory and calculating the entry point through the skull based upon safety and target coverage considerations and an anatomic atlas of the basal ganglia. After planning is complete, the surgeon accompanies the patient to the OR and positions the patient on the operating table. While the patient is prepped and draped, the surgeon scrubs for the procedure.

Under IV sedation, the skin is infiltrated with local anesthetic. A linear incision is made just anterior to the coronal suture. The wound edge is retracted and hemostasis obtained with monopolar electrocautery. A perforator is used to make a single burr hole 2.5 cm from the midline at the level of the coronal suture. The dura is coagulated with monopolar electrocautery and punctured. Next, components of the frame are assembled and coordinates set. The electrode array is marked for the appropriate depth of placement. The electrode array is passed into the pre-determined site. To establish a baseline, a neurologic examination is performed of relevant patient functions. After the electrode array is stimulated to determine the degree of tremor suppression, the electrode array is repositioned and re-stimulated as many times as necessary to obtain the best degree of tremor suppression and least side effects. Absolute hemostasis is obtained. The electrode array is implanted, attaching the plastic ring and grommet to the burr hole in the skull. The wounds are irrigated with antibiotic solution. If this is to be a one-stage operation (i.e., the stimulator generator is placed at the same operative setting), then the lead is coiled in a subgaleal pocket. The subgaleal and subcutaneous tissues are closed with interrupted 2-0 Vicryl suture. If this is to be a two-stage operation (i.e., the stimulator generator is placed at a later date), then the tail of the electrode is subcutaneously tunneled and exits the scalp at a separate site. Either way, The subcutaneous tissues and skin are closed with deep sutures and staples. Sterile dressings are applied, and the stereotactic frame is removed. The four pin sites are dressed.



**Description of Post-Service Work:**

Postoperative work includes checking the external connections of the electrode to testing cables; communicating with the family and other health care professionals (including written and oral reports and orders); monitoring the patient's neurological condition for any deficits from either electrode placement and/or the stimulation itself; monitoring for wound infection; and antibiotic and pain medication management. Discharge day management includes the surgeon's final examination of the patient; review with the patient and family of post-discharge continuing care and instructions; and preparation of discharge records. Additionally, all post-discharge office visits for this procedure for 90 days after the day of the operation are considered part of the postoperative work for this procedure; including removal of staples and sutures; monitoring wound healing; and examining the patient in the office at appropriate postoperative intervals to ensure adequate healing of all wounds.

**SURVEY DATA**

**Presenter(s):** Samuel Hassenbusch, MD (AANS/CNS)  
Peter Dempsey, MD (AANS)

**Specialty(s):** American Association of Neurological Surgeons/Congress of Neurological Surgeons

**Sample Size:** 51      **Response Rate (No. and %):** 29 (57%)

**Type of Sample:** Panel

<b><u>Survey RVW</u></b>	Low: 17.00	25th%: 31.00	<b>Med: 36.00</b>	75th%: 45.00	High: 75.00
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**TIME (min) AND VISITS**

**24 Hr Preceding Service:**      **Med: 60**

**Day of Service**

Pre-service time:      **Med: 30**

Intra-service time:      Low: 180      25th%: 300      **Med: 320**      75th%: 360      High: 420

<b><u>Post Service</u></b>	<b><u>Total Time</u></b>	<b><u>CPT Code / # of visits</u></b>
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Same Day:	25	99232 x 1
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After Same Day:

Critical Care	0	
Other Hospital	20	99231 x 1
Discharge Mgmt	25	99238 x 1
Office	80	99213 x 4

**KEY REFERENCE SERVICE(S):**

<u>99 RVW</u>	<u>Global</u>	<u>CPT</u>	<u>Descriptor</u>
17.62	090	61751	Stereotactic biopsy, aspiration, or excision, including burr hole(s), for intracranial lesion; with computerized axial tomography
22.97	090	61865	Craniectomy or craniotomy for implantation of neurostimulator electrodes, cerebral; subcortical

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

	<i>Mean</i> Intensity/Complexity Measures		
	6186X1 (AA2)	61751	61865
Time Estimates (Median)			
PRE-service time	90	45	75
INTRA-service time	320	120	180
POST-service time	150	80	140
Mental Effort and Judgment			
The number of possible diagnosis and/or the number of management options that must be considered	4.55	3.60	3.57
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	4.69	3.67	3.86
Urgency of medical decision making	2.97	2.87	2.29
Technical Skill/physical Effort			
Technical skill required	4.90	3.40	4.00
Physical effort required	4.21	3.13	2.86
Psychological Stress			
The risk of significant complications, morbidity and/or mortality	4.62	3.93	3.86
Outcome depends on skill and judgment of physician	4.97	3.79	4.00
Estimated risk of malpractice suit with poor outcome	4.41	3.50	4.00
Time Segments			
PRE-service intensity/complexity	4.00	3.29	3.43
INTRA-service intensity complexity	4.86	3.80	3.57
POST-service intensity complexity	4.17	3.20	3.43

**ADDITIONAL RATIONALE (describe the process by which your specialty society reached your final recommendation):**

In considering a relative value for new code 6186X1 (AA2), the AANS review committee took into account: the elements of new technology; increased work (time and intensity); a building block comparison, and the frequency distribution of responses from the neurosurgeons who perform this procedure (average 12 month experience was 20 with a range of 5 to 50).

**Technology**

New code 6186X1 (AA2) represents new technology in its hardware, target sites for stimulation, and disorders to be treated. Stereotactically-placed deep brain stimulation electrodes were recently approved (1997) and now are commercially available. The target sites have expanded to include the thalamus, globus pallidus, subthalamic nucleus, periventricular area, and periaqueductal grey. The actual brain stimulation approved indications have increased and include the treatment of functional disorders (movement problems from Parkinson's disease, essential tremor, multiple sclerosis, head trauma, drug-induced hyperkinesias, vascular malformations, cerebral hemorrhage) and intractable pain.

### Time

CPT 6186X1 involves more time than CPT codes 61855 and 61865, which will be deleted and crosswalked to the new code. This is due to the addition of stereotactic localization of the target for stimulation and the need to do intraoperative stimulation as a test of the safety and effectiveness of the electrode placement. The present codes 61855 and 61865 represent the basic procedure with a distinction made about the cranial openings for the approach to the subcortical target (e.g., burr hole vs. craniotomy), which is actually a small part of the overall procedure. Present codes 61855 and 61865 do not include the new and more difficult target sites where the new electrodes can be applied, nor do these codes include the computer-guided MRI or CT stereotactic elements necessary for placement of these electrode arrays. Summary forms presented and accepted by the RUC and HCFA during the MFS five-year review process (1995), indicated that (on average) 120 minutes are spent to perform the stereotactic-related tasks prior to the first incision of the scalp in the OR (see CPT 61751 summary). These tasks are outlined in the intra-service description on page one of this summary. The median intra-service time of 320 minutes includes approximately two hours for stereotactic-related tasks, one hour for opening the skull and placing the electrode array, and the remainder of the time for testing and moving the electrode array and closing.

### Building Block

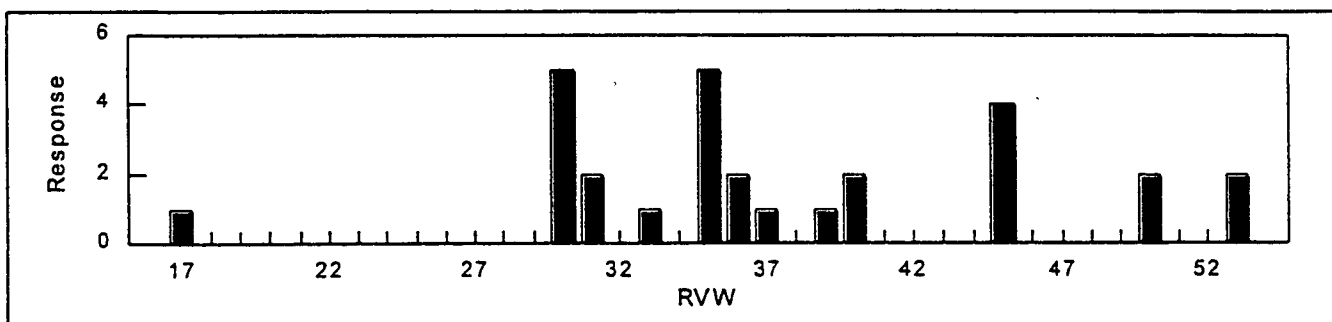
1. The stereotactic work can be estimated as similar to CPT 61795 *Stereotactic computer assisted volumetric intracranial procedure (List separately in addition to code for primary procedure)* [RVW=4.04 and global=ZZZ].
2. The portion of the procedure done in the OR includes those services in the deleted codes and covers the work of making a cranial opening, introducing the electrode to the target area, and the closure and repair of the wound. The value for this portion of the procedure is based on an estimated frequency ratio of 4:1 (i.e., 80% 61855 and 20% 61865). When this is calculated, the RVW = 15.30.
3. The final intraoperative element that needs to be considered is the testing and repositioning of the electrode array to optimize the effects of the placement. This may take, on average, two or more hours in the OR. Using the survey median intraoperative time of 320 minutes and subtracting 120 minutes for stereotactic work and 60 minutes for opening the skull, placing the electrode, and closing after testing, there is left 140 minutes of intraoperative testing. A reasonable and conservative comparison, in terms of work, would be equivalent to two hours of critical care management (CPT 99291/99292) for the two to three hours of testing, with a RVW of 8.00.

The sum of these estimates of work using a building block approach is 27.34

1. 4.04 = 61795
  2. 15.30 = (0.80 x 13.39) + (0.20 x 22.97)
  3. 8.00 = (99291 x 1 @ 4.00) + (99292 x 2 @ 2.00)
- 27.34 = Sum

### Response Frequency

Of 29 survey respondents who have performed this procedure on average 20 times in the past 12 months, only one respondent indicated an RVW estimate less than 30.00 rvu's.



### Recommendation

We have chosen to recommend an RVW of 27.34 for 6186X1 (AA2). This is lower than the survey median and lower than the survey 25th percentile, but appropriately places this service relative to deleted codes and incorporates the new additional work of stereotaxis and intra-operative testing.

**FREQUENCY INFORMATION****How was this service previously reported?**

- 61855 Twist drill or burr hole(s) for implantation of neurostimulator electrodes; subcortical  
61865 Craniectomy or craniotomy for implantation of neurostimulator electrodes, cerebral; subcortical  
61795 Stereotactic computer assisted volumetric intracranial procedure (List separately in addition to code for primary procedure)  
20660 Application of cranial tongs, caliper, or stereotactic frame, including removal (separate procedure)  
64999 Unlisted Procedure, nervous system

**How often do physicians in your specialty perform this service?**

~~Commonly~~      Sometimes      ~~Rarely~~

**Estimate the number of times this service might be provided nationally in a one-year period?**

100% of 61855 and 61865; 2% of 61795; 8% of 20660; and some unknown percent of 64999.

Ninety-two centers in the U.S. have a physician who has implanted a deep brain stimulator. Since FDA approval in August 1997, over 1,000 patients have been implanted, mostly outside the Medicare population.

**Is this service performed by many physicians across the United States?**

~~Yes~~      No

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF WORK RECOMMENDATION

(April 1999)

**Recommended RVW:** 8.00

**CPT Code/ Tracking:** 61885 (AA3)

**Global Period:** 090

**CPT Descriptor:** Incision and subcutaneous placement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling; with connection to a single electrode array

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**Vignette Used in Survey:**

A 45-year-old male presents with essential tremor that has become quite severe and is disabling. He has had the disease for 8 years and has failed to obtain tremor relief using various oral medications and physical therapy. He is not a candidate for direct brain resection or an ablative brain procedure because of the severity of his tremor and the length of symptoms. His history also includes implantation of a deep brain stimulator electrode array, which upon stimulation, eliminated 80% of the patient's tremor. He undergoes internalization of the tail of the electrode array and placement and connection of a subcutaneous stimulator generator for long-term brain stimulation.

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**CLINICAL DESCRIPTION OF SERVICE** (This work description was NOT provided on the survey.):

**Description of Pre-Service Work:**

Pre-service work includes review of records and any pertinent imaging studies, including previous deep brain stimulation procedures; examining the tail of the stimulation electrode array for any disconnections or other technical problems (if this is a two-stage operation); communicating with other professionals, patient, and family; and obtaining consent. The pre-operative work also includes dressing, scrubbing, preparing the needed equipment for the procedure, and supervising prepping and draping of the patient.

[This implies that the tail of the array was available for such exam before going into surgery, thence had been externalized to the scalp for testing after initial placement.]

**Description of Intra-Service Work:**

Under general anesthesia, the cranial lead is recovered from the subgaleal space. A linear incision is made just below the clavicle over a distance of approximately 3 cm. A subcutaneous pocket is created under this incision. The cephalic wound is re-opened where the electrode array had been placed. A small incision is made at approximately the level of the mastoid and the electrode extension passer is passed from the cephalic wound down a subgaleal tract and out the mastoid wound. Using this passer, the lead is pulled through the subcutaneous tract. The same passer is passed from the mastoid wound down another subcutaneous tract and out the clavicular wound, pulling the electrode tail and extension wire through this subcutaneous tract. A sleeve is placed on the distal tail of the electrode array. The array tail is inserted into the proximal end of the extension wire and tightened. The sleeve is placed over the connection and tied in place with 0-silk suture. The boot and connector are placed in the subgaleal space while the proximal end of the extension wire is secured to the skull. The distal end of the extension wire is inserted into the generator and tightened. Excess extension wire is coiled behind the stimulator generator. The stimulator generator is sutured into place in the subcutaneous tissue. The stimulator is tested, under sterile technique, to determine the impedance of the connections and rule-out any electrical short. The skin and subcutaneous tissues of all wounds are closed with deep sutures and skin staples.

**Description of Post-Service Work:**

Postoperative work includes application of sterile dressings; checking the entire stimulator system for proper function; communicating with the family and other health care professionals (including written and oral reports and orders); monitoring the patient's neurological condition for any deficits; monitoring for wound infection; and antibiotic and pain medication management. Discharge day management includes the surgeon's final examination of the patient; review with the patient and family of post-discharge continuing care and instructions; and preparation of discharge records. Additionally, all post-discharge office visits for this procedure for 90 days after the day of the operation are

considered part of the postoperative work for this procedure; including removal of staples and sutures; monitoring wound healing; and examining the patient in the office at appropriate postoperative intervals to ensure adequate healing of all wounds and functioning/effectiveness of the stimulator system.

### SURVEY DATA

**Presenter(s):** Samuel Hassenbusch, MD (AANS/CNS)  
Peter Dempsey, MD (AANS)

**Specialty(s):** American Association of Neurological Surgeons/Congress of Neurological Surgeons

**Sample Size:** 51      **Response Rate (No. and %):** 29 (57%)

**Type of Sample:** Panel

<b><u>Survey RVW</u></b>	Low: 5.85	25th%: 8.00	Med: 11.00	75th%: 15.00	High: 28.00
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### TIME (min) AND VISITS

**24 Hr Preceding Service:** Med: 20

#### Day of Service

Pre-service time: Med: 30

Intra-service time: Low: 30      25th%: 60      Med: 60      75th%: 90      High: 100

<u>Post Service</u>	<u>Total Time</u>	<u>CPT Code / # of visits</u>
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Same Day:	25	99232 x 1
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**After Same Day:**

Critical Care	0	
Other Hospital	20	99231 x 1
Discharge Mgmt	25	99238 x 1
Office	80	99213 x 4

### **KEY REFERENCE SERVICE(S):**

<u>99 RVW</u>	<u>Global</u>	<u>CPT</u>	<u>Descriptor</u>
7.04	090	63685	Incision and subcutaneous placement of spinal neurostimulator pulse generator or receiver, direct or inductive coupling

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Time Estimates (Median)	<i>Mean</i> Intensity/Complexity Measures		
	61885 (AA3)	63685	N/A*
PRE-service time	50	35	--
INTRA-service time	60	45	--
POST-service time	150	95	--
<b>Mental Effort and Judgment</b>			
The number of possible diagnosis and/or the number of management options that must be considered	3.66	2.96	--
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	3.66	2.96	--
Urgency of medical decision making	2.76	2.50	--
<b>Technical Skill/physical Effort</b>			
Technical skill required	3.66	2.88	--
Physical effort required	3.59	2.85	--
<b>Psychological Stress</b>			
The risk of significant complications, morbidity and/or mortality	3.69	2.77	--
Outcome depends on skill and judgment of physician	3.62	3.00	--
Estimated risk of malpractice suit with poor outcome	3.83	3.19	--
<b>Time Segments</b>			
PRE-service intensity/complexity	3.39	2.96	--
INTRA-service intensity complexity	3.72	3.00	--
POST-service intensity complexity	3.41	3.04	--

**ADDITIONAL RATIONALE (describe the process by which your specialty society reached your final recommendation):**

The revision in code 61885 (AA3) and new code 6188X (AA4) were created to reflect changes in clinical practice. Because of the nature of the disorders (e.g., Parkinson's disease, essential tremor, multiple sclerosis) treated by deep brain stimulation, bilateral symptoms and findings are now frequently seen. Thus, sometimes 1 electrode array might be connected to 1 pulse generator or receiver. At other times, 2 electrode arrays (one on each side of the brain) might be required and might be connected to one generator or receiver. Again, the work involved in connected two different arrays from opposite sides of the head into 1 generator is significantly different than the work of connecting just 1 array.

Old code 61885 was not chosen as a reference service for revised code 61885 (AA3), but instead 63685 was cited by almost all respondents. The original value for 61885 was based on Harvard study intraoperative work estimates by four neurosurgeons and predicted pre- and post-operative work. Deep brain stimulation (ie, new target sites) was not available in the 1980s during the Harvard study, nor were there an indications approved for using more than one electrode array. Subsequent to the Harvard study, this code was reviewed during the RUC MFS five-year review and increased based on a comparison to CPT 61880 (Revision or removal intracranial electrodes). Deep brain stimulation was not approved at the time of the five-year review and code 61855 was still not well understood or used.

With recent approval of new technology and new indications and the ability to implant and connect to more than one electrode array, experience has been gained with respect to implanting neurostimulator generators/receivers. Based on their experience (12 month experience average of 16), the survey respondents chose CPT 63650 as a reference service. CPT 63650 is for a spinal neurostimulator as compared with AA3 for the cranial neurostimulator, which requires more time and more work to implant. This is reflected in the survey data.

Based on the discussion above, the AANS review committee recommends 8.00 for both AA3 for AA4. This is the survey 25th percentile for AA3 and less than the survey 25th percentile for AA4. This value sets a better relationship for AA3 and AA4 (cranial) to 63650 (spinal). AA4 was created as a separate CPT code in response to a request by the CPT panel for tracking purposes. However, AA4 is very rarely performed and it is difficult to estimate the amount of increased work for implanting two or more electrode arrays. Consequently, we have chosen to recommend that the RVW for AA4 be equal to AA3, until more experience is gained with this new technology.

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## FREQUENCY INFORMATION

### How was this service previously reported?

61885 Incision and subcutaneous placement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling

64999 Unlisted Procedure, nervous system

### How often do physicians in your specialty perform this service?

~~Commonly~~ Sometimes ~~Rarely~~

### Estimate the number of times this service might be provided nationally in a one-year period?

For revised code 61885 (AA3) and new code 6188X (AA4):

100% of the old 61885

Some percentage of 64999 Unlisted Procedure, nervous system

### Is this service performed by many physicians across the United States?

~~Yes~~ No



**Recommended RVW:** 8.00

**CPT Code/ Tracking:** 6188X (AA4)

**Global Period:** 090

**CPT Descriptor:** Incision and subcutaneous placement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling; with connection to two or more electrode arrays

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**Vignette Used in Survey:**

A 35-year-old male presents with bilateral essential tremor that has become quite severe and is disabling. He has had the disease for ten years and has failed to obtain tremor relief using various oral medications and physical therapy. He is not a candidate for direct brain resection or an ablative brain procedure because of the severity of his tremor and the length of symptoms. His history also includes implantation of bilaterally-placed deep-brain stimulator electrode arrays, which upon stimulation, eliminated 90% of the patient's tremor. Stimulation of either electrode alone, however, provides only about 80% relief on the one side and no relief on the other side. He undergoes internalization of the tails of both electrode arrays and placement and connection of a single subcutaneous stimulator generator for long-term brain stimulation.

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**CLINICAL DESCRIPTION OF SERVICE** (This work description was NOT provided on the survey.):

**Description of Pre-Service Work:**

Pre-service work includes review of records and any pertinent imaging studies, including previous deep brain stimulation procedures (if this is a two-stage operation); examining the tails of both stimulation electrode arrays for any disconnections or other technical problems; communicating with other professionals, patient, and family; and obtaining consent. The pre-operative work also includes dressing, scrubbing, preparing the needed equipment for the procedure, and supervising prepping and draping of the patient. [This implies that the tail of the array was available for such exam before going into surgery, thence had been externalized to the scalp for testing after initial placement.]

**Description of Intra-Service Work:**

Under general anesthesia or local anesthesia with light sedation, the cranial lead for the first electrode array is recovered from subgaleal space and a 3 cm linear incision is made just below the clavicle on the same side. A subcutaneous pocket is created under this incision. The cephalic wound is re-opened where the ipsilateral electrode array had been placed. A small incision is made at approximately the level of the mastoid and the electrode extension passer is passed from the cephalic wound down a subgaleal tract and out the mastoid wound and the dual lead extension wire is pulled through the subgaleal tract. The same passer is passed from the mastoid wound down another subcutaneous tract and out the clavicular wound, pulling the catheter and extension wire through this subcutaneous tract. The outer boot is placed on the distal tails of the electrode array. The ipsilateral array tail is inserted into the proximal end of one of the leads in the bifurcated extension wire and tightened. The boot is placed over the connection and tied in place with 0-silk suture. The boot and connector are pulled into the subgaleal space and the proximal end of the bifurcated extension wire is secured to the skull.

This same procedure is repeated for the electrode array on the other side, except tunneling the tail of this electrode to the second limb of the bifurcated extension wire. The cranial lead for the second electrode array is recovered from subgaleal space by re-opening the wound where the contralateral electrode array had been placed. A tunnel is made in the subgaleal space from this side over the vertex to the opposite side where the initial array has been attached to the bifurcated extension wire. An outer boot is placed on the distal tail of the second electrode array and the array tail is inserted into the proximal end of the second limb of the bifurcated extension wire and tightened. The boot is placed over the connection and tied in place with 0-silk suture. The boot and connector are in the subgaleal space and the proximal end of the second limb of the bifurcated extension wire is sutured to the skull. The distal end of both leads of the bifurcated extension wire is inserted into the generator and tightened. Excess bifurcated extension wire is coiled behind the stimulator generator. The stimulator generator is sutured into place in the subcutaneous tissue. The

stimulator is tested, under sterile technique, to determine the impedance of the connections and rule-out any electrical short. The skin and subcutaneous tissues of all wounds are closed with deep sutures and skin staples.

#### **Description of Post-Service Work:**

Postoperative work includes application of sterile dressings; checking the entire stimulator system for proper function; communicating with the family and other health care professionals (including written and oral reports and orders); monitoring the patient's neurological condition for any deficits; monitoring for wound infection; and antibiotic and pain medication management. Discharge day management includes the surgeon's final examination of the patient; review with the patient and family of post-discharge continuing care and instructions; and preparation of discharge records. Additionally, all post-discharge office visits for this procedure for 90 days after the day of the operation are considered part of the postoperative work for this procedure; including removal of staples and sutures; monitoring wound healing; and examining the patient in the office at appropriate postoperative intervals to ensure adequate healing of all wounds and functioning/effectiveness of the stimulator system.

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#### **SURVEY DATA**

**Presenter(s):** Samuel Hassenbusch, MD (AANS/CNS)  
Peter Dempsey, MD (AANS)

**Specialty(s):** American Association of Neurological Surgeons/Congress of Neurological Surgeons

**Sample Size:** 51      **Response Rate (No. and %):** 26 (51%)

**Type of Sample:** Panel

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<b><u>Survey RVW</u></b>	Low: 4.00	25th%: 10.05	Med: 15.00	75th%: 19.50	High: 35.00
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#### **TIME (min) AND VISITS**

**24 Hr Preceding Service:**      **Med: 20**

#### **Day of Service**

Pre-service time:      **Med: 30**

Intra-service time:      Low: 45      25th%: 90      **Med: 100**      75th%: 120      High: 180

<b><u>Post Service</u></b>	<b><u>Total Time</u></b>	<b><u>CPT Code / # of visits</u></b>
Same Day:	25	99232 x 1
After Same Day:		
Critical Care	0	
Other Hospital	28	99232 x 1
Discharge Mgmt	30	99238 x 1
Office	80	99213 x 4

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**KEY REFERENCE SERVICE(S):**

<u>99 RVW</u>	<u>Global</u>	<u>CPT</u>	<u>Descriptor</u>
7.04	090	63685	Incision and subcutaneous placement of spinal neurostimulator pulse generator or receiver, direct or inductive coupling

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

	<i>Mean</i> Intensity/Complexity Measures		
	6188X (AA4)	63685	N/A*
<b>Time Estimates (Median)</b>			
PRE-service time	50	35	--
INTRA-service time	100	45	--
POST-service time	163	95	--
<b>Mental Effort and Judgment</b>			
The number of possible diagnosis and/or the number of management options that must be considered	3.44	2.96	--
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	4.19	2.96	--
Urgency of medical decision making	3.65	2.50	--
<b>Technical Skill/physical Effort</b>			
Technical skill required	3.69	2.88	--
Physical effort required	3.62	2.85	--
<b>Psychological Stress</b>			
The risk of significant complications, morbidity and/or mortality	2.88	2.77	--
Outcome depends on skill and judgment of physician	3.85	3.00	--
Estimated risk of malpractice suit with poor outcome	4.04	3.19	--
<b>Time Segments</b>			
PRE-service intensity/complexity	3.85	2.96	--
INTRA-service intensity complexity	3.77	3.00	--
POST-service intensity complexity	3.85	3.04	--

**ADDITIONAL RATIONALE:**

The revision in code 61885 (AA3) and new code 6188X (AA4) were created to reflect changes in clinical practice. Because of the nature of the disorders (e.g., Parkinson's disease, essential tremor, multiple sclerosis) treated by deep brain stimulation, bilateral symptoms and findings are now frequently seen. Thus, sometimes 1 electrode array might be connected to 1 pulse generator or receiver. At other times, 2 electrode arrays (one on each side of the brain) might be required and might be connected to one generator or receiver. Again, the work involved in connected two different arrays from opposite sides of the head into 1 generator is significantly different than the work of connecting just 1 array.

Old code 61885 was not chosen as a reference service for revised code 61885 (AA3), but instead 63685 was cited by almost all respondents. The original value for 61885 was based on Harvard study intraoperative work estimates by four neurosurgeons and predicted pre- and post-operative work. Deep brain stimulation (ie, new target sites) was not available in the 1980s during the Harvard study, nor were there an indications approved for using more than one electrode array. Subsequent to the Harvard study, this code was reviewed during the RUC MFS five-year review and

increased based on a comparison to CPT 61880 (Revision or removal intracranial electrodes). Deep brain stimulation was not approved at the time of the five-year review and code 61855 was still not well understood or used.

With recent approval of new technology and new indications and the ability to implant and connect to more than one electrode array, experience has been gained with respect to implanting neurostimulator generators/receivers. Based on their experience (12 month experience average of 16), the survey respondents chose CPT 63650 as a reference service. CPT 63650 is for a spinal neurostimulator as compared with AA3 for the cranial neurostimulator. The cranial neurostimulator requires more time and more work to implant than the spinal neurostimulator. This is reflected in the survey data.

Based on the discussion above, the AANS review committee recommends 8.00 for both AA3 for AA4. This is the survey 25th percentile for AA3 and less than the survey 25th percentile for AA4. This value sets a better relationship for AA3 and AA4 (cranial) to 63650 (spinal). AA4 was created as a separate CPT code in response to a request by the CPT panel for tracking purposes. However, AA4 is very rarely performed and it is difficult to estimate the amount of increased work for implanting two or more electrode arrays. Consequently, we have chosen to recommend that the RVW for AA4 be equal to AA3, until more experience is gained with this new technology.

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## FREQUENCY INFORMATION

### How was this service previously reported?

61885-50	Incision and subcutaneous placement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling
64999	Unlisted Procedure, nervous system

### How often do physicians in your specialty perform this service?

Commonly      Sometimes      Rarely

### Estimate the number of times this service might be provided nationally in a one-year period?

For revised code 61885 (AA3) and new code 6188X (AA4): 100% of the old 61885; and some percentage of 64999 Unlisted Procedure, nervous system

### Is this service performed by many physicians across the United States?

~~Yes~~      No

**Recommended RVW:** 7.50

**CPT Code/ Tracking:** 64573 (AA6)

**Global Period:** 090

**CPT Descriptor:** Incision for implantation of neurostimulator electrodes; cranial nerve

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**Vignette Used in Survey:**

A 31-year-old male with a 21 year history of partial complex epilepsy is experiencing 10 to 12 seizures per month and considerable side effects from maximal doses of carbamazepine and sodium valproate. His history includes previous single drug and polypharmacy drug regimens, but in each case, the number, intensity, and duration of seizures were intolerable. His history also indicates no evidence for non-epileptic seizures under video EEG recording. He undergoes an open operation to implant a neurostimulator electrode on the vagal nerve.

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**CLINICAL DESCRIPTION OF SERVICE** (This work description was NOT provided on the survey.):

**Description of Pre-service work:**

Review of records and any pertinent imaging studies, including previous treatments for seizure disorder; communicating with other professionals, patient, and family; and obtaining consent. The pre-operative work also includes dressing, scrubbing, preparing the needed equipment for the procedure, and supervising prepping and draping of the patient.

**Description of Intra-Service Work:**

After induction of anesthesia, a curvilinear incision is made on the side of the neck over the sternocleidomastoid (SCM) muscle. The wound edges are retracted with a self-retaining retractor. Hemostasis is obtained. The external jugular vein and SCM muscle are dissected. The carotid sheath is exposed and carefully opened. The vagus nerve is exposed, being careful not to damage either the jugular vein, carotid artery, and laryngeal nerve. Dissection is carried out along the posterior carotid sheath and vagus nerve to expose about 6 cm of the nerve. The stimulator electrode coil is placed by spiraling it around the vagus nerve. The electrode array is tested for good contact with the nerve by measuring electrode impedance. The electrode array is repositioned, as necessary. Absolute hemostasis is obtained and the wound is irrigated with antibiotic solution. The electrode placement and efficacy are tested. The wound is inspected for any bleeding or damage to nerves, veins, and/or arteries. The tail of electrode is tunneled subcutaneously to permit connection to a neurostimulator generator. The wound is irrigated and closed in layers.

**Description of Post-Service Work:**

Postoperative work includes application of sterile dressings; checking the entire stimulator system for proper function; communicating with the family and other health care professionals (including written and oral reports and orders); monitoring the patient's neurological condition for any deficits; monitoring for wound infection; and antibiotic and pain medication management. Frequently during the postoperative period, the patient's neurological condition is monitored for any deficits from either electrode placement and/or the stimulation itself and/or from carotid artery, jugular vein, or vagal nerve damage. Discharge day management includes the surgeon's final examination of the patient; review with the patient and family of post-discharge continuing care and instructions; and preparation of discharge records. Additionally, all post-discharge office visits for this procedure for 90 days after the day of the operation are considered part of the postoperative work for this procedure; including removal of staples and sutures; monitoring wound healing; and examining the patient in the office at appropriate postoperative intervals to ensure adequate healing of all wounds and functioning/effectiveness of the implant.

**SURVEY DATA**

**Presenter(s):** Samuel Hassenbusch, MD (AANS/CNS)  
 Peter Dempsey, MD (AANS)

**Specialty(s):** American Association of Neurological Surgeons/Congress of Neurological Surgeons

**Sample Size:** 62      **Response Rate (No. and %):** 29 (47%)

**Type of Sample:** Panel

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<b><u>Survey RVW</u></b>	Low: 6.00	25th%: 10.50	Med: 13.00	75th%: 16.00	High: 18.70
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**TIME (min) AND VISITS**

**24 Hr Preceding Service:** Med: 35

**Day of Service**

Pre-service time: Med: 30

Intra-service time: Low: 30      25th%: 85      Med: 90      75th%: 110      High: 180

<b><u>Post Service</u></b>	<b><u>Total Time</u></b>	<b><u>CPT Code / # of visits</u></b>
Same Day:	20	99231
After Same Day:		
Critical Care	0	
Other Hospital	0	
Discharge Mgmt	30	99238
Office	35	99231 x 2

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**KEY REFERENCE SERVICE(S):**

<b><u>99 RVW</u></b>	<b><u>Global</u></b>	<b><u>CPT</u></b>	<b><u>Descriptor</u></b>
18.70	090	35301	Thromboendarterectomy, with or without patch graft; carotid, vertebral, subclavian, by neck incision
10.29	090	63655	Laminectomy for implantation of neurostimulator electrodes, plate/paddle, epidural

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Time Estimates (Median)	<i>Mean</i> Intensity/Complexity Measures		
	64573 (AA6)	35301	63655
PRE-service time	65	68	50
INTRA-service time	90	120	100
POST-service time	85	110	75
<b>Mental Effort and Judgment</b>			
The number of possible diagnosis and/or the number of management options that must be considered	3.52	3.58	3.38
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	4.03	3.92	4.00
Urgency of medical decision making	2.28	4.08	2.46
<b>Technical Skill/physical Effort</b>			
Technical skill required	3.66	4.25	3.38
Physical effort required	3.17	3.42	3.00
<b>Psychological Stress</b>			
The risk of significant complications, morbidity and/or mortality	3.10	4.33	3.23
Outcome depends on skill and judgment of physician	3.62	4.33	3.77
Estimated risk of malpractice suit with poor outcome	3.10	4.00	3.92
<b>Time Segments</b>			
PRE-service intensity/complexity	3.00	3.50	2.92
INTRA-service intensity complexity	3.62	4.08	3.54
POST-service intensity complexity	2.90	3.58	3.08

**ADDITIONAL RATIONALE:**

CPT 64573 is a very old code, originally designed for an open incision and placement of a simple electrode on the trigeminal cranial nerve. We believe this procedure was rarely performed (total frequency of less than 20 per year), and the code was created to complement the code for the very infrequently performed "percutaneous" placement of a neurostimulator electrode for trigeminal stimulation (64553). The MFS RVW for 64573 was based on the Harvard study from the response from three general surgeons, who estimated intra-service time at 37 minutes. The pre- and post-service work and time were predicted. Recently (in the past 2 years), vagus cranial nerve stimulation has been approved for seizure control and is new technology. The vagal stimulator operation was not performed prior to this time. It is most often used for epilepsy in children.

Because CPT 64573, for a generic cranial nerve electrode placement was no longer used, AANS (and others) proposed to delete this code and create a new vagal nerve electrode placement descriptor. During recent CPT deliberations on this issue, because of the decreasing availability of new CPT numbers, it was decided to use CPT 64573 for the new procedure.

Therefore, CPT 64573 became part of the review and survey for the deep brain stimulation codes because the procedure for which the code will be used has totally changed. The procedure now involves an open operation to place a spiral electrode on the vagal nerve. It also includes a long area of dissection of the carotid artery, with care to avoid injury to the vagus nerve and other structures (e.g., recurrent laryngeal, carotid artery) in/near the carotid sheath. For this reason, the survey respondents referenced CPT 35301.

Comparison of the revised utilization of CPT 64573 to the original, with a RVU of 4.43, requires a different set of reference codes in order to place the current version in relation to other services. The original Harvard time values for 64573, when considered as applied to the trigeminal nerve, were pre-service 13 minutes, intraservice 37 minutes, and post-service 31 minutes. The present version of this code has increased each of these time values, as noted above.

The reference codes selected by the survey respondents included CPT 35301 Thromboendarterectomy and CPT 63655 Laminectomy for implantation of an array of epidural electrodes into the spinal canal over the spinal cord. The RVW for 35301 is 18.70 and for 63655 is 10.29. This latter code is also an old code originally valued in the Harvard process by general surgeons at 9.17 RVWs. The common denominator between 63655 and the current version of 64753 lies in the implantation of an electrode to a deep neural structure. However, the differences in the work of the approach as well as some question about the reliability of the assigned work value for 63655 make the security of the comparison uncertain.

The consensus committee reviewing this code noted other codes that involve significant amounts of neck dissection that were not listed in the survey reference table and therefore not cited by the respondents. These include:

Code	Description	99 RVW	Global
37605	Ligation internal or common carotid artery	6.19	90
37606	Carotid occlusion by Serverstone clamp	6.28	90
38380	Suture &/or ligat. Thoracic duct, cervical appr	7.46	90
38542	Dissection deep jugular nodes	5.91	90
60220	Thyroid lobectomy, unilateral	10.53	90
38724	Modified radical neck dissection	14.54	90

Among this group of codes, CPT 37606 Carotid occlusion by clamp with a RVW of 6.28 matches the current procedure in the location, depth and intensity of the service components. The times for 37606 from the Harvard study are 62 minutes (pre-service), 84 minutes (intra-service), and 125 minutes (post-service), all of which compare quite well to the survey times for CPT 64753.

For perspective, we offer a final comparison of two codes on the MPC (32100 and 56340), both with values at the level of the key reference CPT 63655 which has an RVW 10.29. The first MPC code is 32100 Exploratory thoracotomy at RVW of 10.07, and the second was 56340 Laparoscopic cholecystectomy at RVW of 10.68.

Based on the above comparisons, it appears that the overall work of this CPT 64573 matches that of CPT 38380 (RVW 7.46) most closely in the location and depth as well as complexity of the exposure and dissection. Additional work for connection of the electrode, once placed around the vagus, comes under the code for implantation of the stimulus generator and should not be considered under the present code. Wound closure and aftercare are also comparable. Therefore, we recommend a value of 7.50 for CPT 64573 (AA6).

## FREQUENCY INFORMATION

**How was this service previously reported?**

64573-22

**How often do physicians in your specialty perform this service?**

Commonly      Sometimes      Rarely

**Estimate the number of times this service might be provided nationally in a one-year period?**

1997 Medicare frequency for 64753 was less than 30. This procedure would more likely be performed on patients outside the Medicare population, especially for children. However, it still will be performed infrequently.

**Is this service performed by many physicians across the United States?**

~~Yes~~      No



**AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE**  
**SUMMARY OF RECOMMENDATIONS**  
**May 1999**

**ELECTRONIC ANALYSIS OF PACING CARDIOVERTER-DEFIBRILLATOR PACEMAKER SYSTEMS**

***Work Relative Value Recommendations***

A series of new CPT codes, 93741-93744 was established to describe the electronic analysis of pacing cardioverter-defibrillator single and dual chamber pacemaker systems (with and without reprogramming). The FDA recently approved a new implantable cardioverter-defibrillator that combines the features of a typical defibrillator with a dual-chamber pacemaker into one device. The current codes do not reflect the more extensive follow-up and additional time and expertise required in the electronic analysis of this combined device.

**CPT Code 93741**

The work described by 93741 *Electronic analysis of pacing cardioverter-defibrillator (includes interrogation, evaluation of pulse generator status, evaluation of programmable parameters at rest and during activity where applicable, using electrocardiographic recording and interpretation of recordings at rest and during exercise, analysis of event markers and device response); without reprogramming* is most similar to the work of 93737 *Electronic analysis of cardioverter/defibrillator only (interrogation, evaluation of pulse generator status); without reprogramming* (work RVU=0.45) plus 50% of 93734 *Electronic analysis of single chamber pacemaker system (includes evaluation of programmable parameters at rest and during activity where applicable, using electrocardiographic recording and interpretation of recordings at rest and during exercise, analysis of event markers and device response); without reprogramming* (work RVU= 0.38) for the additional work. Based on the additional work of 93741 compared to 93737, the RUC recommends a work RVU at twice the value of 93737 for a recommendation of .90.

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## **CPT Code 93742**

CPT Code 93742 *Electronic analysis of pacing cardioverter-defibrillator (includes interrogation, evaluation of pulse generator status, evaluation of programmable parameters at rest and during activity where applicable, using electrocardiographic recording and interpretation of recordings at rest and during exercise, analysis of event markers and device response); single chamber, with reprogramming* is very similar in work to several existing CPT codes, such as CPT 93738 *Electronic analysis of cardioverter/defibrillator only (interrogation, evaluation of pulse generator status); with reprogramming* (work RVU=0.92) plus 50% of 93735 *Electronic analysis of single chamber pacemaker system (includes evaluation of programmable parameters at rest and during activity where applicable, using electrocardiographic recording and interpretation of recordings at rest and during exercise, analysis of event markers and device response); with reprogramming* (work RVU=0.74) for the additional work. According to survey data, there is a 14% increase in total time between 93741 and 93742. Therefore, the RUC agreed that 14% should be added to the work value of 93741 to arrive at a recommended work RVU of 1.03 for CPT code 93742.

## **CPT Codes 93743 & 93744**

The work involved in CPT Code 93743 *Electronic analysis of pacing cardioverter-defibrillator (includes interrogation, evaluation of pulse generator status, evaluation of programmable parameters at rest and during activity where applicable, using electrocardiographic recordings and interpretation of recordings at rest and during exercise, analysis of event markers and device response); dual chamber without reprogramming* is very similar to a combination of existing codes 93738 (work RVU = 0.92) plus 50% of 93735 (work RVU=0.74) for the additional work. The RUC agreed that the 30% increase in time from CPT 93741 to 93743 supported a 30% increase in work RVU for a dual chamber and that the increase in time between 93743 and 93744 was considered equivalent to 93741 and 93742. Therefore, the RUC supports a work RVU of 1.17 for 93743 and 1.33 for 93744.

## ***Practice Expense Recommendations***

The specialty society did not offer any recommendations regarding direct practice expense inputs for these codes. As such, no practice expense recommendations will be forwarded by the RUC at this time.

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<b>CPT Code (•New)</b>	<b>Track- ing Number</b>	<b>CPT Descriptor</b>	<b>Global Period</b>	<b>Work RVU Recommendation</b>
•93741	B3	Electronic analysis of pacing cardioverter-defibrillator (includes interrogation, evaluation of pulse generator status, evaluation of programmable parameters at rest and during activity where applicable, using electrocardiographic recording and interpretation of recordings at rest and during exercise, analysis of event markers and device response); single chamber, without reprogramming	XXX	.90
•93742	B4	Single chamber, with programming	XXX	1.03
•93743	B5	dual chamber, without reprogramming	XXX	1.17
•93744	B6	dual chamber, with reprogramming	XXX	1.33

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## Physician Work Data

### Staff Note

CPT Editorial Research & Development editorially revised the descriptor language for the CPT codes contained in this section subsequent to the CPT Panel meetings. As such, the descriptor language contained on the “Summary of Recommendation” forms prepared by specialty societies may not be identical to that which appears in the RUC’s final recommendations. The editorial changes that were adopted did not affect the survey process or the relative value recommendations.

**AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF RECOMMENDATION**

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CPT Code: 9374X1 Tracking Number:      Global Period:      Recommended RVW: 1.0

CPT Descriptor: Electronic analysis of combination ICD/single-chamber pacemaker system; without reprogramming.

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**CLINICAL DESCRIPTION OF SERVICE:**

Vignette Used in Survey: A 72-year-old female with ventricular tachycardia and chronic atrial fibrillation has previously undergone insertion of a combination implantable cardioverter defibrillator (ICD)/rate-responsive, single-chamber pacemaker. Because of recurrent ventricular tachycardia, an antiarrhythmic drug is initiated. In follow-up analysis, the device is interrogated to determine the number of defibrillator shocks delivered, the associated shock impedance, and review of the electrograms documenting episodes of tachycardia treated with either antitachycardia pacing or an internal shock. The sensing, pacing, and impedance characteristics along with the rate responsive characteristics of the lead are evaluated. Capacitors are reformed and charge times assessed. The results of the interrogation are reviewed with the patient and family, documented in the patient's history, and a report is sent to the referring physician.

Description of Pre-Service Work: A careful history and appropriate physical examination are performed along with review of any pertinent laboratory testing including the results of blood tests, ECG, chest x-ray, and drug levels. The indication and benefits of interrogating the ICD are reviewed with the patient and family, and verbal consent is obtained.

Description of Intra-Service Work: The procedure is performed under continuous ECG recording. The device is interrogated to assess program parameters and stored data. The battery voltage and/or charge time is assessed to confirm adequate battery reserve. The pacing lead impedance, sensing, and pacing thresholds are determined. The patient is walked to assess the rate-responsive settings of the defibrillator/pacemaker. Stored electrogram data documenting treated episodes of ventricular tachycardia or ventricular fibrillation are reviewed to make certain that the device is functioning properly. The services are documented, a report is generated, and the results are communicated with the referring physician, patient, and the patient's family.

Description of Post-Service Work: None.

**SURVEY DATA:**Presenter: James D. Maloney - American College of CardiologySpecialty: CardiologySample Size: 46 Response Rate: (%): 35 Final Median RVW: 1.0

Explanation of Sampling Technique: Two hundred randomly selected American members of the North American Society for Pacing and Electrophysiology were asked if they were willing to respond to a survey on the relative value of this procedure. Forty-six responded that they would and they were subsequently sent the survey documents.

25th Percentile RVW: 0.8 75th Percentile RVW: 1.4 Low: 0.5 High: 2.6Median Pre-Service Time: 5 Median Intra-Service Time: 2325th Percentile Intra-Svc Time: 19 75th Percentile Intra-Svc Time: 30 Low: 10 High: 60Median Same Day Post-Service Time: 5Number of Post Procedure Visits: 1 Total Time of Post Procedure Visits: 28**KEY REFERENCE SERVICE:**

<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
93737	Electronic analysis of cardioverter/defibrillator only (interrogation, evaluation of pulse generator status); without reprogramming	0.45

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**  
The relationship of the code being reviewed to the key reference service(s) (by the mean) of the service you are rating to the key reference services listed above. Make certain that you are including the data from the service that you are rating as well as the key reference services.

**TIME ESTIMATES (Median)**

	<u>CPT Code</u>	<u>Reference Service 1</u>	<u>Reference Service 2</u>
Median Pre-Time	<u>5</u>	<u>-</u>	<u></u>
Median Intra-Time	<u>23</u>	<u>23</u>	<u></u>
Median Post-Time	<u>33</u>	<u>17</u>	<u></u>

**INTENSITY/COMPLEXITY MEASURES (Mean)****Mental Effort and Judgement (Mean)**

The number of possible diagnosis and/or the number of management options that must be considered	<u>3.6</u>	<u>3.6</u>	<u></u>
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	<u>3.5</u>	<u>3.7</u>	<u></u>
Urgency of medical decision making	<u>3.1</u>	<u>3.2</u>	<u></u>

Technical Skill/Physical Effort (Mean)

Technical skill required	3.1	3.3	
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Physical effort required	1.7	1.7	
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Psychological Stress (Mean)

The risk of significant complications, morbidity and/or mortality	3.0	3.4	
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Outcome depends on the skill and judgement of physician	3.2	3.5	
---	-----	-----	--

Estimated risk of malpractice suit with poor outcome	2.9	3.0	
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INTENSITY/COMPLEXITY MEASURESCPT CodeReference  
Service 1Reference  
Service 2Time Segments (Mean)

Pre-Service intensity/complexity	2.2	1.8	
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Intra-Service intensity/complexity	3.3	3.1	
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Post-Service intensity/complexity	2.2	1.8	
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**ADDITIONAL RATIONALE**

The new code is similar in work to existing codes 93737 (RVW = 0.45) plus 50% of 93734 (RVW = 0.38).

**FREQUENCY INFORMATION**

How was this service previously reported? 93737

How often do physicians in your specialty perform this service? X Commonly    Sometimes    Rarely

Estimate the number of times this service might be provided nationally in a one-year period? 138,000

Do many physicians perform this service across the United States? X Yes    No



**AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF RECOMMENDATION**

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CPT Code: 9374X2 Tracking Number:      Global Period:      Recommended RVW: 1.1

CPT Descriptor: Electronic analysis of combination ICD/single chamber pacemaker system with reprogramming.

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**CLINICAL DESCRIPTION OF SERVICE:**

Vignette Used in Survey: A 72-year-old female with spontaneous and electrically inducible ventricular tachycardia and chronic atrial fibrillation has previously undergone insertion of a combination implantable cardioverter defibrillator (ICD)/rate-responsive, single-chamber pacemaker. Because of recurrent ventricular tachycardia, an antiarrhythmic drug is initiated. In follow-up analysis, the device is interrogated to determine the number of defibrillator shocks delivered, the associated shock impedance, and review of the electrograms documenting episodes of tachycardia treated with either antitachycardia pacing or an internal shock. The sensing, pacing, and impedance characteristics along with the rate responsive characteristics of the lead are evaluated. Capacitors are reformed and charge times assessed. Interrogation of the device documents that one shock was delivered for atrial fibrillation, and the maximum heart rate achieved with moderate exercise today is only 80 beats per minute. Therefore, stability criteria is programmed on to help discriminate between atrial fibrillation and ventricular tachycardia, and the rate responsive parameters are readjusted to allow a more rapid heart rate during exercise. The results of the interrogation are reviewed with the patient and family, documented in the patient's history, and a report is sent to the referring physician.

Description of Pre-Service Work: A careful history and appropriate physical examination are performed along with review of any pertinent laboratory testing including the results of blood tests, ECG, chest x-ray, and drug levels. The indication and benefits of interrogating the ICD are reviewed with the patient and family, and verbal consent is obtained.

Description of Intra-Service Work: The procedure is performed under continuous ECG recording. The device is interrogated to assess program parameters and stored data. The battery voltage and/or charge time is assessed to confirm adequate battery reserve. The pacing lead impedance, sensing, and pacing thresholds are determined. The patient is walked to assess the rate-responsive settings of the defibrillator/pacemaker. Stored electrogram data documenting treated episodes of ventricular tachycardia or ventricular fibrillation are reviewed to make certain that the device is functioning properly. The device is reprogrammed to optimize the antitachycardia treatment parameters, tachycardia detection criteria, atrial and ventricular lead sensing and pacing thresholds, and rate responsive characteristics. The patient is then observed during light exercise to assess heart rate response. The services are documented, a report is generated, and the results are communicated with the referring physician, patient, and the patient's family.

Description of Post-Service Work: None.

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**SURVEY DATA:**

Presenter: James D. Maloney - American College of Cardiology

Specialty: Cardiology

Sample Size: 46 Response Rate: (%): 35 Final Median RVW: 1.1

Explanation of Sampling Technique: Two hundred randomly selected American members of the North American Society for Pacing and Electrophysiology were asked if they were willing to respond to a survey on the relative value of this procedure. Forty-six responded that they would and they were subsequently sent the survey documents.

25th Percentile RVW: 0.9 75th Percentile RVW: 1.5 Low: 0.5 High: 2.6

Median Pre-Service Time: 5 Median Intra-Service Time: 30

25th Percentile Intra-Svc Time: 20 75th Percentile Intra-Svc Time: 41 Low: 15 High: 60

Median Same Day Post-Service Time: 3

Number of Post Procedure Visits: 1 Total Time of Post Procedure Visits: 32

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**KEY REFERENCE SERVICE:**

<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
93738	Electronic analysis of cardioverter/defibrillator only (interrogation, evaluation of pulse generator status); with reprogramming	0.92

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**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. Make certain that you are including the data from the service that you are rating as well as the key reference services.

**TIME ESTIMATES (Median)**

	<u>CPT Code</u>	<u>Reference Service 1</u>	<u>Reference Service 2</u>
Median Pre-Time	5	3	
Median Intra-Time	30	23	
Median Post-Time	35	-	

**INTENSITY/COMPLEXITY MEASURES (Mean)****Mental Effort and Judgement (Mean)**

The number of possible diagnosis and/or the number of management options that must be considered	3.7	3.5	
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.5	3.3	

Urgency of medical decision making	3.0	3.2	
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**Technical Skill/Physical Effort (Mean)**

Technical skill required	3.1	3.2	
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Physical effort required	1.6	1.7	
--------------------------	-----	-----	--

**Psychological Stress (Mean)**

The risk of significant complications, morbidity and/or mortality	3.0	3.2	
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Outcome depends on the skill and judgement of physician	3.2	3.5	
---	-----	-----	--

Estimated risk of malpractice suit with poor outcome	2.9	3.0	
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**INTENSITY/COMPLEXITY MEASURES**

**CPT Code**

**Reference  
Service 1**

**Reference  
Service 2**

**Time Segments (Mean)**

Pre-Service intensity/complexity	2.2	2.0	
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Intra-Service intensity/complexity	3.5	3.3	
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Post-Service intensity/complexity	2.2	2.0	
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**ADDITIONAL RATIONALE**

The new code is similar in work to a combination of existing codes 93738 (RVW = 0.92) plus 50% of 93735 (RVW = 0.74) for the additional work.

**FREQUENCY INFORMATION**

How was this service previously reported? 93738

How often do physicians in your specialty perform this service? X Commonly    Sometimes    Rarely

Estimate the number of times this service might be provided nationally in a one-year period? 182,000

Do many physicians perform this service across the United States? X Yes    No

**AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF RECOMMENDATION**

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CPT Code: 9374X3 Tracking Number:      Global Period:      Recommended RVW: 1.3

CPT Descriptor: Electronic analysis of combination ICD/dual-chamber pacemaker system without reprogramming.

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**CLINICAL DESCRIPTION OF SERVICE:**

Vignette Used in Survey: A 66-year-old male with coronary artery disease, ischemic cardiomyopathy, cardiac arrest, and sinus node dysfunction has a combination ICD/dual-chamber pacemaker system placed. He returns after experiencing three shocks from the device and shortness of breath with exertion. The device is interrogated and the patient is observed during walking to assess heart-rate response. Stored electrograms from the device are reviewed to determine the cause and appropriateness of the shocks. The findings are reviewed with the patient and family, and the results are documented in the patient's history. A report is generated and sent to the referring physician.

Description of Pre-Service Work: A careful history and appropriate physical examination are performed along with review of any pertinent laboratory testing including the results of blood tests, ECG, chest x-ray, and drug levels. The indication and benefits of interrogating the ICD are reviewed with the patient and family, and verbal consent is obtained.

Description of Intra-Service Work: The procedure is performed under continuous ECG recording. The device is interrogated to assess program parameters and stored data. The battery voltage and/or charge time may be assessed to confirm adequate battery reserve. The sensing, pacing, and impedance characteristics of the atrial and ventricular lead are assessed. The stored electrograms are reviewed to assess the appropriateness of the shock. The programmed antitachycardia and defibrillation therapies are reviewed. The rate responsiveness aspect of the pacemaker is also assessed while the patient is exercising. The findings are documented in the patient's history, a report is generated, and the results are communicated with the patient, family members, and referring physician.

Description of Post-Service Work: None.

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**SURVEY DATA:**

Presenter: James D. Maloney - American College of Cardiology

Specialty: Cardiology

Sample Size: 46 Response Rate: (%): 35 Final Median RVW: 1.3

Explanation of Sampling Technique: Two hundred randomly selected American members of the North American Society for Pacing and Electrophysiology were asked if they were willing to respond to a survey on the relative value of this procedure. Forty-six responded that they would and they were subsequently sent the survey documents.

25th Percentile RVW: 1.0 75th Percentile RVW: 1.5 Low: 0.5 High: 3.0

Median Pre-Service Time: 5 Median Intra-Service Time: 25

25th Percentile Intra-Svc Time: 23 75th Percentile Intra-Svc Time: 48 Low: 10 High: 280

Median Same Day Post-Service Time: 5

Number of Post Procedure Visits: 1 Total Time of Post Procedure Visits: 33

**KEY REFERENCE SERVICE:**

<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
93737	Electronic analysis of cardioverter/defibrillator only (interrogation, evaluation of pulse generator status); without reprogramming	0.45

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**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. Make certain that you are including the data from the service that you are rating as well as the key reference services.

**TIME ESTIMATES (Median)**

	<u>CPT Code</u>	<u>Reference Service 1</u>	<u>Reference Service 2</u>
Median Pre-Time	<u>5</u>	<u>-</u>	
Median Intra-Time	<u>25</u>	<u>20</u>	
Median Post-Time	<u>38</u>	<u>-</u>	

**INTENSITY/COMPLEXITY MEASURES (Mean)****Mental Effort and Judgement (Mean)**

The number of possible diagnosis and/or the number of management options that must be considered	<u>3.7</u>	<u>3.7</u>	
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	<u>3.7</u>	<u>3.5</u>	

Urgency of medical decision making	3.0	3.1	
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**Technical Skill/Physical Effort (Mean)**

Technical skill required	3.2	3.2	
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Physical effort required	1.5	1.7	
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**Psychological Stress (Mean)**

The risk of significant complications, morbidity and/or mortality	3.0	3.3	
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Outcome depends on the skill and judgement of physician	3.3	3.4	
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Estimated risk of malpractice suit with poor outcome	3.0	2.8	
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**INTENSITY/COMPLEXITY MEASURES**

**CPT Code**

**Reference  
Service 1**

**Reference  
Service 2**

**Time Segments (Mean)**

Pre-Service intensity/complexity	2.1	2.0	
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Intra-Service intensity/complexity	3.4	3.1	
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Post-Service intensity/complexity	2.2	2.0	
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**ADDITIONAL RATIONALE**

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**FREQUENCY INFORMATION**

How was this service previously reported? 93737

How often do physicians in your specialty perform this service? ☒ Commonly ☐ Sometimes ☐ Rarely

Estimate the number of times this service might be provided nationally in a one-year period? 32,000

Do many physicians perform this service across the United States? ☒ Yes ☐ No

**AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF RECOMMENDATION**

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CPT Code: 9374X4    Tracking Number:            Global Period:            Recommended RVW: 1.5

CPT Descriptor: Electronic analysis of combination ICD/dual-chamber pacemaker system with reprogramming.

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**CLINICAL DESCRIPTION OF SERVICE:**

Vignette Used in Survey: A 66-year-old male with coronary artery disease, ischemic cardiomyopathy, cardiac arrest, and sinus node dysfunction has a combination ICD/dual-chamber pacemaker system placed. He returns after experiencing three shocks from the device and shortness of breath with exertion. The device is interrogated and the patient is observed during walking to assess heart-rate response. Stored electrograms from the device are reviewed to determine the cause and appropriateness of the shocks which are found to be due to sinus tachycardia. The ICD and pacemaker are reprogrammed to enhance sensing by using sudden onset criteria and improve exercise performance by adjusting the rate responsive parameters of the dual-chamber pacemaker. The findings are reviewed with the patient and family, and the results are documented in the patient's history. A report is generated and sent to the referring physician.

Description of Pre-Service Work: A careful history and appropriate physical examination are performed along with review of any pertinent laboratory testing including the results of blood tests, ECG, chest x-ray, and drug levels. The indication and benefits of interrogating the ICD are reviewed with the patient and family, and verbal consent is obtained.

Description of Intra-Service Work: The procedure is performed under continuous ECG recording. The device is interrogated to assess program parameters and stored data. The battery voltage and/or charge time may be assessed to confirm adequate battery reserve. The sensing, pacing, and impedance characteristics of the atrial and ventricular lead are assessed. The stored electrograms are reviewed to assess the appropriateness of the shock and the programmed detection criteria and antitachycardia and defibrillation therapies. The rate responsive aspect of the pacemaker is also assessed while the patient is exercising. The device is reprogrammed to optimize the tachycardia detection criteria, antitachycardia treatment parameters, atrial and ventricular lead sensing and pacing thresholds, and rate responsive characteristics. The patient is then observed during light exercise to assess heart rate response. The findings are documented in the patient's history, a report is generated, and the results are communicated with the patient, family members, and referring physician.

Description of Post-Service Work: None.

## SURVEY DATA:

Presenter: James D. Maloney - American College of Cardiology

Specialty: Cardiology

Sample Size: 46 Response Rate: (%): 35 Final Median RVW: 1.5

Explanation of Sampling Technique: Two hundred randomly selected American members of the North American Society for Pacing and Electrophysiology were asked if they were willing to respond to a survey on the relative value of this procedure. Forty-six responded that they would and they were subsequently sent the survey documents.

25th Percentile RVW: 1.2 75th Percentile RVW: 1.8 Low: 0.5 High: 3.4

Median Pre-Service Time: 5 Median Intra-Service Time: 33

25th Percentile Intra-Svc Time: 30 75th Percentile Intra-Svc Time: 49 Low: 15 High: 80

Median Same Day Post-Service Time: 5

Number of Post Procedure Visits: 1 Total Time of Post Procedure Visits: 34

## KEY REFERENCE SERVICE:

<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
93738	Electronic analysis of cardioverter/defibrillator only (interrogation, evaluation of pulse generator status); with reprogramming	0.92

## RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. Make certain that you are including the data from the service that you are rating as well as the key reference services.

### TIME ESTIMATES (Median)

	<u>CPT Code</u>	<u>Reference Service 1</u>	<u>Reference Service 2</u>
Median Pre-Time	<u>5</u>	<u>5</u>	
Median Intra-Time	<u>33</u>	<u>20</u>	
Median Post-Time	<u>39</u>	<u>-</u>	

### INTENSITY/COMPLEXITY MEASURES (Mean)

#### Mental Effort and Judgment (Mean)

The number of possible diagnosis and/or the number of management options that must be considered	<u>3.8</u>	<u>3.6</u>	
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	<u>3.8</u>	<u>3.3</u>	



Urgency of medical decision making	3.0	3.2	
<b>Technical Skill/Physical Effort (Mean)</b>			
Technical skill required	3.3	3.2	
Physical effort required	1.6	1.7	
<b>Psychological Stress (Mean)</b>			
The risk of significant complications, morbidity and/or mortality	3.2	3.2	
Outcome depends on the skill and judgement of physician	3.6	3.7	
Estimated risk of malpractice suit with poor outcome	3.0	3.0	

#### **INTENSITY/COMPLEXITY MEASURES**

#### **CPT Code**

#### **Reference Service 1**

#### **Reference Service 2**

#### **Time Segments (Mean)**

Pre-Service intensity/complexity	2.1	2.2	
Intra-Service intensity/complexity	3.6	3.2	
Post-Service intensity/complexity	2.3	2.2	

#### **ADDITIONAL RATIONALE**

The new code is similar in work to a combination of existing code 93738 (RVW = 0.92) plus 50% of 93732 (RVW = 0.92).

#### **FREQUENCY INFORMATION**

How was this service previously reported? 93738

How often do physicians in your specialty perform this service? X Commonly    Sometimes    Rarely

Estimate the number of times this service might be provided nationally in a one-year period? 48,000

Do many physicians perform this service across the United States? X Yes    No

**AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE**  
**SUMMARY OF RECOMMENDATIONS**  
**May 1999**

**EPIDURAL OR SUBARACHNOID SPINE INJECTION PROCEDURES**

***Work Relative Value Recommendations***

New codes 62310 –62319 were developed to systematically organize different routes for injection (subarachnoid, epidural), at different levels (cervical, thoracic, lumbar, caudal), for different substances (narcotic, anesthetic, steroid, antispasmodic).

The most difficult of these four procedures is 62318, followed by 62310 and 62319 (approximately equal), and then 62311 .

Nine current CPT codes were deleted and crosswalked into these four new codes. Additionally, three of the codes include procedures that did not have specific codes assigned: 62310 now includes injection, epidural, cervical of steroid or narcotic; 62318 now includes infusion, epidural, cervical antispasmodic, narcotic or steroid; and 62319 now includes infusion, epidural, lumbar of steroid.

It should also be noted that with respect to this code series, the Harvard post-service data for each of the nine codes being deleted was predicted at 7 to 9 minutes. These services, whether performed in a facility or non-facility, will require frequent post service monitoring of the patient and discharge management. The survey median post-service time for four of the codes (62310 - 62319) ranges from 15-30 minutes, which is two to three times more than Harvard's predicted estimates. Harvard's pre-service time is also lower by 5 to 15 minutes. Harvard's intra service time is only slightly lower than the new codes.

**CPT Code 62310**

CPT Code 62310 was created to report *Injection, single (not via indwelling catheter), not including neurolytic substances, with or without contrast (for either localization or epidurography), of diagnostic or therapeutic substance(s) (including anesthetic, antispasmodic, opioid, steroid, other solution), epidural or subarachnoid; cervical or thoracic.*

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The survey median of 2.20 is recommended for 62310. This is the current RVU for deleted code 62298, most closely related to the new code as it is used in current practice. The RVW is slightly more than the other three codes (62274, 62275, 62288) being crosswalked to this new code, but less than the amount of work for the cervical procedures, which previously would have been coded using 64999. The RUC agreed that the survey median represented a fair balance of the portions of all codes combined.

### **CPT Code 62311**

The CPT Editorial Panel adopted 62311 to describe *Injection, single (not via indwelling catheter), not including neurolytic substances, with or without contrast (for either localization or epidurography), of diagnostic or therapeutic substance(s) (including anesthetic, antispasmodic, opioid, steroid, other solution), epidural or subarachnoid; lumbar, sacral (caudal).*

The survey median of 1.78 is recommended for CPT code 62311. This is the current value for deleted code 62274, which has time and intensity/complexity measure closely related to the new code. The second referenced code 62278 has lower time and intensity/complexity measures across the board as compared with the new code 62311.

### **CPT Code 62318**

Also appearing in CPT 2000 will be CPT code 62318, which reports *Injection, including catheter placement, continuous infusion or intermittent bolus, not including neurolytic substances, with or without contrast (for either localization or epidurography), of diagnostic or therapeutic substance(s) (including anesthetic, antispasmodic, opioid, steroid, other solution), epidural or subarachnoid; cervical or thoracic.*

The survey median of 2.35 is recommended for 62318. This is slightly more than the current values for deleted crosswalked codes 62276 and 62277, but less than the amount of work for the cervical procedure, which is previously would have been coded using 64999. The RUC supported the survey median and agreed that the value of 2.35 represents a fair balance of the portions of all codes combined for this infrequently performed procedure.

### **CPT Code 62319**

Within this series, CPT Code 62319 was developed: *Injection, including catheter placement, continuous infusion or intermittent bolus, not including neurolytic substances, with or without contrast (for either localization or epidurography), of diagnostic or therapeutic substance(s) (including anesthetic, antispasmodic, opioid, steroid, other solution), epidural or subarachnoid; lumbar, sacral (caudal).*

The survey median of 2.15 is recommended for 62319. This is the current value for deleted CPT code 62227 and most closely relates to the new code as it is used in current practice, but less than the amount of work for the cervical procedures, which previously would have been code using 64999. The second referenced 62279 has lower time and intensity/complexity measures across the board compared with new code 62319. The RUC agrees that the survey median represents a fair balance of the portions of all codes combined.

### **CPT Code 72275**

Also implemented as a change for CPT 2000 was adoption of a new code to reflect *Epidurography, radiological supervision and interpretation*. This code was developed to allow for the reporting of radiologic component of epidurography

In evaluating potential relative work value units, the RUC referenced CPT code 72265 *Myelography, lumbosacral, radiological supervision and interpretation* (work RVU=.83) and also considered survey results. The RUC recommends the median survey value, .83, which is also the same value as the key reference code, though the intensity and complexity values are consistently slightly higher.

### ***Practice Expense Recommendations***

Since these are new codes there currently are no direct input data assigned to these codes. The specialties chose to crosswalk these codes to existing codes with direct inputs that the specialty believes is representative of the expenses associated with the new codes.

#### **CPT Code 62310**

The RUC recommends that the direct inputs associated with code 62298 *Injection of substance other than anesthetic, contrast, or neurolytic solutions, epidural, cervical or thoracic (separate procedure)* be applied to code 62310.

#### **CPT Code 62311**

The RUC recommends that the direct inputs associated with code 62289 *Injection of substance other than anesthetic, antispasmodic, contrast, or neurolytic solutions;lumbar or caudal epidural (separate procedure)* be applied to code 62311.

#### **CPT Code 62318**

The RUC recommends that the direct inputs associated with code 62277 *Injection of diagnostic or therapeutic anesthetic or antispasmodic substance (including narcotics);subarachnoid or subdural, continuous* be applied to code 62318.

#### **CPT Code 62319**

The RUC recommends that the direct inputs associated with code 62277 *Injection of diagnostic or therapeutic anesthetic or antispasmodic substance (including narcotics);subarachnoid or subdural, continuous* be applied to code 62319.

## CPT Code 72275

The RUC recommends that the direct inputs associated with code 72265 *Myelography, lumbosacral, radiological supervision and interpretation* be applied to code 72275.

CPT Code (•New)	Track- ing Number	CPT Descriptor	Global Period	Work RVU Recommendation
<b>Injection, Drainage or Aspiration</b> (For radiological supervision and interpretation in conjunction with codes 62274, 62282, 62288, 62289, 62298, use 76000) <u>Injection of contrast during fluoroscopic guidance and localization is an inclusive component of codes 62270-62273, 62280-62282, 62310-62319. Fluoroscopic guidance and localization is reported by code 76005, unless a formal contrast study (myelography, epidurography, or arthrography) is performed, in which case the use of fluoroscopy is included in the supervision and interpretation codes.</u> <u>For radiologic supervision and interpretation of epidurography, use 72275. Code 72275 is only to be used when an epidurogram is performed or filmed, and a formal radiologic report is issued.</u> <u>For codes 62318, 62319, use code 01996 for subsequent daily management of epidural or subarachnoid catheter drug administration.</u>				
▲ 62273		Injection, lumbar epidural, of blood or clot patch	000	2.15 (No Change)
▲ 62280		Injection/ <u>infusion</u> of neurolytic substance (eg, alcohol, phenol, iced saline solutions), <u>with or without other therapeutic substance</u> ; subarachnoid	090	2.63 (No Change)
62281		epidural, cervical or thoracic	010	2.66 (No Change)

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CPT Code (•New)	Track- ing Number	CPT Descriptor	Global Period	Work RVU Recommendation
▲ 62282		epidural, lumbar or <del>sacral</del> (caudal)	010	2.33 (No Change)
62274		Injection of diagnostic or therapeutic anesthetic or antispasmodic substance (including narcotics); subarachnoid or subdural, single  (62274 has been deleted. To report, see 62310, 62311)	000	1.78 <b>Deleted Code</b>
62275		epidural, cervical or thoracic, single  (62275 has been deleted. To report, see 62310)	000	1.79 <b>Deleted Code</b>
62276		subarachnoid or subdural, differential  (62276 has been deleted. To report, see 62318, 62319)	000	2.04 <b>Deleted Code</b>
62277		subarachnoid or subdural, continuous  (62277 has been deleted. To report, see 62318, 62319)	000	2.15 <b>Deleted Code</b>
62278		epidural, lumbar or caudal, single  (62278 has been deleted. To report, use 62311)	000	1.51 <b>Deleted Code</b>
62279		epidural, lumbar or caudal, continuous  (62279 has been deleted. To report, use 62319)	000	1.58 <b>Deleted Code</b>

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<b>CPT Code (•New)</b>	<b>Track- ing Number</b>	<b>CPT Descriptor</b>	<b>Global Period</b>	<b>Work RVU Recommendation</b>
62288		Injection of substance other than anesthetic, antispasmodic, contrast, or neurolytic solutions; subarachnoid (separate procedure)  (62288 has been deleted. To report, see 62310, 62311)	000	1.74  <b>Deleted Code</b>
62289		lumbar or caudal epidural (separate procedure)  (62289 has been deleted. To report, use 62311)	000	1.64  <b>Deleted Code</b>
62298		Injection of substance other than anesthetic, contrast, or neurolytic solutions; epidural, cervical or thoracic (separate procedure)  (62298 has been deleted. To report, use 62310)	000	2.20  <b>Deleted Code</b>
•62310	K1	Injection, single (not via indwelling catheter), not including neurolytic substances, with or without contrast (for either localization or epidurography), of diagnostic or therapeutic substance(s) (including anesthetic, antispasmodic, opioid, steroid, other solution), epidural or subarachnoid; cervical or thoracic	000	2.20
•62311	K2	lumbar, sacral (caudal)	000	1.78

*CPT five-digit codes, two-digit modifiers, and descriptions only are copyright by the American Medical Association.*



<b>CPT Code (•New)</b>	<b>Track- ing Number</b>	<b>CPT Descriptor</b>	<b>Global Period</b>	<b>Work RVU Recommendation</b>
•62318	K3	Injection, including catheter placement, continuous infusion or intermittent bolus, not including neurolytic substances, with or without contrast (for either localization or epidurography), of diagnostic or therapeutic substance(s) (including anesthetic, antispasmodic, opioid, steroid, other solution), epidural or subarachnoid; cervical or thoracic	000	2.35
•62319	K4	lumbar, sacral (caudal)	000	2.15
•72275	K5	Epidurography, radiological supervision and interpretation  <u>(For injection procedure, see codes 62280-62282, 62310-62319, 64479, 64483)</u>	000	0.83

*CPT five-digit codes, two-digit modifiers, and descriptions only are copyright by the American Medical Association.*



## Physician Work Data

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF WORK RECOMMENDATION

(April 1999)

**Recommended RVW:** 2.20

**CPT Code/ Tracking:** 62X01 (K1)

**Global Period:** 000

**CPT Descriptor:** Injection, single (not via indwelling catheter), not including neurolytic substances, with or without contrast (for either localization or epidurography), of diagnostic or therapeutic substance(s) (including anesthetic, antispasmodic, opioid, steroid, other solution), epidural or subarachnoid; cervical or thoracic

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**Vignette Used in Survey:**

A 45-year-old male has severe pain (rated at 8/10) involving both arms and the neck after multiple neck operations over a 10-year period. Various systemic medications (oral narcotic and non-narcotic) and physical therapy have failed to provide significant long-term pain relief. The patient is given a single subarachnoid or epidural narcotic injection in the cervical or thoracic space.

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**CLINICAL DESCRIPTION OF SERVICE** (This work description was NOT provided on the survey.):

**Description of Pre-Service Work:**

Pre-service work includes review of records and any pertinent imaging studies; communicating with other professionals, patient, and family; and obtaining consent. The pre-operative work also includes dressing, scrubbing, and waiting before the procedure, preparing the patient and needed equipment for the procedure, positioning the patient on the x-ray table, and draping of the injection site.

**Description of Intra-Service Work:**

An injection needle is directed into the subarachnoid or epidural space at the proper vertebral level, possibly under x-ray fluoroscopy. Care has to be taken to avoid damaging any nerve roots or spinal cord. A contrast injection is performed as necessary to confirm needle tip or catheter location and determine degree of free flow of liquid in the space to assure both safety and accuracy. The therapeutic injection(s) is performed through the same needle. The injection needle is removed and dressing applied.

**Description of Post-Service Work:**

The patient is closely observed for two to eight hours post-procedure in a monitored setting for any new, unexpected neurologic deficits and/or any change in vital signs (respiratory depression, bradycardia, altered mental status). The physician communicates findings with the patient and other professionals (including written and telephone reports and orders).

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**SURVEY DATA**

**Presenter(s):** Michael Ashburn, MD (AAPM)  
 Karl Becker, MD (ASA)  
 Peter Dempsey, MD (AANS)  
 Paul Dreyfuss, MD (AAPM&R)  
 Thomas Faciszewski, MD (NASS)  
 Samuel Hassenbusch, MD (AANS/CNS)

**Specialty(s):** American Academy of Pain Medicine, American Academy of Physical Medicine and Rehabilitation, American Society of Anesthesiologists, American Association of Neurological Surgeons/Congress of Neurological Surgeons, North American Spine Society

**Sample Size:** 205      **Response Rate (No. and %):** 63 (31%)

**Type of Sample:** random and panel

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<b><u>Survey RVW</u></b>	<b>Low:</b> 1.51	<b>25th%:</b> 1.88	<b>Med:</b> 2.20	<b>75th%:</b> 2.50	<b>High:</b> 6.00
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**TIME (min) AND VISITS**

**24 Hr Preceding Service:** **Med:** 20

**Day of Service**

Pre-service time: **Med:** 15

Intra-service time: **Low:** 10      **25th%:** 20      **Med:** 30      **75th%:** 40      **High:** 60

<b><u>Post Service</u></b>	<b><u>Total Time</u></b>	<b><u>CPT Code / # of visits</u></b>
Same Day:	20	99238

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**KEY REFERENCE SERVICE(S):****HVD**

<b><u>Tot Min</u></b>	<b><u>99 RVW</u></b>	<b><u>Global</u></b>	<b><u>CPT</u></b>	<b><u>Descriptor</u></b>
n/a*	1.79	000	62275	Injection of diagnostic or therapeutic anesthetic or antispasmodic substance (including narcotics); epidural, cervical or thoracic, single
n/a*	2.20	000	62298	Injection of substance other than anesthetic, contrast, or neurolytic solutions, epidural, cervical or thoracic (separate procedure)

\*There is no data available in the Harvard data files for these codes. We do not know how these codes were originally valued.

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Time Estimates (Median)	<i>Mean</i> Intensity/Complexity Measures		
	62X01 (K1)	62275	62298
Survey response count	63	31	24
PRE-service time	35	25	38
INTRA-service time	30	25	30
POST-service time	20	15	20
<b>Mental Effort and Judgment</b>			
The number of possible diagnosis and/or the number of management options that must be considered	3.44	3.29	3.42
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	3.44	3.35	3.38
Urgency of medical decision making	2.74	2.45	2.75
<b>Technical Skill/physical Effort</b>			
Technical skill required	4.18	4.10	4.13
Physical effort required	3.16	3.06	3.04
<b>Psychological Stress</b>			
The risk of significant complications, morbidity and/or mortality	4.13	4.13	4.13
Outcome depends on skill and judgment of physician	4.20	4.23	4.17
Estimated risk of malpractice suit with poor outcome	4.25	4.29	4.04
<b>Time Segments</b>			
PRE-service intensity/complexity	2.82	2.77	2.75
INTRA-service intensity complexity	3.98	3.97	3.96
POST-service intensity complexity	2.84	2.63	2.83

**ADDITIONAL RATIONALE (describe the process by which your specialty society reached your final recommendation):**

New codes 62X01-62X04 were developed to systematically organize different routes for injection (subarachnoid, epidural), at different levels (cervical, thoracic, lumbar, caudal), for different substances (narcotic, anesthetic, steroid, antispasmodic).

The most difficult of the four procedures is 62X03, followed by 62X01 and 62X04 (approximately equal), and then 62X02.

Nine current CPT codes were deleted and crosswalked into these four new codes. Additionally, three of the codes include procedures that did not have specific codes assigned: 62X01 now includes injection, epidural, cervical of steroid or narcotic; 62X03 now includes infusion, epidural, cervical of antispasmodic, narcotic, or steroid; and 62X04 now includes infusion, epidural, lumbar of steroid.

It should also be noted that Harvard post-service data for each of the nine codes being deleted was predicted at 7 to 9 minutes. These services, whether performed in a facility or non-facility, will require frequent post-service monitoring of the patient and discharge management. The survey median post-service time for the four new codes 62X01-62X04 ranges from 15 to 30 minutes which is two to three times more than Harvard's predicted estimates. Harvard's pre-service time is also lower by 5 to 15 minutes. Harvard's intraservice time is only slightly lower than the new codes.

The survey median 2.20 is recommended for 62X01. This is the current RVW for deleted CPT 62298, most closely related to the new code as it is used in current practice. This RVW is slightly more than the other three codes (62274, 62275, 62288) being crosswalked to this new code, but less than the amount of work for the cervical procedure, which previously would have been coded using 64999. The consensus committee believes the survey median represents a fair balance of the portions of all codes combined.

**FREQUENCY INFORMATION****How was this service previously reported?**

- 62274 Injection of diagnostic or therapeutic anesthetic or antispasmodic substance (including narcotics); subarachnoid or subdural, single
- 62275 Injection of diagnostic or therapeutic anesthetic or antispasmodic substance (including narcotics); epidural, cervical or thoracic, single
- 62288 Injection of substance other than anesthetic, antispasmodic, contrast, or neurolytic solutions; subarachnoid (separate procedure)
- 62298 Injection of substance other than anesthetic, contrast, or neurolytic solutions, epidural, cervical or thoracic (separate procedure)
- 64999 Unlisted procedure, nervous system

**How often do physicians in your specialty perform this service?**

~~Commonly~~      **xx Sometimes**      ~~Rarely~~

**Estimate the number of times this service might be provided nationally in a one-year period?**

Based on estimated percentages and 1997 Medicare frequency data, it is estimated that this new service will be provided to the Medicare population approximately 60,000 times. However, this service is more often provided to patients outside the Medicare population to treat intractable pain, primarily patients suffering from the effects of cancer therapy (eg, radiation damage, chemotherapy neuropathy, postsurgical scarring. Rarely, the injection might be used to treat spasticity of other motor dysfunction in a nerve, nerve root, or spinal cord level. Occasionally, the injection might be used for a non-cancer pain that is very severe and localized to a nerve, nerve root, or spinal cord dermatome level that could be ablated without causing significant functional impairment to the patient.

**Is this service performed by many physicians across the United States?**

**xx Yes**      ~~No~~

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF WORK RECOMMENDATION

(April 1999)

**Recommended RVW:** 1.78

**CPT Code/ Tracking:** 62X02 (K2)

**Global Period:** 000

**CPT Descriptor:** Injection, single (not via indwelling catheter), not including neurolytic substances, with or without contrast (for either localization or epidurography), of diagnostic or therapeutic substance(s) (including anesthetic, antispasmodic, opioid, steroid, other solution), epidural or subarachnoid; lumbar, sacral (caudal)

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**Vignette Used in Survey:**

A 45-year-old male has severe pain (rated at 8/10) involving both legs and the lower back after multiple back operations over a 10-year period. Various systemic medications (oral narcotic and non-narcotic) and physical therapy have failed to provide significant long-term pain relief. The patient is given a single subarachnoid or epidural narcotic injection in the lumbar or sacral space.

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**CLINICAL DESCRIPTION OF SERVICE** (This work description was NOT provided on the survey.):

**Description of Pre-Service Work:**

Pre-service work includes review of records and any pertinent imaging studies; communicating with other professionals, patient, and family; and obtaining consent. The pre-operative work also includes dressing, scrubbing, and waiting before the procedure, preparing the patient and needed equipment for the procedure, positioning the patient on the x-ray table, and draping of the injection site.

**Description of Intra-Service Work:**

An injection needle is directed into the subarachnoid or epidural space at the proper vertebral level, under x-ray fluoroscopy, as necessary. Care has to be taken to avoid damaging any nerve roots, cauda equina, or spinal cord. A contrast injection is performed as necessary to confirm needle tip or catheter location and determine degree of free flow of liquid in the space to assure both safety and accuracy. The therapeutic injection(s) is performed through the same needle. The injection needle is removed and dressing applied.

**Description of Post-Service Work:**

The patient is closely observed for two to eight hours post-procedure in a monitored setting for any new, unexpected neurologic deficits and/or any change in vital signs (respiratory depression, bradycardia, altered mental status). The physician communicates findings with the patient and other professionals (including written and telephone reports and orders).

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**SURVEY DATA**

**Presenter(s):** Michael Ashburn, MD (AAPM)  
 Karl Becker, MD (ASA)  
 Peter Dempsey, MD (AANS)  
 Paul Dreyfuss, MD (AAPM&R)  
 Thomas Faciszewski, MD (NASS)  
 Samuel Hassenbusch, MD (AANS/CNS)

**Specialty(s):** American Academy of Pain Medicine, American Academy of Physical Medicine and Rehabilitation, American Society of Anesthesiologists, American Association of Neurological Surgeons/Congress of Neurological Surgeons, North American Spine Society

**Sample Size:** 199      **Response Rate (No. and %):** 63 (32%)

**Type of Sample:** random and panel

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<b><u>Survey RVW</u></b>	Low: 1.36	25th%: 1.70	Med: 1.78	75th%: 2.00	High: 3.20
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**TIME (min) AND VISITS**

**24 Hr Preceding Service:**      **Med: 20**

**Day of Service**

Pre-service time:      **Med: 15**

Intra-service time:      Low: 10      25th%: 15      **Med: 20**      75th%: 30      High: 60

<b><u>Post Service</u></b>	<b><u>Total Time</u></b>	<b><u>CPT Code / # of visits</u></b>
Same Day:	15	99238

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**KEY REFERENCE SERVICE(S):****HVD**

<b><u>Tot Min</u></b>	<b><u>99 RVW</u></b>	<b><u>Global</u></b>	<b><u>CPT</u></b>	<b><u>Descriptor</u></b>
38	1.78	000	62274	Injection of diagnostic or therapeutic anesthetic or antispasmodic substance (including narcotics); subarachnoid or subdural, single
59	1.51	000	62278	Injection of diagnostic or therapeutic anesthetic or antispasmodic substance (including narcotics); epidural, lumbar or caudal, single



**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Time Estimates (Median)	<i>Mean</i> Intensity/Complexity Measures		
	62X02 (K2)	62278	62274
Survey response count	63	26	18
PRE-service time	35	30	35
INTRA-service time	20	20	23
POST-service time	15	10	15
<b>Mental Effort and Judgment</b>			
The number of possible diagnosis and/or the number of management options that must be considered	3.22	3.04	3.00
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	3.25	3.08	3.22
Urgency of medical decision making	2.43	2.27	2.22
<b>Technical Skill/physical Effort</b>			
Technical skill required	3.43	3.35	3.24
Physical effort required	2.67	2.62	2.53
<b>Psychological Stress</b>			
The risk of significant complications, morbidity and/or mortality	3.35	3.12	3.59
Outcome depends on skill and judgment of physician	3.62	3.50	3.59
Estimated risk of malpractice suit with poor outcome	3.37	3.35	3.65
<b>Time Segments</b>			
PRE-service intensity/complexity	2.52	2.50	2.28
INTRA-service intensity complexity	3.19	3.04	3.17
POST-service intensity complexity	2.48	2.36	2.50

**ADDITIONAL RATIONALE (describe the process by which your specialty society reached your final recommendation):**

New codes 62X01-62X04 were developed to systematically organize different routes for injection (subarachnoid, epidural), at different levels (cervical, thoracic, lumbar, caudal), for different substances (narcotic, anesthetic, steroid, antispasmodic).

The most difficult of the four procedures is 62X03, followed by 62X01 and 62X04 (approximately equal), and then 62X02.

Nine current CPT codes were deleted and crosswalked into these four new codes. Additionally, three of the codes include procedures that did not have specific codes assigned: 62X01 now includes injection, epidural, cervical of steroid or narcotic; 62X03 now includes infusion, epidural, cervical of antispasmodic, narcotic, or steroid; and 62X04 now includes infusion, epidural, lumbar of steroid.

It should also be noted that Harvard post-service data for each of the nine codes being deleted was predicted at 7 to 9 minutes. These services, whether performed in a facility or non-facility, will require frequent post-service monitoring of the patient and discharge management. The survey median post-service time for the four new codes 62X01-62X04 ranges from 15 to 30 minutes which is two to three times more than Harvard's predicted estimates. Harvard's pre-service time is also lower by 5 to 15 minutes. Harvard's intraservice time is only slightly lower than the new codes.

The survey median 1.78 is recommended for 62X02. This is the current value for deleted CPT 62274, which has time and intensity/complexity measures closely related to the new code. The second referenced code 62278 has lower time and intensity/complexity measures across the board as compared with new code 62X02.

**FREQUENCY INFORMATION****How was this service previously reported?**

- 62274 Injection of diagnostic or therapeutic anesthetic or antispasmodic substance (including narcotics); subarachnoid or subdural, single
- 62278 Injection of diagnostic or therapeutic anesthetic or antispasmodic substance (including narcotics); epidural, lumbar or caudal, single
- 62288 Injection of substance other than anesthetic, antispasmodic, contrast, or neurolytic solutions; subarachnoid (separate procedure)
- 62289 Injection of substance other than anesthetic, antispasmodic, contrast, or neurolytic solutions; lumbar or caudal epidural (separate procedure)

**How often do physicians in your specialty perform this service?**

~~Commonly~~      **xx Sometimes**      ~~Rarely~~

**Estimate the number of times this service might be provided nationally in a one-year period?**

Based on estimated percentages and 1997 Medicare frequency data, it is estimated that this new service will be provided to the Medicare population approximately 560,000 times. However, this service is more often provided to patients outside the Medicare population to treat intractable pain. Rarely, the injection might be used to treat spasticity of other motor dysfunction in a nerve, nerve root, or spinal cord level. Less commonly, these procedures might be used for reflex sympathetic dystrophy (RSD) or complex regional pain syndrome (CRPS).

**Is this service performed by many physicians across the United States?**

**xx Yes** ~~No~~

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF WORK RECOMMENDATION

(April 1999)

**Recommended RVW:** 2.35

**CPT Code/ Tracking:** 62X03 (K3)

**Global Period:** 000

**CPT Descriptor:** Injection, including catheter placement, continuous infusion or intermittent bolus, not including neurolytic substances, with or without contrast (for either localization or epidurography), of diagnostic or therapeutic substance(s) (including anesthetic, antispasmodic, opioid, steroid, other solution), epidural or subarachnoid; cervical or thoracic

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**Vignette Used in Survey:**

A 45-year-old male has severe pain (rated at 8/10) involving both arms and the neck after multiple neck operations over a 10-year period. Various systemic medications (oral narcotic and non-narcotic) and physical therapy have failed to provide significant long-term pain relief. A catheter (subarachnoid or epidural) is placed in the cervical or thoracic space and an intermittent bolus of a narcotic is injected.

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**CLINICAL DESCRIPTION OF SERVICE** (This work description was NOT provided on the survey.):

**Description of Pre-Service Work:**

Pre-service work includes review of records and any pertinent imaging studies; communicating with other professionals, patient, and family; and obtaining consent. The pre-operative work also includes dressing, scrubbing, and waiting before the procedure, preparing the patient and needed equipment for the procedure, positioning the patient on the x-ray table, and draping of the catheter puncture site.

**Description of Intra-Service Work:**

An injection needle is directed into the subarachnoid or epidural space at the proper vertebral level, under x-ray fluoroscopy, as necessary. Care has to be taken to avoid damaging any nerve roots or spinal cord. A contrast injection is performed as necessary to confirm needle tip or catheter location and determine degree of free flow of liquid in the space to assure both safety and accuracy. An infusion catheter is threaded through the needle in the subarachnoid or epidural space. The therapeutic injection(s) or infusion is performed through the same needle. The injection catheter is removed and dressing applied, with detailed attention given to wound care to prevent infection which may lead to meningitis or epidural abscess.

**Description of Post-Service Work:**

The patient is closely observed for two to eight hours post-procedure in a monitored setting for any new, unexpected neurologic deficits and/or any change in vital signs (respiratory depression, bradycardia, altered mental status). The physician communicates findings with the patient and other professionals (including written and telephone reports and orders).

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**SURVEY DATA**

**Presenter(s):** Michael Ashburn, MD (AAPM)  
 Karl Becker, MD (ASA)  
 Peter Dempsey, MD (AANS)  
 Paul Dreyfuss, MD (AAPM&R)  
 Thomas Faciszewski, MD (NASS)  
 Samuel Hassenbusch, MD (AANS/CNS)

**Specialty(s):** American Academy of Pain Medicine, American Academy of Physical Medicine and Rehabilitation, American Society of Anesthesiologists, American Association of Neurological Surgeons/Congress of Neurological Surgeons, North American Spine Society

**Sample Size:** 209      **Response Rate (No. and %):** 60 (29%)

**Type of Sample:** random and panel

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<b><u>Survey RVW</u></b>	Low: 1.80	25th%: 2.20	Med: 2.35	75th%: 3.00	High: 7.00
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**TIME (min) AND VISITS**

**24 Hr Preceding Service:** Med: 30

**Day of Service**

Pre-service time: Med: 20

Intra-service time: Low: 15      25th%: 30      Med: 40      75th%: 60      High: 120

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<b><u>Post Service</u></b>	<b><u>Total Time</u></b>	<b><u>CPT Code / # of visits</u></b>
Same Day:	30	99238

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**KEY REFERENCE SERVICE(S):****HVD**

<u>Tot Min</u>	<u>99 RVW</u>	<u>Global</u>	<u>CPT</u>	<u>Descriptor</u>
55	2.15	000	62277	Injection of diagnostic or therapeutic anesthetic or antispasmodic substance (including narcotics); subarachnoid or subdural, continuous
n/a*	2.20	000	62298	Injection of substance other than anesthetic, contrast, or neurolytic solutions, epidural, cervical or thoracic (separate procedure)

\*There is no data available in the Harvard data files for these codes. We do not know how these codes were originally valued.

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Time Estimates (Median)	<i>Mean</i> Intensity/Complexity Measures		
	62X03 (K3)	62277	62298
Survey response count	60	30	11
PRE-service time	50	50	40
INTRA-service time	40	30	40
POST-service time	30	30	20
<b>Mental Effort and Judgment</b>			
The number of possible diagnosis and/or the number of management options that must be considered	3.82	3.73	3.36
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	3.88	3.70	3.36
Urgency of medical decision making	3.08	3.07	2.55
<b>Technical Skill/physical Effort</b>			
Technical skill required	4.47	4.10	4.27
Physical effort required	3.47	3.37	2.64
<b>Psychological Stress</b>			
The risk of significant complications, morbidity and/or mortality	4.42	4.17	4.27
Outcome depends on skill and judgment of physician	4.37	4.30	4.09
Estimated risk of malpractice suit with poor outcome	4.35	4.33	3.82
<b>Time Segments</b>			
PRE-service intensity/complexity	3.50	3.23	3.00
INTRA-service intensity complexity	4.38	4.13	4.09
POST-service intensity complexity	3.57	3.47	2.91

**ADDITIONAL RATIONALE (describe the process by which your specialty society reached your final recommendation):**

New codes 62X01-62X04 were developed to systematically organize different routes for injection (subarachnoid, epidural), at different levels (cervical, thoracic, lumbar, caudal), for different substances (narcotic, anesthetic, steroid, antispasmodic).

The most difficult of the four procedures is 62X03, followed by 62X01 and 62X04 (approximately equal), and then 62X02.

Nine current CPT codes were deleted and crosswalked into these four new codes. Additionally, three of the codes include procedures that did not have specific codes assigned: 62X01 now includes injection, epidural, cervical of steroid or narcotic; 62X03 now includes infusion, epidural, cervical of antispasmodic, narcotic, or steroid; and 62X04 now includes infusion, epidural, lumbar of steroid.

It should also be noted that Harvard post-service data for each of the nine codes being deleted was predicted at 7 to 9 minutes. These services, whether performed in a facility or non-facility, will require frequent post-service monitoring of the patient and discharge management. The survey median post-service time for the four new codes 62X01-62X04 ranges from 15 to 30 minutes which is two to three times more than Harvard's predicted estimates. Harvard's pre-service time is also lower by 5 to 15 minutes. Harvard's intraservice time is only slightly lower than the new codes.

The survey median 2.35 is recommended for 62X03. This is slightly more than the current values for deleted crosswalked codes 62276 and 62277, but less than the amount of work for the cervical procedure, which previously would have been coded using 64999. The consensus committee believes the survey median represents a fair balance of the portions of all codes combined for this infrequently performed procedure.

**FREQUENCY INFORMATION****How was this service previously reported?**

- 62277 Injection of diagnostic or therapeutic anesthetic or antispasmodic substance (including narcotics);  
subarachnoid or subdural, continuous
- 62298 Injection of substance other than anesthetic, contrast, or neurolytic solutions, epidural, cervical or  
thoracic (separate procedure)
- 64999 Unlisted procedure, nervous system

**How often do physicians in your specialty perform this service?**

~~Commonly~~      **xx Sometimes**      ~~Rarely~~

**Estimate the number of times this service might be provided nationally in a one-year period?**

Based on estimated percentages and 1997 Medicare frequency data, it is estimated that this new service will be provided to the Medicare population approximately 3,800 times. However, this service is more often provided to patients outside the Medicare population to treat complicated pain in patients with unclear sources of pain. Rarely, the injection might be used to treat spasticity of other motor dysfunction in a nerve, nerve root, or spinal cord level. Less commonly, these procedures might be used for reflex sympathetic dystrophy (RSD) or complex regional pain syndrome (CRPS).

**Is this service performed by many physicians across the United States?**

**xx Yes**      ~~No~~

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF WORK RECOMMENDATION

(April 1999)

**Recommended RVW:** 2.15

**CPT Code/ Tracking:** 62X04 (K4)

**Global Period:** 000

**CPT Descriptor:** Injection, including catheter placement, continuous infusion or intermittent bolus, not including neurolytic substances, with or without contrast (for either localization or epidurography), of diagnostic or therapeutic substance(s) (including anesthetic, antispasmodic, opioid, steroid, other solution), epidural or subarachnoid; lumbar, sacral (caudal)

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**Vignette Used in Survey:**

A 45-year-old male has severe pain (rated at 8/10) involving both legs and the back after multiple back operations over a 10-year period. Various systemic medications (oral narcotic and non-narcotic) and physical therapy have failed to provide significant long-term pain relief. A catheter (subarachnoid or epidural) is placed in the lumbar or sacral space and an intermittent bolus of a narcotic is injected.

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**CLINICAL DESCRIPTION OF SERVICE** (This work description was NOT provided on the survey.):

**Description of Pre-Service Work:**

Pre-service work includes review of records and any pertinent imaging studies; communicating with other professionals, patient, and family; and obtaining consent. The pre-operative work also includes dressing, scrubbing, and waiting before the procedure, preparing the patient and needed equipment for the procedure, positioning the patient on the x-ray table, and draping of the catheter puncture site.

**Description of Intra-Service Work:**

An injection needle is directed into the subarachnoid or epidural space at the proper vertebral level, under x-ray fluoroscopy, as necessary. Care has to be taken to avoid damaging any nerve roots or spinal cord. A contrast injection is performed as necessary to confirm needle tip or catheter location and determine degree of free flow of liquid in the space to assure both safety and accuracy. An infusion catheter is threaded through the needle in the subarachnoid or epidural space. The therapeutic injection(s) or infusion is performed through the same catheter. The injection catheter is removed and dressing applied, with detailed attention given to wound care to prevent infection which may lead to meningitis or epidural abscess.

**Description of Post-Service Work:**

The patient is closely observed for two to eight hours post-procedure in a monitored setting for any new, unexpected neurologic deficits and/or any change in vital signs (respiratory depression, bradycardia, altered mental status). The physician communicates findings with the patient and other professionals (including written and telephone reports and orders).

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**SURVEY DATA**

**Presenter(s):** Michael Ashburn, MD (AAPM)  
 Karl Becker, MD (ASA)  
 Peter Dempsey, MD (AANS)  
 Paul Dreyfuss, MD (AAPM&R)  
 Thomas Faciszewski, MD (NASS)  
 Samuel Hassenbusch, MD (AANS/CNS)

**Specialty(s):** American Academy of Pain Medicine, American Academy of Physical Medicine and Rehabilitation, American Society of Anesthesiologists, American Association of Neurological Surgeons/Congress of Neurological Surgeons, North American Spine Society

**Sample Size:** 201    **Response Rate (No. and %):** 59 (29%)

**Type of Sample:** random and panel

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<b><u>Survey RVW</u></b>	Low: 1.58	25th%: 1.85	Med: 2.15	75th%: 2.50	High: 7.00
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**TIME (min) AND VISITS**

**24 Hr Preceding Service:** Med: 28

**Day of Service**

Pre-service time: Med: 20

Intra-service time: Low: 10    25th%: 20    Med: 30    75th%: 50    High: 90

<b><u>Post Service</u></b>	<b><u>Total Time</u></b>	<b><u>CPT Code / # of visits</u></b>
Same Day:	30	99238

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**KEY REFERENCE SERVICE(S):****HVD**

<b><u>Tot Min</u></b>	<b><u>99 RVW</u></b>	<b><u>Global</u></b>	<b><u>CPT</u></b>	<b><u>Descriptor</u></b>
55	2.15	000	62277	Injection of diagnostic or therapeutic anesthetic or antispasmodic substance (including narcotics); subarachnoid or subdural, continuous
44	1.58	000	62279	Injection of diagnostic or therapeutic anesthetic or antispasmodic substance (including narcotics); epidural, lumbar or caudal, continuous



**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Time Estimates (Median)	<i>Mean</i> Intensity/Complexity Measures		
	62X04 (K4)	62277	62279
Survey response count	59	29	23
PRE-service time	48	40	35
INTRA-service time	30	30	23
POST-service time	30	30	25
<b>Mental Effort and Judgment</b>			
The number of possible diagnosis and/or the number of management options that must be considered	3.53	3.62	3.35
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	3.56	3.59	3.22
Urgency of medical decision making	2.86	3.00	2.48
<b>Technical Skill/physical Effort</b>			
Technical skill required	3.86	3.97	3.43
Physical effort required	3.10	3.03	2.87
<b>Psychological Stress</b>			
The risk of significant complications, morbidity and/or mortality	3.88	3.97	3.52
Outcome depends on skill and judgment of physician	4.00	4.11	3.74
Estimated risk of malpractice suit with poor outcome	3.90	3.76	3.70
<b>Time Segments</b>			
PRE-service intensity/complexity	3.10	2.93	3.09
INTRA-service intensity complexity	3.83	3.83	3.65
POST-service intensity complexity	3.25	3.21	3.00

**ADDITIONAL RATIONALE (describe the process by which your specialty society reached your final recommendation):**

New codes 62X01-62X04 were developed to systematically organize different routes for injection (subarachnoid, epidural), at different levels (cervical, thoracic, lumbar, caudal), for different substances (narcotic, anesthetic, steroid, antispasmodic).

The most difficult of the four procedures is 62X03, followed by 62X01 and 62X04 (approximately equal), and then 62X02.

Nine current CPT codes were deleted and crosswalked into these four new codes. Additionally, three of the codes include procedures that did not have specific codes assigned: 62X01 now includes injection, epidural, cervical of steroid or narcotic; 62X03 now includes infusion, epidural, cervical of antispasmodic, narcotic, or steroid; and 62X04 now includes infusion, epidural, lumbar of steroid.

It should also be noted that Harvard post-service data for each of the nine codes being deleted was predicted at 7 to 9 minutes. These services, whether performed in a facility or non-facility, will require frequent post-service monitoring of the patient and discharge management. The survey median post-service time for the four new codes 62X01-62X04 ranges from 15 to 30 minutes which is two to three times more than Harvard's predicted estimates. Harvard's pre-service time is also lower by 5 to 15 minutes. Harvard's intraservice time is only slightly lower than the new codes.

The survey median 2.15 is recommended for 62X04. This is the current value for deleted CPT 62277 and most closely related to the new code as it is used in current practice, but less than the amount of work for the cervical procedure, which previously would have been coded using 64999. The second referenced code 62279 has lower time and intensity/complexity measures across the board as compared with new code 62X04. The consensus committee believes the survey median represents a fair balance of the portions of all codes combined.

**FREQUENCY INFORMATION****How was this service previously reported?**

- 62276 Injection of diagnostic or therapeutic anesthetic or antispasmodic substance (including narcotics); subarachnoid or subdural, differential
- 62277 Injection of diagnostic or therapeutic anesthetic or antispasmodic substance (including narcotics); subarachnoid or subdural, continuous
- 62279 Injection of diagnostic or therapeutic anesthetic or antispasmodic substance (including narcotics); epidural, lumbar or caudal, continuous
- 64999 Unlisted procedure, nervous system

**How often do physicians in your specialty perform this service?**

~~Commonly~~      **xx Sometimes**      ~~Rarely~~

**Estimate the number of times this service might be provided nationally in a one-year period?**

Based on estimated percentages and 1997 Medicare frequency data, it is estimated that this new service will be provided to the Medicare population approximately 122,000 times. However, this service is more often provided to patients outside the Medicare population to treat complicated pain in patients with unclear sources of pain. Rarely, the injection might be used to treat spasticity of other motor dysfunction in a nerve, nerve root, or spinal cord level. Less commonly, these procedures might be used for reflex sympathetic dystrophy (RSD) or complex regional pain syndrome (CRPS).

**Is this service performed by many physicians across the United States?**

**xx Yes**    ~~No~~

**AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF RECOMMENDATION**

CPT Code: 7227X    Tracking Number: K5    Global Period: XXX    Recommended RVW: 0.83

## CPT Descriptor:

Epidurography, radiological supervision and interpretation

(For injection procedure, see codes 62280-62282, 62X01-62X04)

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**CLINICAL DESCRIPTION OF SERVICE:**
**Vignette Used in Survey:**

1) A 45 year old male with extensive rectal carcinoma involving the left lumbosacral plexus has intractable left perirectal pain but has lost much of his control of both bladder and bowel function. Various systemic medications (oral narcotic and non-narcotic), physical therapy, radiation therapy, chemotherapy have all failed to provide significant long-term pain relief. There are no further operative resection possible for the tumor.

This patient is a good candidate for a neurolytic injection because of the severity of the pain and the diminished control of bladder and bowel function. A neurolytic injection to ablate the left S2-4 nerve roots is recommended. The injection could be performed subarachnoid or epidural and an epidural approach is selected. A diagnostic epidurogram is performed to define the anatomic extent of the epidural space in this patient, and exclude adhesions or other reasons that the neurolytic substance cannot be delivered to the selected nerve roots.

2) A 62 year old female with chronic low back pain and a left L4 radiculopathy who is status post multiple lumbar surgeries. She has had a prior epidural steroid injection without significant response. She is referred for a diagnostic epidurogram to exclude epidural adhesion/fibrosis, and possible repeat therapeutic injection.

**Description of Pre-Service Work:**

The patient's prior imaging examinations (Radiographs, CT scans, MRI exams, ect.) of the level to be studied are reviewed in order to be familiar with the anatomy, anatomic variants, prior surgery and pathology.

**Description of Intra-Service Work:**

The patient is placed on an x-ray table in the prone, oblique or decubitus position. Preliminary fluoroscopy is performed to identify the appropriate level and approach for the initial needle placement, and the skin entry site marked. During the needle/catheter placement (the needle/catheter placement is a separate procedure and separately codeable and should not be considered in your assessment of physician work or practice expense for this code). Intermittent fluoroscopy is used to confirm the correct approach and need for needle repositioning or realignment. When the needle position appears correct, a small test dose of radiographic contrast is injected to confirm proper position. If position is not correct (eg, subarachnoid or venous opacification), additional fluoroscopic guidance is provided during repositioning until proper position is achieved. If catheter is to be placed, additional fluoroscopic guidance is provided during and after the catheter placement to confirm proper position for injection of the full diagnostic dose of contrast. Following epidural space injection of appropriate radiographic contrast (separately codeable and not included in the physician work for this code), Multiple radiographic images are obtained from different angles. These images are formally interpreted. The results are discussed with the physician performing the injection procedure (if different than the interpreting physician) to determine if there is any abnormality of the epidural space that would limit the desired distribution of therapeutic substances to be injected.

## Description of Post-Service Work:

A report is dictated for the medical record. The findings are discussed with the referring physician and patient.

## SURVEY DATA:

Presenter(s): William T. Thorwarth Jr., M.D.  
ACR RUC Advisor

J. Arliss Pollock, M.D.  
ASNR RUC Advisor

Specialty(s): Radiology

Sample Size: 357 Response Rate (%): 39 (11%) Median RVW 0.83

Type of Sample (Circle one): random, ☒ panel, convenience, Explanation of sample size: \_\_\_\_\_

25<sup>th</sup> Percentile RVW: 0.8 75<sup>th</sup> Percentile RVW: 1.28 Low: 0.2 High: 7.5

Median Pre-Service Time: 12.5 Median Intra-Service Time: 30

25<sup>th</sup> Percentile Intra-Svc Time: 15 75<sup>th</sup> Percentile Intra-Svc Time: 30 Low: 0 High: 60

Median Post-Service Time:

	Total Time	Level of Service by CPT Code (List # of Visits)
Immediate Post Service Time:	<u>2</u>	
Critical Care:		
Other Hospital Visit:		
Discharge Day Mgmt:		
Office Visits:		

## KEY REFERENCE SERVICE:

CPT Code	CPT Descriptor	RVW
72265	Myelography, lumbosacral (S&I)	0.83

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. Make certain that you are including the data from the service that you are rating as well as the key reference services.

**TIME ESTIMATES (Median)**

	<b><u>CPT Code</u></b>	<b><u>Reference Service 1</u></b>	<b><u>Reference Service 2</u></b>
Median Pre-Time	12.5	7.5	
Median Intra-Time	30	30	
Median Post-Time	2	1	

**INTENSITY/COMPLEXITY MEASURES (Mean)****Mental Effort and Judgement (Mean)**

The number of possible diagnosis and/or the number of management options that must be considered	3.4	3.3	
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.4	3.3	
Urgency of medical decision making	3.2	2.5	

**Technical Skill/Physical Effort (Mean)**

Technical skill required	3.8	3.3	
Physical effort required	3.5	3.0	

**Psychological Stress (Mean)**

The risk of significant complications, morbidity and/or mortality	4.5	2.6	
Outcome depends on the skill and judgement of physician	3.6	3.1	
Estimated risk of malpractice suit with poor outcome	3.2	2.8	

**INTENSITY/COMPLEXITY MEASURES****CPT Code****Reference  
Service 1****Reference  
Service 2****Time Segments (Mean)**

Pre-Service intensity/complexity	3.0	2.6	
Intra-Service intensity/complexity	3.6	3.4	
Post-Service intensity/complexity	2.8	2.4	

**ADDITIONAL RATIONALE**

Describe the process by which your specialty society reached your final recommendation.

The committee recommends the median survey value, the same value as the key reference code, though the intensity/complexity values are consistently slightly higher.

**FREQUENCY INFORMATION**

How was this service previously reported?

72265-52 Lumbar Myelography; Supervision and Interpretation – Reduced Service

Note: 72240-52 and 72255-52 are used for cervical and thoracic injection; respectively.

How often do physicians in your specialty perform this service?      Commonly   X   Sometimes      Rarely

Estimate the number of times this service might be provided nationally in a one-year period?

Estimating the number of times this service might be provided nationally in a one-year period is difficult. We have taken 3 percent of the frequency reported for the myelography code (72265) reported in HCFA's 1997 Part B Physician/Supplier file (BMAD) data (80,814) to arrive at 2424 times this service may be performed for Medicare patients in a one-year period.

Do many physicians perform this service across the United States?   X   Yes      No

## Practice Expense Data

Date: April 26, 1999

To: James Hoehn, MD (Chair, AMA/RUC)

From: Michael Ashburn, MD (American Academy of Pain Medicine)  
Karl Becker, MD (American Society of Anesthesiologists)  
Peter Dempsey, MD (American Association of Neurological Surgeons)  
Paul Dreyfuss, MD (American Academy of Physical Medicine and Rehabilitation)  
Thomas Faciszewski, MD (North American Spine Society)  
Samuel Hassenbusch, MD (American Association of Neurological Surgeons)

Re: Practice Expense Recommendations  
M3-M12  
K1-K4  
J1-J2

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We recommend that the existing CPEP inputs for selected CPT codes be used as interim crosswalk references to develop practice expense RVUs for new/revised codes for *CPT 2000* (see attached tables).

Time constraints due to the short turn around from CPT Editorial approval to RUC review did not allow for surveying of both work estimates and practice expense recommendations. Additionally, we note that neither the RUC nor HCFA have developed guidelines for practice expense data collection and acceptance. Specifically, pre-, intra-, and post-service time components and staff activities have not been well defined to the satisfaction of HCFA and the current definitions are at odds with RUC time definitions for physician work. We also note that no "minimum" number of practice expense survey responses has been set (eg, 30 responses for work RVU recommendations) and expert panel recommendations have been accepted and rejected inconsistently.

Our approach to use crosswalks as an interim measure is consistent with previous HCFA practice expense development for new and revised codes. In the June 5, 1998 Federal Register, HCFA discusses development of practice expense RVUs for codes that will be new in 1999 and beyond:

There will be new codes included in CPT 1999 for which we will not have practice expense data in time for publication in the 1998 final rule. We plan to develop interim practice expense RVUs for these codes by preparing a crosswalk of CPEP data from existing codes. The crosswalk we use will be available with the final rule, and the practice expense values for the codes will be subject to comment. However, the interim values will serve as the basis of payment during 1999.

We do not believe that preparing a crosswalk of new codes is the most appropriate method of developing practice expense RVUs for new codes. However, for 1999, time constraints do not permit any other approach. Beyond 1999, we would like to develop a process whereby we receive recommended practice expense RVUs or recommended inputs for clinical staff types and times, quantity and cost of medical supplies, and quantity and cost of medical equipment.

For practice expense RVUs, we believe there are two principal options. First, we could continue to crosswalk new codes to existing codes, publish the results of that crosswalk as interim practice expense RVUs in the final rule, and review comments we receive with the assistance of our multiple specialty panels. Second, we could



request the RUC or a RUC-like organization to provide recommended practice expense RVUs or recommended inputs before publication of the proposed rule as we do with work RVUs. This approach would allow us to publish interim RVUs based on the advice of practicing physicians. As with the work RVUs, any comments we received on the interim RVUs could then be reviewed with the assistance of HCFA multiple specialty panels. We invite comments on these options and would welcome any other recommendations.

Although HCFA requested comments regarding crosswalked codes, as noted above, they did not to implement any changes for the final rule, as stated in the November 2, 1998 Federal Register:

*Comment:* ...We also received comments from several organizations with recommendations for revised crosswalks for those codes not valued by the CPEPs, as well as recommended in-office inputs for some codes that are now being done in the office, but were only given practice expense RVUs for the facility setting.

*Response:* We had intended to make the CPEP revisions requested by a given specialty as part of the final rule if the recommendations appeared reasonable and if there would be no significant impact on any other specialty. However, given the huge volume of recommended revisions -- over a third of the codes in the fee schedule would be affected -- acceptance of the recommended changes across the board would almost certainly have a spill-over impact on many subspecialties and between sites-of-service. ... All the code-specific comments referred to above will be considered at the start of the refinement period. (See Section II.A.4, Refinement of Practice Expense RVUs).

We recommend that the CPT codes listed in the attached table be advanced to HCFA as our recommended interim proxies for practice expense details for new/revised codes for *CPT 2000*. In general, the crosswalk codes chosen are consistent with deletion and crosswalking information to be provided in *CPT 2000*. We understand that HCFA has a methodology in place to crosswalk time, supply, and equipment inputs using physician time and office visit information from work RVU summary recommendations. We anticipate reviewing the crosswalked interim practice expense details for these codes during the refinement period after data collection methodology and guidelines are developed.

# K1-K4 Practice Expense Crosswalk Recommendations

New code / Descriptor	CPT crosswalk code for practice expense
62X01 (K1) Injection, single (not via indwelling catheter), not including neurolytic substances, with or without contrast (for either localization or epidurography), of diagnostic or therapeutic substance(s) (including anesthetic, antispasmodic, opioid, steroid, other solution), epidural or subarachnoid; cervical or thoracic global 000	62298 Injection of substance other than anesthetic, contrast, or neurolytic solutions, epidural, cervical or thoracic (separate procedure) global 000 <i>[to be deleted in CPT 2000]</i>
62X02 (K2) Injection, single (not via indwelling catheter), not including neurolytic substances, with or without contrast (for either localization or epidurography), of diagnostic or therapeutic substance(s) (including anesthetic, antispasmodic, opioid, steroid, other solution), epidural or subarachnoid; lumbar, sacral (caudal) global 000	62289 Injection of substance other than anesthetic, antispasmodic, contrast, or neurolytic solutions; lumbar or caudal epidural (separate procedure) global 000 <i>[to be deleted in CPT 2000]</i>
62X03 (K3) Injection, including catheter placement, continuous infusion or intermittent bolus, not including neurolytic substances, with or without contrast (for either localization or epidurography), of diagnostic or therapeutic substance(s) (including anesthetic, antispasmodic, opioid, steroid, other solution), epidural or subarachnoid; cervical or thoracic global 000	62277 Injection of diagnostic or therapeutic anesthetic or antispasmodic substance (including narcotics); subarachnoid or subdural, continuous global 000 <i>[to be deleted in CPT 2000]</i>
62X04 (K4) Injection, including catheter placement, continuous infusion or intermittent bolus, not including neurolytic substances, with or without contrast (for either localization or epidurography), of diagnostic or therapeutic substance(s) (including anesthetic, antispasmodic, opioid, steroid, other solution), epidural or subarachnoid; lumbar, sacral (caudal) global 000	62277 Injection of diagnostic or therapeutic anesthetic or antispasmodic substance (including narcotics); subarachnoid or subdural, continuous global 000 <i>[to be deleted in CPT 2000]</i>



April 8, 1999

James G. Hoehn, M.D.  
Chairman of RVS Update Committee  
American Medical Association  
Relative Value Systems  
515 North State St.  
Chicago, IL 60610

Dear Dr. Hoehn:

Enclosed please find the completed Summary of Recommendation forms for work relative values and practice expense data for the four new codes for epidurography, sacroiliac joint arthrography, and fluoroscopic guidance and localization for diagnostic and therapeutic injections. The American College of Radiology (ACR) did coordinate with the American Spine Association (ASA) and North American Spine Society (NASS) on the arthrography injection code (2709X) and will continue to coordinate with all the societies involved in the spine injection proposal for the presentation at the April RVS Update Committee (RUC) meeting.

The ACR's RVS workgroup reviewed practice expense data for the four new CPT codes being surveyed and would like to make the following recommendations in addition submission of the enclosed practice expense data:

The ACR believes that the practice expense values for code 2709X (Injection procedure for sacroiliac joint arthrography and/or anesthetic/steroid) and code 7352X (Radiological examination, sacroiliac joint arthrography, radiological supervision and interpretation) are comparable to the practice expense values for the injection and imaging procedure codes for hip arthrography. The ACR also believes that the practice expense values for code 7227X (Epidurography, radiological supervision and interpretation) are comparable to those that would be reported for myelography. In addition, the practice expense values for code 7600X (Fluoroscopic guidance and localization of needle or catheter tip for spine or paraspinal diagnostic or therapeutic injection procedures) are comparable to those that would be reported for fluoroscopic guidance for needle biopsy or fine needle aspiration.

The ACR will continue to work on the expansive revision of spine injection family of codes and will make further comments at the time of the RUC representation. If you have any questions, please give me a call.

Sincerely,

William T. Thorwarth, Jr., M.D.  
ACR Representative to the RUC

Cc: Sherry Smith  
Patrick Gallagher  
Jill Zanutto  
Pam Kassing  
Trisha Crishock

**AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE**  
**SUMMARY OF RECOMMENDATIONS**  
**May 1999**

**EXTRACORPOREAL IMMUNOADSORPTION**

***Work Relative Value Recommendations***

The CPT Editorial Panel approved CPT Code 36521 *Therapeutic apheresis; with extracorporeal affinity adsorption and plasma reinfusion*. The American College of Rheumatology elected not to survey the new code for work or practice expense values due to concerns regarding the ability to obtain an adequate sample size. At its May 1999 RUC meeting, specialty societies did discuss and comment on potential values despite the absence of formal survey data. Many physicians agreed that the work described in CPT 36521 was very similar to the procedure reported under CPT Code 36520 *Therapeutic apheresis; (plasma and/or cell exchange)* (work RVU = 1.74).

The specialty society chose to withdraw this issue from the May 1999 RUC agenda. In addition, it was noted that the code will be referred to the CPT Editorial Panel for further revision. HCFA may consider this information when formulating a final work relative value unit. However, based on the absence of a formal survey data, the RUC is unable to make a final recommendation regarding physician work at this time.

***Practice Expense Recommendations***

The RUC's discussion was very limited but the specialty society stated that practice expense value for the new code should be higher due to the use of the column equipment. However, based on the absence of formal survey data, the RUC is unable to make a final recommendation regarding practice expense at this time.

<b>CPT Code (•New)</b>	<b>Tracking Number</b>	<b>CPT Descriptor</b>	<b>Global Period</b>	<b>Work RVU Recommendation</b>
▲36520		Therapeutic apheresis; (plasma and/or cell exchange);	000	1.74 ( No Change)
•36521	X1	with extracorporeal affinity column adsorption and plasma reinfusion	000	<b>No Recommendation</b>

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## AMERICAN COLLEGE OF RHEUMATOLOGY

SPECIALISTS IN ARTHRITIS CARE & RESEARCH

March 25, 1999

Jill Zanutto  
Policy Assistant  
Relative Value Systems  
American Medical Association  
515 North State Street  
Chicago, IL 60610

Dear Jill:

The American College of Rheumatology provided comment to the CPT Editorial Panel regarding a proposed new code for extracorporeal immunoadsorption. This was primarily related to a device, the Prosorba Column, which was subsequently approved by the FDA for use in rheumatoid arthritis. The CPT Editorial Panel approved a new code, and the American College of Rheumatology was slated to conduct a survey for the RUC's use in establishing relative values.

We have decided not to conduct a survey at this time. There are very few – no more than five – rheumatologists who provide this service. At the present time, physicians other than rheumatologists provide the majority of these procedures. We cannot obtain valid data from a hastily constructed consortium of specialists. We are in discussion with other specialties, which provide this service. Our plan is to work with them to construct a survey to evaluate not only physician work but practice expense as well.

We understand that by delaying this survey, HCFA will establish work and practice expense RVUs without RUC comment. While we strongly endorse and plan to use the RUC process, we believe that a survey at this time might produce data that are unreliable. We believe it is prudent to allow HCFA to establish a value with the understanding that we might choose to survey physicians who provide this service at a later date when the sample size is larger.

Please feel free to contact me if you have any questions about this issue.

Sincerely,

Melvin C. Britton, MD  
American College of Rheumatology  
Advisor to the RUC

**AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE**  
**SUMMARY OF RECOMMENDATIONS**  
**May 1999**

**HORMONE PELLET IMPLANTATION**

***Work Relative Value Recommendations***

A new CPT code, 11980 *Subcutaneous hormone pellet implantation (implantation of estradiol and/or testosterone pellets beneath the skin)*, was accepted by the CPT Editorial Panel in December 1998 through a "fax ballot." Relative Value Systems staff was not aware that a new code had been accepted for these services until April 1999. At that time, AMA staff contacted specialties who perform these services to determine if an appropriate organization would pursue the survey process. No specialty societies indicated an interest in surveying this code for work relative values or practice expense recommendations. As such, no formal recommendations regarding these issues will be forwarded by the RUC at this time.

***Practice Expense Recommendations***

As previously stated, no practice expense recommendations are being presented at this time. The RUC may choose to present data regarding these issues at a later date if appropriate.

<b>CPT Code (•New)</b>	<b>Tracking Number</b>	<b>CPT Descriptor</b>	<b>Global Period</b>	<b>Work RVU Recommendation</b>
•11980	None	Subcutaneous hormone pellet implantation (implantation of estradiol and/or testosterone pellets beneath the skin)	Not yet assigned.	<b>No Recommendation</b>

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**AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE**  
**SUMMARY OF RECOMMENDATIONS**  
**May 1999**

**IMMUNIZATION ADMINISTRATION**

***Work Relative Value Recommendations***

Code 90471 *Immunization administration (includes percutaneous, intradermal, subcutaneous, intramuscular and jet injections and/or intranasal or oral administration); one vaccine (single or combination vaccine/toxoid)*, and code 90472 *Immunization administration (includes percutaneous, intradermal, subcutaneous, intramuscular and jet injections and/or intranasal or oral administration); each additional vaccine (single or combination vaccine/toxoid)* were both editorially revised to more accurately reflect the work associated with administering vaccines. These changes were made so that the resources and work required to administer multiple vaccines would be more accurately identified and also to more accurately track the costs of administering immunizations.

While the specialty presented its median survey RVW as the recommended RVW, the RUC reviewed this recommendation and concluded that the RVW was too high since immunization administration is typically performed in conjunction with a evaluation and management code. The RUC concluded that the work involved in immunization administration was comparable to the work involved in 99211 (*see Evaluation & Management, established Patient*) which has a work RVU of 0.17. To maintain the originally proposed relativity between the administration of the first vaccine and each additional vaccine (which was .02 RVW's lower), the RUC recommended reducing 90472 by .02 RVUs, for a final recommended RVU of .15. The RUC therefore recommends a work RVU recommendation of .17 for code 90471 and an RVU of .15 for code 90472.

***Practice Expense Recommendations***

The RUC examined the direct inputs associated with immunization administration and added "Xerox copy" as an additional supply item to both 90471 and 90472 to reflect the cost of documenting the immunization for public health purposes.

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The RUC discussed the marginal costs involved in code 90472 and agreed to reduce the clinical staff time to two minutes. The RUC decided that the time to provide an additional immunization was only two minutes, substantially lower than the time required to provide the first immunization.

CPT Code (•New)	Track- ing Number	CPT Descriptor	Global Period	Work RVU Recommendation
▲90471	CC1	Immunization administration (includes percutaneous, intradermal, subcutaneous, intramuscular and jet injections and/or intranasal or oral administration); <u>one vaccine</u> (single or combination vaccine/toxoid)	XXX	.17
▲90472	CC2	<del>two or more</del> <u>each additional vaccine</u> (single or combination vaccine/toxoid)  (List 90472 in conjunction with 90471)	ZZZ	.15

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## Physician Work Data

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF WORK RECOMMENDATION

(April 1999)

Recommended RVW: 0.20

CPT Code/ Tracking: 90471 (CC1)

Global Period: XXX

**CPT Descriptor:** Immunization administration (includes percutaneous, intradermal, subcutaneous, intramuscular and jet injections and/or intranasal or oral administration); one vaccine (single or combination vaccine/toxoid)

**Vignette Used in Survey:**

An 18-month old girl is seen for a well-child visit. In accordance with national recommendations for childhood immunizations, the pediatrician determines that the child should receive a diphtheria, tetanus, and pertussis (DTaP) vaccination. The parent is asked whether the child has had any reactions to previous DTaP immunizations and is given a vaccine information sheet on DTaP. The physician reviews the benefits and risks of providing the DTaP vaccination with the parent. The child is given the DTaP immunization as an injection. A dose of acetaminophen is given to the child at the office to reduce the incidence and severity of fever and irritability from the DTaP immunization. The immunization tracking number is entered into a computerized statewide registry.

**CLINICAL DESCRIPTION OF SERVICE (This work description was NOT provided on the survey.):**

**Description of Total Work:**

The physician discusses with the patient/parent/guardian the benefits and risks for a necessary/required vaccine/toxoid administration. If the vaccine/toxoid has been administered previously, the patient/parent/guardian is questioned about previous reactions. Available pertinent informational material is provided to the patient/parent/guardian. The vaccine/toxoid is administered, along with a dose of acetaminophen, if appropriate. The immunization tracking number is entered into a computerized statewide registry.

**SURVEY DATA:**

**Presenter(s):** Steven Krug, MD

**Specialty(s):** American Academy of Pediatrics

**Sample Size:** 180      **Response Rate (No. and %):** 35 (19.4%)

**Type of Sample (✓ one):** ~~random~~    ✓ ~~panel~~    ~~convenience~~

Survey RVW	Low: 0.10	25th%: 0.18	Med: 0.20	75th%: 0.45	High: 1.10
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Survey Total Time	Low: 2	25th%: 5	Med: 7	75th%: 10	High: 25
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**KEY REFERENCE SERVICE(S):**

1999 RVW	Global	CPT	Descriptor
0.17	XXX	94010	Spirometry, including graphic record, total and times vital capacity, expiratory flow rate measurement(s), with or without maximal voluntary ventilation
0.45	XXX	99212	Office or other outpatient visit for the evaluation and management of an established patient, which requires at least two of these three key components: a problem focused history; a problem focused examination; straightforward medical decision making. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patients and/or family needs. Usually, the presenting problem(s) are self limited or minor. Physicians typically spend 10 minutes face-to-face with the patient and/or family.

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

	<i>Mean</i> Intensity/Complexity Measures		
	90471	94010	99212
Time Estimates (Median)			
PRE-service time	n/a	n/a	n/a
INTRA-service time (TOTAL time for XXX global)	7	7	10
POST-service time	n/a	n/a	n/a
Mental Effort and Judgment			
The number of possible diagnosis and/or the number of management options that must be considered	2.34	2.29	2.90
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	2.63	2.43	2.80
Urgency of medical decision making	2.17	2.00	2.90
Technical Skill/physical Effort			
Technical skill required	2.29	1.86	3.10
Physical effort required	2.11	1.57	2.60
Psychological Stress			
The risk of significant complications, morbidity and/or mortality	3.06	1.57	2.90
Outcome depends on skill and judgment of physician	2.43	2.07	3.20
Estimated risk of malpractice suit with poor outcome	3.69	1.85	3.40
Time Segments			
PRE-service intensity/complexity	n/a	n/a	2.43
INTRA-service intensity complexity	2.12	2.08	2.50
POST-service intensity complexity	n/a	n/a	2.43

**ADDITIONAL RATIONALE:**

The time and complexity/intensity data presented above indicate that 90471 (CC1) is more work than 94010 and less work than 99212, the reference procedures. Although the survey respondents reported 10 minutes total time for 99212, HCFA "total" time estimates for this code are 14-15 minutes. Taking into account this difference in total time and the difference in intensity/complexity averages for the survey code and the reference procedures, the survey median RVW of 0.20 is recommended for 90471.

**FREQUENCY INFORMATION****How was this service previously reported?**

90471 Immunization administration (includes percutaneous, intradermal, subcutaneous, intramuscular and jet injections and/or intranasal or oral administration); single or combination vaccine/toxoid

**How often do physicians in your specialty perform this service? (✓ one)**

✓Commonly                      Sometimes                      Rarely

**Estimate the number of times this service might be provided nationally in a one-year period?**

This is difficult to estimate because of the wide variety of application (eg, well-child immunizations, travelers to foreign countries, health care workers, annual flu vaccine, etc.)

**Is this service performed by many physicians across the United States? (✓ one)**

✓Yes                      No

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF WORK RECOMMENDATION

(April 1999)

Recommended RVW: 0.18

CPT Code/ Tracking: 90472 (CC2)

Global Period: ZZZ

CPT Descriptor: Immunization administration (includes percutaneous, intradermal, subcutaneous, intramuscular and jet injections and/or intranasal or oral administration); each additional vaccine (single or combination vaccines/toxoids)

**Vignette Used in Survey:**

An 18-month old girl is seen for a well-child visit. In accordance with national recommendations for childhood immunizations, the pediatrician determines that the child should receive diphtheria, tetanus, and pertussis (DTaP) and varicella vaccinations. The parent is asked whether the child has had any reactions to previous DTaP immunizations. Since the varicella vaccine is relatively new and the child has not previously received a varicella immunization, the pediatrician discusses in depth the benefits and risks of providing the varicella vaccination with the parent. The parent is given DTaP and varicella vaccine information sheets. The child is given the DTaP immunization as an injection. During the same visit, the child is given the varicella vaccination as an injection. A dose of acetaminophen is given to the child at the office to reduce the incidence and severity of fever and irritability from the DTaP immunization. The immunization tracking numbers for each vaccine are entered into a computerized statewide registry.

**CLINICAL DESCRIPTION OF SERVICE (This work description was NOT provided on the survey.):**

**Description of Intra-service Work:**

The physician discusses with the patient/parent/guardian the benefits and risks for a necessary/required second (or third, or fourth, etc) vaccine/toxoid administration. If the vaccine/toxoid has been administered previously, the patient/parent/guardian is questioned about previous reactions. Available pertinent informational material is provided to the patient/parent/guardian. The vaccine/toxoid is administered, along with a dose of acetaminophen, if appropriate. The immunization tracking number is entered into a computerized statewide registry.

**SURVEY DATA:**

Presenter(s): Steven Krug, MD

Specialty(s): American Academy of Pediatrics

Sample Size: 180      Response Rate (No. and %): 32 (17.8%)

Type of Sample (✓ one): ~~random~~      ✓ panel      ~~convenience~~

Survey RVW	Low: 0.12	25th%: 0.17	Med: 0.18	75th%: 0.33	High: 0.88
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Survey Total Time	Low: 3	25th%: 5	Med: 7	75th%: 10	High: 25
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**KEY REFERENCE SERVICE(S):**

1999 RVW	Global	CPT	Descriptor
0.17	XXX	94010	Spirometry, including graphic record, total and times vital capacity, expiratory flow rate measurement(s), with or without maximal voluntary ventilation

# RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):

	Mean Intensity/Complexity Measures		
Time Estimates (Median)	90472	94010	N/A*
PRE-service time	n/a	n/a	—
INTRA-service time (TOTAL time for XXX global)	7	6	—
POST-service time	n/a	n/a	—
Mental Effort and Judgment			
The number of possible diagnosis and/or the number of management options that must be considered	2.35	2.33	—
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	2.68	2.58	—
Urgency of medical decision making	2.1	2.00	—
Technical Skill/physical Effort			
Technical skill required	2.23	1.83	—
Physical effort required	2.13	1.50	—
Psychological Stress			
The risk of significant complications, morbidity and/or mortality	2.97	1.50	—
Outcome depends on skill and judgment of physician	2.42	1.92	—
Estimated risk of malpractice suit with poor outcome	3.65	2.27	—
Time Segments			
PRE-service intensity/complexity	2.68	1.73	—
INTRA-service intensity complexity	2.28	2.08	—
POST-service intensity complexity	2.25	2.09	—

\*No other code was reported with a high enough frequency to report a meaningful mean measure of intensity/complexity.

## ADDITIONAL RATIONALE:

Although it is an add-on code, new code 90472 (CC2) is only minimally less work than 90471 (CC1). With the provision of each additional vaccine come increased time requirements on the part of the physician for the legally required counseling of parents/guardians regarding the relative risks and benefits of vaccines and assessing the medical history to determine the safety of administering vaccines. Additionally, it should be noted that multiple vaccines at one visit may be administered by various means (eg, oral, intranasal, and/or injection). The median RVW of 0.18 for 90472 is recommended and reflects this work.

## FREQUENCY INFORMATION

### How was this service previously reported?

90472 Immunization administration (includes percutaneous, intradermal, subcutaneous, intramuscular and jet injections and/or intranasal or oral administration); two or more single or combination vaccine/toxoids

### How often do physicians in your specialty perform this service? (✓ one)

✓Commonly      Sometimes      Rarely

### Estimate the number of times this service might be provided nationally in a one-year period?

This is difficult to estimate because of the wide variety of application (eg, well-child immunizations, travelers to foreign countries, health care workers, annual flu vaccine, etc.)

### Is this service performed by many physicians across the United States? (✓ one)

✓Yes      No

## Practice Expense Data

# AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS SUMMARY OF RECOMMENDATION

## Direct Practice Expense Inputs

(April 1999)

PT Code: 90471 (CC1)

Global Period: XXX

CPT Descriptor: Immunization administration (includes percutaneous, intradermal, subcutaneous, intramuscular and jet injections and/or intranasal or oral administration); one vaccine (single or combination vaccine/toxoid)

Reference Code 1: 90782

Reference Code 2: 90788

Specialty(s): American Academy of Pediatrics

### CLINICAL LABOR (IN MINUTES)

Clinical Staff	Staff Code	Pre IN Office	TOTAL IN Office	Post IN Office	Pre OUT Office	Intra OUT Office	Post OUT Office
RN/LPN/MA	10130	—	12	—	n/a	n/a	n/a

### MEDICAL SUPPLIES

HCFA Supply Code	Supply Description	Unit	Quantity used IN-OFFICE for procedure AND pre- & post-op visits	QUANTITY used OUT-OF-OFFICE for pre- & post-op visits ONLY
NEW	APAP elixir 160mg/5ml (50% of the time)	ml	5	n/a
31502	band aid, 3/4" x 3"	item	1	n/a
11115	patient education sheet	item	1	n/a
31101	swab, alcohol	item	2	n/a
91408	syringe, 1ml	item	1	n/a
NEW	record sheet (AFP)	item	1	n/a
NEW	school record form	item	1	n/a

xerox copy

item

1

### PROCEDURE SPECIFIC MEDICAL EQUIPMENT

HCFA Equip Code	Procedure-specific Description	Quantity used IN-OFFICE for procedure AND pre- & post-op visits	QUANTITY used OUT-OF-OFFICE for pre- & post-op visits ONLY
E13605	refrigerator	1	n/a

### OVERHEAD MEDICAL EQUIPMENT:

HCFA Equip Code	Overhead Equipment Description	Office Quantity
E91002	crash cart, no defibrillator	1
E11001	exam table	2



**AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS SUMMARY OF RECOMMENDATION**

**Direct Practice Expense Inputs**

(April 1999)

**CPT Code:** 90472 (CC2)

**Global Period:** XXX

**CPT Descriptor:** Immunization administration (includes percutaneous, intradermal, subcutaneous, intramuscular and jet injections and/or intranasal or oral administration); each additional vaccine (single or combination vaccines/toxoids)

**Reference Code 1:** 90782

**Reference Code 2:** 90788

**Specialty(s):** American Academy of Pediatrics

**CLINICAL LABOR (IN MINUTES)**

Clinical Staff	Staff Code	Pre-IN Office	TOTAL IN Office	Post-IN Office	Pre OUT Office	Intra OUT Office	Post OUT Office
RN/LPN/MA	10130	-	2	-	n/a	n/a	n/a

**MEDICAL SUPPLIES**

HCFA Supply Code	Supply Description	Unit	Quantity used IN-OFFICE for procedure AND pre- & post-op visits	QUANTITY used OUT-OF-OFFICE for pre- & post-op visits ONLY
NEW	APAP elixir 160mg/5ml (50% of the time)	ml	5	n/a
31502	band aid, 3/4' x 3"	item	1	n/a
11115	patient education sheet	item	1	n/a
31101	swab, alcohol	item	2	n/a
91408	syringe, 1ml	item	1	n/a
NEW	record sheet (AFP)	item	1	n/a
NEW	school record form	item	1	n/a

xerox copy

item

1

**PROCEDURE SPECIFIC MEDICAL EQUIPMENT**

HCFA Equip Code	Procedure-specific Description	Quantity used IN-OFFICE for procedure AND pre- & post-op visits	QUANTITY used OUT-OF-OFFICE for pre- & post-op visits ONLY
E13605	refrigerator	1	n/a

**OVERHEAD MEDICAL EQUIPMENT:**

HCFA Equip Code	Overhead Equipment Description	Office Quantity
E91002	crash cart, no defibrillator	1
E11001	exam table	2

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE  
SUMMARY OF RECOMMENDATIONS

May 1999

**IMPLANTATION AND REMOVAL OF CARDIAC EVENT RECORDER**

***Work Relative Value Recommendations***

A series of new codes was established to report implantation and removal of a patient-activated cardiac event recorder as well as implantable loop recorder (ILR) reprogramming. The ILR represents new technology that is capable of extending the cardiac monitoring period sufficiently to address infrequent, recurrent symptoms. There is no code currently assigned to these procedures. Although the ILR appears to have similar components and the insertion or replacement of this device appear procedurally similar to that of a pacemaker pulse generator CPT 33212 *Insertion or replacement of pacemaker pulse generator only; single chamber, atrial or ventricular* (work RVU = 5.52), and CPT 33233 *Removal of permanent pacemaker pulse generator* (work RVU = 3.29), the nomenclature does not accurately describe ILR implantation.

**CPT Code 33282**

The RUC compared the total physician work time for the new code 33282 *Implantation of patient-activated cardiac event recorder* (150 minutes) to that of 1994 survey data for the reference procedure CPT Code 33212 (180 minutes). Based on the survey data, it was agreed that the new procedure has 17% less total service time than the time reported in the reference procedure's survey data. Reducing the reference code's RVW (5.52) by the same percentage arrives at a work RVW of 4.6. The 4.6 RVW was then adjusted to reflect the greater intensity of the 33212's intra-service time to arrive at a final recommendation of 4.17 for CPT 33282.

**CPT Code 33284**

The RUC compared the total time involved in the new code 33284 *Removal of an implantable, patient-activated cardiac event recorder* (90 minutes) to the 1994 survey data for 33233 (105 minutes) and agreed that CPT 33284 was 24% less work. The RUC

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concluded that the new code's RVW should be 24% less of 33233's RVW of 3.29. As such, the RUC recommended 2.50 for 33284.

### **CPT Code 93727**

The RUC recommends an RVU of 0.52 for 93727 *Electronic analysis of implantable loop recorder (ILR) system (includes retrieval of recorded and stored ECG data, physician review and interpretation of retrieved ECG data and programming)*. This recommendation appears appropriate as the time and intensity of two comparable procedures, CPT 93224 *Electrocardiographic monitoring for 24 hours by continuous original ECG waveform recording and storage, with visual superimposition scanning; includes recording, scanning analysis with report, physician review and interpretation*, and 93230 *Electrocardiographic monitoring for 24 hours by continuous original ECG waveform recording and storage without superimposition scanning utilizing a device capable of producing a full miniaturized printout; includes recording, microprocessor-based analysis with report, physician review and interpretation*. Both of these procedures have RVWs of 0.52. The recommendation of 0.52 also represents the 25<sup>th</sup> percentile of the survey results.

### **Practice Expense Recommendations**

The RUC's discussion of practice expense for these particular codes was very limited as the specialty society did not submit practice expense information. As such, the RUC is unable to make a final recommendation regarding practice expense at this time.

CPT Code (•New)	Track- ing Number	CPT Descriptor	Global Period	Work RVU Recommendation
•33282	U1	Implantation of patient-activated cardiac event recorder  (Initial implantation includes programming. For subsequent electronic analysis and/or reprogramming use 93727.)	090	4.17

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CPT Code (•New)	Track- ing Number	CPT Descriptor	Global Period	Work RVU Recommendation
•33284	U2	Removal of an implantable, patient-activated cardiac event recorder	090	2.5
•93727	U3	Electronic analysis of implantable loop recorder (ILR) system (includes retrieval of recorded and stored ECG data, physician review and interpretation of retrieved ECG data and programming)	XXX	.52

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## Physician Work Data

**AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF RECOMMENDATION**

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CPT Code: 332X1 Tracking Number: U1 Global Period: 090 Recommended RVW: 5.00

CPT Descriptor: Implantation of patient-activated cardiac event recorder (Initial implantation includes programming. For subsequent electronic analysis and/or reprogramming use 9373X.)

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**CLINICAL DESCRIPTION OF SERVICE:**

Vignette Used in Survey: A 42-year-old white female, with a history of syncopal spells with inconclusive results using various investigations. The patient continues to have distressing symptoms somewhat infrequently. A history and physical were performed. The procedure, indications, potential complications and alternatives were explained to the patient who appeared to understand and indicated the same. Opportunity for questions was provided and informed consent obtained.

Description of Pre-Service Work: A pertinent history is obtained, and physical examination is performed. All laboratory tests, including blood tests, chest x-ray, and ECG, are reviewed. The risks and benefits of and alternatives to the procedure are discussed with the patient and family, and informed consent is obtained. The history, physical examination, and subsequent discussion are documented in the patient's records.

Description of Intra-Service Work: The patient is prepared for the procedure using standard, sterile technique, and the surgical site and surrounding area are cleaned with an antimicrobial agent. Drapes are then placed to create a sterile field. The patient may require administration of conscious sedation. Local anesthetic is then injected into the skin and subcutaneous tissue, and a 2 cm length incision is made down to the subcutaneous fat. Additional local anesthetic is placed in the subcutaneous plane as needed for patient comfort during the procedure. Using blunt dissection, a subcutaneous pocket the size and shape of the recording device is created deeply enough to improve patient comfort and reduce the risk for skin erosion of the device. Hemostasis is maintained using standard techniques. The device is then inserted into the pocket. The ECG signal quality and amplitude are verified by placing the programmer head in a sterile sleeve over the recorder, establishing telemetry. The waveform is evaluated on the programmer screen, and the gain is adjusted to optimize waveform amplitude. The device may require repositioning or orientation within the pocket until adequate signal amplitude is achieved. Once the signal amplitude is satisfactory, the device is sutured to the adjacent underlying tissue using nonabsorbable sutures through the anchoring suture holes in the device to prevent rotation or migration following implantation. The incision is then closed with subcuticular absorbable sutures and a cutaneous nonabsorbable suture. The wound is dressed, the device is programmed using a pacemaker programmer, and recording is initiated.

Description of Post-Service Work: The results of the procedure are reviewed with the patient, and the patient is educated on the operation of the implantable event recorder. Standard postoperative care and follow-up procedures are reviewed with the patient and all questions answered.

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**SURVEY DATA:**

Presenter: Stephen Hammill, M.D., F.A.C.C. – American College of Cardiology/North American Society of Pacing and Electrophysiology

Specialty: Cardiology

Sample Size: 116 Response Rate: (%): 46% Final Median RVW: 5

Explanation of Sampling Technique: Three hundred randomly selected American members of the North American Society for Pacing and Electrophysiology were asked if they were willing to respond to a survey on the relative value of this procedure. One hundred sixteen responded that they would and they were subsequently sent the survey documents.

25th Percentile RVW: 4 75th Percentile RVW: 5.7 Low: 2 High: 10

Median Pre-Service Time: 60 Median Intra-Service Time: 40

25th Percentile Intra-Svc Time: 30 75th Percentile Intra-Svc Time: 45 Low: 15 High: 75

Median Number of Post Procedure Visits: 2 Median Total Time of Post Procedure Visits: 50

**KEY REFERENCE SERVICE:**

<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
1) 33212	Insertion or replacement of pacemaker pulse generator only; single chamber, atrial or ventricular	5.52

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. Make certain that you are including the data from the service that you are rating as well as the key reference services.

<u>TIME ESTIMATES (Median)</u>	<u>CPT Code</u>	<u>Reference Service 1</u>	<u>Reference Service 2</u>
Median Pre-Time	60	60	
Median Intra-Time	40	45	
Median Post-Time	50	57.5	

**INTENSITY/COMPLEXITY MEASURES (Mean)****Mental Effort and Judgement (Mean)**

The number of possible diagnosis and/or the number of management options that must be considered	3.79	2.87	
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.92	3.24	

332X1

Urgency of medical decision making	2.79	3.18	
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**Technical Skill/Physical Effort (Mean)**

Technical skill required	3.06	3.53	
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Physical effort required	2.68	2.95	
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**Psychological Stress (Mean)**

The risk of significant complications, morbidity and/or mortality	2.72	3.18	
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Outcome depends on the skill and judgement of physician	3.00	3.32	
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Estimated risk of malpractice suit with poor outcome	2.89	3.16	
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**INTENSITY/COMPLEXITY MEASURES**

**CPT Code**

**Reference  
Service 1**

**Reference  
Service 2**

**Time Segments (Mean)**

Pre-Service intensity/complexity	3.53	3.00	
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Intra-Service intensity/complexity	3.00	3.34	
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Post-Service intensity/complexity	3.02	2.79	
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**ADDITIONAL RATIONALE**

The procedure is similar to 33212, insertion of a permanent pacemaker generator.

**FREQUENCY INFORMATION**

How was this service previously reported? 33999

How often do physicians in your specialty perform this service? Commonly ☒ Sometimes ☐ Rarely ☐

Estimate the number of times this service might be provided nationally in a one-year period? 3000

Do many physicians perform this service across the United States? ☒ Yes ☐ No



**AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF RECOMMENDATION**

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CPT Code: 332X2 Tracking Number: IJ2 Global Period: 090 Recommended RVW: 3.25

CPT Descriptor: Removal of an implantable, patient-activated cardiac event recorder

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**CLINICAL DESCRIPTION OF SERVICE:**

Vignette Used in Survey: A 42-year-old white female with a history of syncopal spells, the cause of which was recently diagnosed using an insertable loop recorder. A history and physical were performed. The procedure, indications, potential complications and alternatives were explained to the patient who appeared to understand and indicated the same. Opportunity for questions was provided and informed consent obtained.

Description of Pre-Service Work: The nature of the procedure, along with its risks and benefits, are reviewed with the patient, and a pertinent history and physical examination are performed. Pertinent laboratory tests are reviewed, and informed consent is obtained. The history, physical examination, and discussion are documented in the patient's record.

Description of Intra-Service Work: The patient is prepared for the procedure using standard, sterile technique. The surgical site and surrounding area are cleaned and prepared with an antimicrobial solution, and drapes are placed to create a sterile field. The patient may require conscious sedation. Local anesthetic is injected into the skin and subcutaneous tissue in the region of the preexisting scar. An incision is made in the preexisting scar down to the subcutaneous fat, and the previously created pocket that contains the device is opened. The sutures anchoring the recorder to the subcutaneous tissue are cut, and the device is removed from the pocket. The pocket is then flushed with an antimicrobial solution and closed with subcuticular absorbable sutures and a subcutaneous nonabsorbable suture. The wound is dressed.

Description of Post-Service Work: The results of the procedure is reviewed with the patient along with standard postoperative care and follow-up procedures.

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**SURVEY DATA:**

Presenter: Stephen Hammill, M.D., F.A.C.C. – American College of Cardiology/North American Society of Pacing and Electrophysiology

Specialty: Cardiology

Sample Size: 116 Response Rate: (%): 43 Final Median RVW: 3.25

Explanation of Sampling Technique: Three hundred randomly selected American members of the North American Society for Pacing and Electrophysiology were asked if they were willing to respond to a survey on the relative value of this procedure. One hundred sixteen responded that they would and they were subsequently sent the survey documents.

25th Percentile RVW: 3 75th Percentile RVW: 3.45 Low: 2 High: 7

Median Pre-Service Time: 30 Median Intra-Service Time: 30

25th Percentile Intra-Svc Time: 26.25 75th Percentile Intra-Svc Time: 40 Low: 15 High: 60

Median Number of Post Procedure Visits: 2 Median Total Time of Post Procedure Visits: 30

**KEY REFERENCE SERVICE:**

<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
1) 33233	Removal of permanent pacemaker pulse generator	3.29

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. Make certain that you are including the data from the service that you are rating as well as the key reference services.

**TIME ESTIMATES (Median)**

	<u>CPT Code</u>	<u>Reference Service 1</u>	<u>Reference Service 2</u>
Median Pre-Time	30	40	
Median Intra-Time	30	35	
Median Post-Time	30	30	

**INTENSITY/COMPLEXITY MEASURES (Mean)****Mental Effort and Judgement (Mean)**

The number of possible diagnosis and/or the number of management options that must be considered	2.48	2.83	
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	2.72	3.02	

332X2

Urgency of medical decision making	2.14	2.51	
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**Technical Skill/Physical Effort (Mean)**

Technical skill required	2.66	3.12	
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Physical effort required	2.52	2.71	
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**Psychological Stress (Mean)**

The risk of significant complications, morbidity and/or mortality	2.54	2.88	
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Outcome depends on the skill and judgement of physician	2.68	2.98	
---	------	------	--

Estimated risk of malpractice suit with poor outcome	2.74	3.2	
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**INTENSITY/COMPLEXITY MEASURES****CPT Code****Reference  
Service 1****Reference  
Service 2****Time Segments (Mean)**

Pre-Service intensity/complexity	2.64	2.88	
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Intra-Service intensity/complexity	2.76	3.00	
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Post-Service intensity/complexity	2.36	2.61	
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**ADDITIONAL RATIONALE**

This procedure is similar to 33233, removal of a permanent pacemaker pulse generator.

**FREQUENCY INFORMATION**

How was this service previously reported? 33999

How often do physicians in your specialty perform this service? Commonly ☒ Sometimes ☐ Rarely ☐

Estimate the number of times this service might be provided nationally in a one-year period? 3000

Do many physicians perform this service across the United States? ☒ Yes ☐ No

**AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF RECOMMENDATION**

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CPT Code: 9372X Tracking Number: U3 Global Period: XXX Recommended RVW: 0.63

CPT Descriptor: Electronic analysis of implantable loop recorder (ILR) system includes retrieval of recorded and stored ECG data, physician review and interpretation of retrieved ECG data and reprogramming

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**CLINICAL DESCRIPTION OF SERVICE.**

Vignette Used in Survey: Using a radiofrequency transmitter/receiver attached to a programming device, a communication link with the insertable loop recorder is established. Data from the recorder is downloaded to a computer. The data is then formatted and printed. The physician reviews the data from the recorder and interprets the findings. A report and clinical recommendations are made after review of the data. The device is then reprogrammed to clear memory banks and to set up the recorder for further recording (may include programming of sensing and recording parameters).

Description of Intra-Service Work: The indication, benefits, and reason for interrogating the recorder are reviewed with the patient, and verbal consent is obtained. Using a radiofrequency transmitter/receiver attached to a programming device, a communication link with the insertable event recorder is established. Data from the recorder is downloaded to a computer and is then formatted and printed. The physician reviews the data from the recorder and interprets the findings. The results are then reviewed with the patient, and a report and clinical recommendations are made. The device is then reprogrammed to clear memory banks and to set up the recorder for further recording which includes programming of the sensing and recording parameters.

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**SURVEY DATA:**

Presenter: Stephen Hammill, M.D., F.A.C.C. – American College of Cardiology/North American Society of Pacing and Electrophysiology

Specialty: Cardiology

Sample Size: 116 Response Rate: (%): 45 Final Median RVW: .74

Explanation of Sampling Technique: Three hundred randomly selected American members of the North American Society for Pacing and Electrophysiology were asked if they were willing to respond to a survey on the relative value of this procedure. One hundred sixteen responded that they would and they were subsequently sent the survey documents.

25th Percentile RVW: .52 75th Percentile RVW: .92 Low: .2 High: 3

Median Pre-Service Time: NA Median Intra-Service Time: 20

25th Percentile Intra-Svc Time: 15 75th Percentile Intra-Svc Time: 30 Low: 3 High: 90

Median Number of Post Procedure Visits: NA Median Total Time of Post Procedure Visits: NA

**KEY REFERENCE SERVICES:**

<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
1) 93272	Patient demand single or multiple event recording with presymptom memory loop, per 30 day period of time; physician review and interpretation only	0.52
2) 93735	Electronic analysis of single chamber pacemaker system (includes evaluation of programmable parameters at rest and during activity where applicable, using electrocardiographic recording and interpretation of recordings at rest and during exercise, analysis of event markers and device response); with reprogramming	0.74

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. Make certain that you are including the data from the service that you are rating as well as the key reference services.

<u>TIME ESTIMATES (Median)</u>	<u>CPT Code</u>	<u>Reference Service 1</u>	<u>Reference Service 2</u>
Median Pre-Time	NA	NA	NA
Median Intra-Time	20	10	17.5
Median Post-Time	NA	NA	NA

9372X

**INTENSITY/COMPLEXITY MEASURES (Mean)**

**Mental Effort and Judgement (Mean)**

The number of possible diagnosis and/or the number of management options that must be considered	3.49	2.55	2.90
--	------	------	------

The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.16	2.18	2.80
--	------	------	------

Urgency of medical decision making	3.06	2.55	2.40
------------------------------------	------	------	------

**Technical Skill/Physical Effort (Mean)**

Technical skill required	2.94	2.09	2.60
--------------------------	------	------	------

Physical effort required	1.94	1.36	1.70
--------------------------	------	------	------

**Psychological Stress (Mean)**

The risk of significant complications, morbidity and/or mortality	2.24	2.00	2.10
---	------	------	------

Outcome depends on the skill and judgement of physician	3.24	2.82	2.90
---	------	------	------

Estimated risk of malpractice suit with poor outcome	2.73	2.09	2.20
--	------	------	------

**INTENSITY/COMPLEXITY MEASURES**

**CPT Code**

**Reference  
Service 1**

**Reference  
Service 2**

**Time Segments (Mean)**

Pre-Service intensity/complexity	NA	NA	NA
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Intra-Service intensity/complexity	3.22	2.36	2.90
------------------------------------	------	------	------

Post-Service intensity/complexity	NA	NA	NA
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**ADDITIONAL RATIONALE**

The work related to this procedure is more than 93272 (review of a loop memory recorder) but less than 93735 (analysis of a single chamber pacemaker system).

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9372X

**FREQUENCY INFORMATION**

How was this service previously reported? 93735 or 93272

How often do physicians in your specialty perform this service? ☐ Commonly ☒ Sometimes ☐ Rarely

Estimate the number of times this service might be provided nationally in a one-year period? 5000

Do many physicians perform this service across the United States? ☒ Yes ☐ No

**AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE**  
**SUMMARY OF RECOMMENDATIONS**  
**May 1999**

**INTEGUMENTARY SYSTEM REPAIR**

***Work Relative Value Recommendations***

A series of four new add-on codes 13102, 13122, 13133 and 13153 was adopted to describe complex repair for each additional 5 cm or less by anatomic site. The following changes were implemented: 13102 *Repair, complex, trunk; each additional 5cm or less*; 13122 *Repair, complex, scalp, arms, and/or legs; each additional 5 cm or less*; 13133 *Repair, complex, forehead, cheeks, chin, mouth, neck, axillae, genitalia, hands and/or feet; each additional 5cm or less*; and 13153 *Repair, complex, eyelids, nose, ears, and/or lips; each additional 5cm or less*. These new add-on codes allow for the quantification of the additional work performed for repairs over 7.5 cm in length. Since the amount of work for each group of repairs is progressively greater, a separate add-on for each group of repairs is necessary. These codes will replace the deleted single code 13300, *Repair, unusual, complicated, over 7.5 cm, any area* (work RVW=5.27).

The RUC valued the codes using the same methodology used by Carrier Medical Directors (CMDs) during the Five-Year Review in 1997. During this review, CMDs increased the work RVW of CPT Code 13132 *Repair, complex, forehead, cheeks, chin, mouth, neck, axillae, genitalia, hands and/or feet; 2.6 cm to 7.5 cm* from 3.79 to 5.95 (an approximate increase of 55%). While reviewing values for these newly established add-on codes, the RUC recommended lowering the specialty society suggested values by 55%. The new values adequately account for the additional work involved in each of these codes and also avoid the potential for a rank order anomaly within the family of codes. Therefore, the RUC supports the following recommended RVUs:

The RUC recommends a work relative value of 1.24 for 13102; a work relative value of 1.44 for 13122; a work relative value of 2.19 for 13133; and finally, a work relative value of 2.38 for 13153.

*CPT five-digit codes, two-digit modifiers, and descriptions only are copyright by the American Medical Association.*



### ***Practice Expense Recommendations***

The RUC is not making any practice expense recommendations for these codes. The RUC agreed to table the practice expense recommendations since it was not able to fully evaluate the specialties' recommended crosswalk for these codes.

CPT Code (•New)	Track- ing Number	CPT Descriptor	Global Period	Work RVU Recommendation
<b>Repair (Closure)</b> <u>Use the codes in this section to designate wound closure utilizing sutures, staples, or tissue adhesives (eg, 2-cyanoacrylate), either singly or in combination with each other or in combination with adhesive strips. Wound closure utilizing adhesive strips as the sole repair material should be coded using the appropriate E/M code.</u>				
<b>Definitions</b>  The repair of wounds may be classified as Simple, Intermediate, or Complex  <b>Simple Repair</b> is used when the wound is superficial; eg involving primarily epidermis or dermis or subcutaneous tissues without significant involvement of deeper structures and requires simple one layer closure/ <del>suturing</del> . This includes local anesthesia and chemical or electrocauterization of wounds not closed.  <del>Closure with adhesive strips is included in appropriate E/M service.</del>  <b>Complex Repair</b> includes the repair of wounds requiring more than layered closure, viz, scar revision, debridement, (eg, traumatic lacerations or avulsions), extensive undermining stents or retention sutures. SEE <u>CPT</u> FOR REMAINING NOTES.  Instructions for listing services at time of wound repair:  1. The repaired wound(s) should be measured and recorded in centimeters, whether curved, angular, or stellate.  2. When multiple wounds are repaired, add together the lengths of those in the same classification (see above) <del>and report as a single item and from</del> <u>all anatomic sites that are grouped together into the same code descriptor. For example, add together the lengths of intermediate repairs to the trunk and extremities. Do not add lengths of repairs from different groupings of anatomic sites (eg, face and extremities). Also, do not add together lengths of different classifications (e.g. intermediate and complex repairs).</u>				

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CPT Code (•New)	Track- ing Number	CPT Descriptor	Global Period	Work RVU Recommendation
<b>REPAIR – SIMPLE</b> Sum of lengths of repairs <u>for each group of anatomic sites.</u>				
<b>REPAIR – INTERMEDIATE</b> Sum of lengths of repairs <u>for each group of anatomic sites.</u>				
<b>REPAIR – COMPLEX</b> Reconstructive procedures, complicated wound closure. Sum of lengths of repairs <u>for each group of anatomic sites.</u>				
13100		Repair, complex, trunk; 1.1 cm to 2.5 cm	010	3.12 (No Change)
13101		2.6 cm to 7.5 cm	010	3.92 (No Change)
•13102	A1	each additional 5 cm or less (List separately in addition to code for primary procedure)  (Use 13102 in conjunction with code 13101)	ZZZ	<b>1.24</b>
13120		Repair, complex, scalp, arms, and/or legs; 1.1 cm to 2.5 cm	010	3.30 (No Change)

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<b>CPT Code (•New)</b>	<b>Track- ing Number</b>	<b>CPT Descriptor</b>	<b>Global Period</b>	<b>Work RVU Recommendation</b>
13121		2.6 cm to 7.5 cm	010	4.33 (No Change)
•13122	A2	each additional 5 cm or less (List separately in addition to code for primary procedure)  (Use 13122 in conjunction with code 13121)	ZZZ	<b>1.44</b>
13131		Repair, complex, forehead, cheeks, chin, mouth, neck, axillae, genitalia, hands and/or feet; 1.1 cm to 2.5 cm	010	3.79 (No Change)
13132		2.6 cm to 7.5 cm	010	5.95 (No Change)
•13133	A3	each additional 5 cm or less (List separately in addition to code for primary procedure) (Use 13133 in conjunction with code 13132)	ZZZ	<b>2.19</b>
13150		Repair, complex, eyelids, nose, ears and/or lips; 1 cm or less	010	3.81 (No Change)
13151		1.1 cm to 2.5 cm	010	4.45 (No Change)
13152		2.6 cm to 7.5 cm	010	6.33 (No Change)

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<b>CPT Code (•New)</b>	<b>Track- ing Number</b>	<b>CPT Descriptor</b>	<b>Global Period</b>	<b>Work RVU Recommendation</b>
•13153	A4	each additional 5 cm or less (List separately in addition to code for primary procedure)  (Use 13153 in conjunction with code 13152)	ZZZ	2.38
13300		<del>Repair, unusual, complicated over 7.5 cm, any area</del>  (13300 has been deleted. To report, see 13102, 13122, 13133, and 13153.)	010	5.27  Deleted Code

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## Physician Work Data

# **Facilitation Committee Report** **Integumentary System Repair-Tab 6** **April 29, 1999**

The following facilitation committee members participated in the review of CPT Codes A1-A4: Doctors Molstad, (Chair), Busis, Gordy, Koopman, Lichtenfeld, Massanari, Mayer, Maloney, and Lenet(DPM). The codes A1- A-4, had survey results that suggested the codes were poorly understood as add-on work. Values presented to the RUC in February 1999, represented the 25<sup>th</sup> percentile or less of responses, referencing instead Harvard data. ). The committee unanimously agreed to adopt the minority report developed by Doctor Molstad in April 1999. The details of the report are as follows:

## **Minority Report**

The reason for this Report, is that the facilitation values in the last column below were generated as a compromise with an eye to the votes necessary to pass. AMA expressed concern that this rationale would be rejected by HCFA. An attempt was made to reconvene the facilitation committee by conference call, but no quorum could be mustered. The report of the committee is therefore presented and this "minority report" is also presented to enable the RUC to best decide which values should be sent on to HCFA.

In 1997, Carrier Medical Directors refined the work of a 7.5 cm laceration on hands, feet, head or neck (A3) to have a value of 5.97. This new value was an enormous increase, but corrected a value poorly fitted to the work described. Values in the column labeled "Minority" can be generated by taking a ratio of the society suggested value to the CMD value as an anchor, then prorating the society suggestions over the family of codes.

HCFA will have very little reason to reject the values of the minority column, simply because they themselves generated the basis for this calculation.

Code	Base Code	Old RVU for 7.5 cm Lesion	Society Requested Value	Minority Report (0.55 of Requested Values)	7.5 cm with Minority Value	Facilitation Committee Report (0.65 of Request)	7.5 cm with Facilitation Values
A1	3.12	3.92	2.26	1.24	4.36	1.47	4.59
A2	3.30	4.33	2.62	1.44	4.74	1.70	5.00
A3	3.79	5.95	3.99	2.19	5.98	2.59	6.38
A4	4.45	6.33	4.33	2.38	6.83	2.81	7.26

In absence of a compelling rationale to adopt the original facilitation values, it is proposed that the values be decreased to those listed in the "Minority" column and that these values then be cross-walked to the four new codes created by the CPT Editorial Panel.

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF RECOMMENDATION

(February 1999)

CPT Code: 13101      Tracking No.: A1      Global Period: ZZZ      Recommended RVW: 2.26

CPT Descriptor: Repair, complex, trunk; each additional 5 cm  
(List separately in addition to code for primary procedure)

**Vignette Used in Survey:**

A 12-year-old boy fell against a fence, lacerating his left chest in the pectoralis muscle through a 12 cm gaping wound. Complex repair is required.

[IMPORTANT NOTE: This is an "add-on" code with a ZZZ global period. Therefore, in your responses below, you should consider ONLY the intra-operative work for each additional 5 cm. The pre- and post-operative work is part of the primary procedure, which is separately billable and not to be considered here.]

**CLINICAL DESCRIPTION OF SERVICE (This work description was NOT provided on the survey.):**

**Description of Pre-Service Work:**

N/A - pre-service work included in global of primary procedure.

**Description of Intra-Service Work:**

Intra-service work includes assessment and complex repair of wound length after the first 2.5 cm. This may involve: additional draping; additional injection of local anesthetic; additional removal of wound debris; additional irrigation with sterile saline; additional suturing of ligated vessels; additional electrocauterization for hemostasis; additional repair of muscle(s) and deep fascial layer(s); additional suturing of skin; and additional dressing application.

**Description of Post-Service Work:**

In general, post-service work is not applicable to add-on codes, however, if the total length of the complex repair is extensive, additional (and measurable) physician time may be required at the postoperative office visit to assess healing of the wound(s), remove sutures, and redress the wound(s).

**SURVEY DATA:**

Presenter(s): John Derr, MD  
Specialty(s): American Society of Plastic and Reconstructive Surgeons  
Type of Sample: Random

Survey n:	100											
Response:	40											
Rate %:	40%											
		RVW	PRE total min	INTRA total min	Same day total min	ICU		Hosp. - Other		Dischg day total min	Office	
						# visits	total min	# visits	total min		# visits	total min
	MED	3.30	n/a	25	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	low	0.67		10								
	25th%	3.00		20								
	75th%	4.50		40								
	high	9.00		90								

**KEY REFERENCE SERVICE(S):**

1999 RVW	Global	CPT	Descriptor
3.12	10	13100	Repair, complex, trunk; 1.1 cm to 2.5 cm
3.79	10	13131	Repair, complex, forehead, cheeks, chin, mouth, neck, axillae, genitalia, hands and/or feet; 1.1 cm to 2.5 cm

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

LOS and Time Estimates (Median)	Mean Intensity/Complexity Measures		
	13101A1	13100	13131
LOS	*	*	*
PRE-service time	*	*	*
INTRA-service time	25	20	30
POST-service time	*	*	*
<b>Mental Effort and Judgment</b>			
The number of possible diagnosis and/or the number of management options that must be considered	2.51	2.27	3.00
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	2.05	1.95	2.40
Urgency of medical decision making	3.05	3.00	2.80
<b>Technical Skill/physical Effort</b>			
Technical skill required	3.20	3.27	3.60
Physical effort required	2.80	2.55	2.40
<b>Psychological Stress</b>			
The risk of significant complications, morbidity and/or mortality	2.59	2.64	3.20
Outcome depends on skill and judgment of physician	3.07	3.14	3.00
Estimated risk of malpractice suit with poor outcome	2.73	2.55	3.20
<b>Time Segments</b>			
PRE-service intensity/complexity	*	*	*
INTRA-service intensity/complexity	2.83	2.87	2.80
POST-service intensity/complexity	*	*	*

\*Information request not included in survey.

**ADDITIONAL RATIONALE:**

ASPRS compared the survey responses for A1-A4 and the reference procedures to the Harvard work and Harvard intra-service time data. We reviewed the relationship of data within and between complex repair family codes for different anatomic sites. We also reviewed RUC 5-year-review issues which lead to the increase of work-rvu for CPT 13152 and referral of CPT 13300 to the CPT Editorial Panel for nomenclature revision. Following is a discussion of our findings and RVW recommendations.

First, the committee compared intra-service time and found the survey data to be consistent with Harvard data. For example, ASPRS surveyed intra-time was 25 minutes 13131 (up to 2.5 cm) and 30 minutes for each additional 5cm. This compares well with the Harvard intra-time of 50 minutes for 13132 (2.6 to 7.5 cm). For code pair 13120/-21, we determined that the typical patient chosen for the vignette may have resulted in intra-times that were lower than Harvard. We believe that a laceration of the arm or scalp would have yielded high intra-times because these areas would require more attention to the cosmetic technique of the repair. The table below compares the Harvard times with the survey times.

CPT	Repair, complex	Hvd Intra time	CPT	Repair, complex	ASPRS Svy Intra time	(up to 7.5 cm)
13100	trunk, 1.1 - 2.5 cm	33	13100	trunk, 1.1 - 2.5 cm	20	
13101	trunk, 2.6 - 7.5 cm	53	A1	trunk; each add'l 5 cm	28	(=48)
13120	scalp, arms, legs; 1.1 - 2.5 cm	35	13120	scalp, arms, legs; 1.1 - 2.5 cm	20	
13121	scalp, arms, legs; 2.6 - 7.5 cm	57	A2	scalp, arms, legs; each add'l 5 cm	23	(=43)
13131	head, neck, hands, feet; 1.1-2.5 cm	43	13131	head, neck, hands, feet; 1.1-2.5 cm	25	
13132	head, neck, hands, feet; 2.6-7.5 cm	50	A3	head, neck, hands, feet; each add'l 5 cm	30	(=55)
13151	eyes, nose, ears, lips; 1.1-2.5 cm	57	13151	eyes, nose, ears, lips; 1.1-2.5 cm	30	
13152	eyes, nose, ears, lips; 2.6-7.5 cm	73	A4	eyes, nose, ears, lips; each add'l 5 cm	45	(=75)

Second, the ASPRS committee considered the affect of the change in the global period from 010 to ZZZ. Initially, this would require subtracting the work-RVUs for one office visit (CPT 99213 @ 0.67 rvu) from the work-RVUs for a 10 day global code. Column B in the table below shows the results of this calculation. This exercise, however, does not take into consideration decreased pre- and post-service work consideration on the day of the procedure for procedures with a ZZZ global period. Nor does it consider the possible increased intensity for longer and/or multiple lacerations or for more difficult cases (e.g., closure after tumor resection or after complex MH's chemosurgery not requiring skin graft).



CPT 010 → ZZZ		A	B	C	D	E
	Repair, complex	1999 RVW	99RVW minus 1x99213	ASPRS survey med RVW	Hvd Intra % work	"Intra-RVW" (col A x col D)
13100	trunk, 1.1 - 2.5 cm	3.12			49%	
13101 → A1	trunk, 2.6 - 7.5 cm → each add'l 5 cm	3.92	3.25	3.30	58%	2.26
13120	scalp, arms, legs; 1.1 - 2.5 cm	3.30			53%	
13121 → A2	scalp, arms, legs; 2.6 - 7.5 cm → each add'l 5 cm	4.33	3.66	3.60	60%	2.62
13131	head, neck, hands, feet; 1.1-2.5 cm	3.79			60%	
13132 → A3	head, neck, hands, feet; 2.6-7.5 cm → each add'l 5 cm	5.95	5.28	4.00	67%*	3.99
13150	eyes, nose, ears, lips; 1.0 or less	3.81			56%	
13151	eyes, nose, ears, lips; 1.1-2.5 cm	4.45			57%	
13152 → A4	eyes, nose, ears, lips; 2.6-7.5 cm → each add'l 5 cm	6.33	5.66	5.00	68%	4.33

\*Rescaled to be consistent with the outcome of the 5-year-review which stated that the relationship of 13131/-32 and 13120/-21 should be the same.

With respect to the intensity/complexity measures, the data for A1-A4 are reasonably similar to the data for their parent codes. This was as expected. However, the committee would like to point out there may be variability in the intensity/complexity for each additional 5 cm of complex repair within and between cases. We offer the following examples of low and high intensity/complexity cases for each code to illustrate this point.

**A1 - LOW:** A 12-year-old boy drops a sharp hunting knife onto his chest resulting in a clean, linear 7 cm laceration in the pectoralis major muscle. A complex repair is required.

**A1 - HIGH:** A 12-year-old boy slips and falls from a cliff onto rocks suffering lacerations to 3 sites: a 10 cm left chest wall wound into the pectoralis major muscle, a 10 cm jagged laceration to the back into the trapezius muscle, and a 3 cm gouge laceration to the right flank, into muscle. A complex repair, including intra-operative repositioning and re-prepping, is required.

**A2 - LOW:** A 54-year-old male is showing off a new hunting knife when it slips from his hands, resulting in a 10 cm clean laceration into the right anterior thigh including the quadriceps muscle. A complex repair is required.

**A2 - HIGH:** A 54-year-old male is hit by a car, and thrown 50 feet, suffering a 12 cm laceration to the occipital scalp into the galea, a 15 cm laceration of the anterior thigh, and a 15 cm laceration to the left posterior calf. A complex repair, including intra-operative repositioning and re-prepping, is required.

**A3 - LOW:** A 32-year-old woman is holding an art piece of glass. It slips through her hands, and as she tries to save the art, she suffers glass cuts to both hands, consisting of parallel lacerations, each 5 cm, into the palmar fascia. A complex repair is required.

**A3 - HIGH:** A 32-year-old woman was involved in a MVA, sustaining a 10cm laceration to the forehead into the frontalis muscle, a jagged 10 cm laceration into the right axilla, and a 14 cm laceration to the sole of the right foot into the plantar fascia. A complex repair is required, involves distant sites, and may require re-positioning and re-prepping.

**A4 - LOW:** A 17-year-old male is seen in the ER after an MVA and has a clean transverse laceration into muscle, 8 cm in length, extending from the left upper eyelid, across the nasal bridge and onto the right eyelid. A complex repair is required.

**A4 - HIGH:** A 17-year-old male is seen in the ER after an MVA and has a 6 cm laceration across the nose and into the upper lip, extending into muscle. Additionally, he is noted to have a deep, jagged 7 cm laceration in the right post-auricular region extending into cartilage. A complex repair is required and may require intra-operative, re-positioning, and re-prepping of the patient.

Because the Harvard intra-times were consistent with the survey intra-times, and because the relative relationship between the family codes for different anatomic sites appeared accurate, the ASPRS committee decided to use the percentage of intra-service work estimated during the Harvard study to calculate an estimated "intra-RVW." The results of this calculation (1999 RVW x Harvard intra percentage work) are shown in Column E of the table below. It is these values that ASPRS is recommending for revised codes A1-A4.

Recommendation for A1: 2.26 work rvw's

Recommendation for A2: 2.62 work rvw's

Recommendation for A3: 3.99 work rvw's

Recommendation for A4: 4.33 work rvw's

---

**FREQUENCY INFORMATION****How was this service previously reported?**

13101 with a 1999 descriptor: Repair, complex, trunk; 2.6 cm to 7.5 cm

13300 with a 1999 descriptor: Repair, unusual, complicated, over 7.5 cm, any area

**How often do physicians in your specialty perform this service? (✓one)**☒ Commonly      ☐ Sometimes      ☐ Rarely**Estimate the number of times this service might be provided nationally in a one-year period?**

This procedure is performed on patients of all ages. 1997 Medicare data for CPT 13101 indicate a frequency of 11,460 which includes claims both as a primary procedure (85%) and as a multiple procedure (15%). This frequency also includes both facility (23%) and non-facility (77%) claims. 1997 Medicare data for CPT 13300 indicate a frequency of approximately 12,000 which includes repair over 7.5 cm for any area.

**Is this service performed by many physicians across the United States?**

Yes

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF RECOMMENDATION

(February 1999)

CPT Code: 13121      Tracking No.: A2      Global Period: ZZZ      Recommended RVW: 2.62

CPT Descriptor: Repair, complex, scalp, arms, and/or legs; each additional 5 cm  
(List separately in addition to code for primary procedure)

**Vignette Used in Survey:**

A 54-year-old construction worker fell from a ladder, lacerating his right thigh on a piece of rusty metal rebar. The 34 cm wound was deep, requiring a complex repair.

[IMPORTANT NOTE: This is an "add-on" code with a ZZZ global period. Therefore, in your responses below, you should consider ONLY the intra-operative work for each additional 5 cm. The pre- and post-operative work is part of the primary procedure, which is separately billable and not to be considered here.]

**CLINICAL DESCRIPTION OF SERVICE (This work description was NOT provided on the survey.):**

**Description of Pre-Service Work:**

N/A - pre-service work included in global of primary procedure.

**Description of Intra-Service Work:**

Intra-service work includes assessment and complex repair of wound length after the first 2.5 cm. This may involve: additional draping; additional injection of local anesthetic; additional removal of wound debris; additional irrigation with sterile saline; additional suturing of ligated vessels; additional electrocauterization for hemostasis; additional repair of muscle(s) and deep fascial layer(s); additional suturing of skin; and additional dressing application.

**Description of Post-Service Work:**

In general, post-service work is not applicable to add-on codes, however, if the total length of the complex repair is extensive, additional (and measurable) physician time may be required at the postoperative office visit to assess healing of the wound(s), remove sutures, and redress the wound(s).

**SURVEY DATA:**

Presenter(s): John Derr, MD  
Specialty(s): American Society of Plastic and Reconstructive Surgeons  
Type of Sample: Random

Survey n:	100											
Response:	40											
Rate %:	40%											
		RVW	PRE total min	INTRA total min	Same day total min	ICU		Hosp. - Other		Dischg day total min	Office	
						# visits	total min	# visits	total min		# visits	total min
		MED	3.60	n/a	23	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		low	0.67		10							
		25th%	2.94		20							
		75th%	4.63		40							
		high	15.00		110							

**KEY REFERENCE SERVICE(S):**

1999 RVW	Global	CPT	Descriptor
3.30	10	13120	Repair, complex, scalp, arms, and/or legs; 1.1 cm to 2.5 cm
3.12	10	13100	Repair, complex, trunk; 1.1 cm to 2.5 cm

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

LOS and Time Estimates (Median)	Mean Intensity/Complexity Measures		
	13121A2	13120	13100
LOS	*	*	*
PRE-service time	*	*	*
INTRA-service time	23	20	22
POST-service time	*	*	*
<b>Mental Effort and Judgment</b>			
The number of possible diagnosis and/or the number of management options that must be considered	2.80	2.86	2.33
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	2.27	2.38	1.67
Urgency of medical decision making	3.18	3.11	2.33
<b>Technical Skill/physical Effort</b>			
Technical skill required	3.29	3.52	2.33
Physical effort required	3.00	2.95	2.00
<b>Psychological Stress</b>			
The risk of significant complications, morbidity and/or mortality	2.90	2.90	2.33
Outcome depends on skill and judgment of physician	3.27	3.24	2.67
Estimated risk of malpractice suit with poor outcome	2.71	2.81	1.67
<b>Time Segments</b>			
PRE-service intensity/complexity	*	*	*
INTRA-service intensity complexity	2.98	2.95	2.50
POST-service intensity complexity	*	*	*

\*Information request not included in survey.

**ADDITIONAL RATIONALE**

ASPRS compared the survey responses for A1-A4 and the reference procedures to the Harvard work and Harvard intra-service time data. We reviewed the relationship of data within and between complex repair family codes for different anatomic sites. We also reviewed RUC 5-year-review issues which lead to the increase of work-rvu for CPT 13152 and referral of CPT 13300 to the CPT Editorial Panel for nomenclature revision. Following is a discussion of our findings and RVW recommendations.

First, the committee compared intra-service time and found the survey data to be consistent with Harvard data. For example, ASPRS surveyed intra-time was 25 minutes 13131 (up to 2.5 cm) and 30 minutes for each additional 5cm. This compares well with the Harvard intra-time of 50 minutes for 13132 (2.6 to 7.5 cm). For code pair 13120/-21, we determined that the typical patient chosen for the vignette may have resulted in intra-times that were lower than Harvard. We believe that a laceration of the arm or scalp would have yielded high intra-times because these areas would require more attention to the cosmetic technique of the repair. The table below compares the Harvard times with the survey times.

CPT	Repair, complex	Hvd Intra time	CPT	Repair, complex	ASPRS Svy Intra time	(up to 7.5 cm)
13100	trunk, 1.1 - 2.5 cm	33	13100	trunk, 1.1 - 2.5 cm	20	
13101	trunk, 2.6 - 7.5 cm	53	A1	trunk; each add'l 5 cm	28	(=48)
13120	scalp, arms, legs; 1.1 - 2.5 cm	35	13120	scalp, arms, legs; 1.1 - 2.5 cm	20	
13121	scalp, arms, legs; 2.6 - 7.5 cm	57	A2	scalp, arms, legs; each add'l 5 cm	23	(=43)
13131	head, neck, hands, feet; 1.1-2.5 cm	43	13131	head, neck, hands, feet; 1.1-2.5 cm	25	
13132	head, neck, hands, feet; 2.6-7.5 cm	50	A3	head, neck, hands, feet; each add'l 5 cm	30	(=55)
13151	eyes, nose, ears, lips; 1.1-2.5 cm	57	13151	eyes, nose, ears, lips; 1.1-2.5 cm	30	
13152	eyes, nose, ears, lips; 2.6-7.5 cm	73	A4	eyes, nose, ears, lips; each add'l 5 cm	45	(=75)

Second, the ASPRS committee considered the affect of the change in the global period from 010 to ZZZ. Initially, this would require subtracting the work-RVUs for one office visit (CPT 99213 @ 0.67 rvu) from the work-RVUs for a 10 day global code. Column B in the table below shows the results of this calculation. This exercise, however, does not take into consideration decreased pre- and post-service work consideration on the day of the procedure for procedures with a ZZZ global period. Nor does it consider the possible increased intensity for longer and/or multiple lacerations or for more difficult cases (e.g., closure after tumor resection or after complex MHT's chemosurgery not requiring skin graft).

		A	B	C	D	E
CPT 010 →ZZZ	Repair, complex	1999 RVW	99RVW minus 1x99213	ASPRS survey med RVW	Hvd Intra % work	"Intra-RVW" (col A x col D)
13100	trunk, 1.1 - 2.5 cm	3.12			49%	
13101 →A1	trunk, 2.6 - 7.5 cm → each add 1.5 cm	3.92	3.25	3.30	58%	2.26
13120	scalp, arms, legs; 1.1 - 2.5 cm	3.30			53%	
13121 →A2	scalp, arms, legs; 2.6 - 7.5 cm → each add 1.5 cm	4.33	3.66	3.60	60%	2.62
13131	head, neck, hands, feet; 1.1-2.5 cm	3.79			60%	
13132 →A3	head, neck, hands, feet; 2.6-7.5 cm → each add 1.5 cm	5.95	5.28	4.00	67%*	3.99
13150	eyes, nose, ears, lips; 1.0 or less	3.81			56%	
13151	eyes, nose, ears, lips; 1.1-2.5 cm	4.45			57%	
13152 →A4	eyes, nose, ears, lips; 2.6-7.5 cm → each add 1.5 cm	6.33	5.66	5.00	68%	4.33

\*Rescaled to be consistent with the outcome of the 5-year-review which stated that the relationship of 13131-32 and 13120-21 should be the same.

With respect to the intensity/complexity measures, the data for A1-A4 are reasonably similar to the data for their parent codes. This was as expected. However, the committee would like to point out there may be variability in the intensity/complexity for each additional 5 cm of complex repair within and between cases. We offer the following examples of low and high intensity/complexity cases for each code to illustrate this point.

- **LOW:** A 12-year-old boy drops a sharp hunting knife onto his chest resulting in a clean, linear 7 cm laceration in the pectoralis major muscle. A complex repair is required.
- A1 - HIGH:** A 12-year-old boy slips and falls from a cliff onto rocks suffering lacerations to 3 sites: a 10 cm left chest wall wound into the pectoralis major muscle, a 10 cm jagged laceration to the back into the trapezius muscle, and a 3 cm gouge laceration to the right flank, into muscle. A complex repair, including intra-operative repositioning and re-prepping, is required.
- A2 - LOW:** A 54-year-old male is showing off a new hunting knife when it slips from his hands, resulting in a 10 cm clean laceration into the right anterior thigh including the quadriceps muscle. A complex repair is required.
- A2 - HIGH:** A 54-year-old male is hit by a car, and thrown 50 feet, suffering a 12 cm laceration to the occipital scalp into the galea, a 15 cm laceration of the anterior thigh, and a 15 cm laceration to the left posterior calf. A complex repair, including intra-operative repositioning and re-prepping, is required.
- A3 - LOW:** A 32-year-old woman is holding an art piece of glass. It slips through her hands, and as she tries to save the art, she suffers glass cuts to both hands, consisting of parallel lacerations, each 5 cm, into the palmar fascia. A complex repair is required.
- A3 - HIGH:** A 32-year-old woman was involved in a MVA, sustaining a 10cm laceration to the forehead into the frontalis muscle, a jagged 10 cm laceration into the right axilla, and a 14 cm laceration to the sole of the right foot into the plantar fascia. A complex repair is required, involves distant sites, and may require re-positioning and re-prepping.
- A4 - LOW:** A 17-year-old male is seen in the ER after an MVA and has a clean transverse laceration into muscle, 8 cm in length, extending from the left upper eyelid, across the nasal bridge and onto the right eyelid. A complex repair is required.
- A4 - HIGH:** A 17-year-old male is seen in the ER after an MVA and has a 6 cm laceration across the nose and into the upper lip, extending into muscle. Additionally, he is noted to have a deep, jagged 7 cm laceration in the right post-auricular region extending into cartilage. A complex repair is required and may require intra-operative, re-positioning, and re-prepping of the patient.

Because the Harvard intra-times were consistent with the survey intra-times, and because the relative relationship between the family codes for different anatomic sites appeared accurate, the ASPRS committee decided to use the percentage of intra-service work estimated during the Harvard study to calculate an estimated "intra-RVW." The results of this calculation (1999 RVW x Harvard intra percentage work) are shown in Column E of the table below. It is these values that ASPRS is recommending for codes A1-A4.

- Recommendation for A1: 2.26 work rvu's
- Recommendation for A2: 2.62 work rvu's
- Recommendation for A3: 3.99 work rvu's
- Recommendation for A4: 4.33 work rvu's

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**FREQUENCY INFORMATION**

How was this service previously reported?

13121 with a 1999 descriptor: Repair, complex, scalp, arms, and/or legs; 2.6 cm to 7.5 cm

13300 with a 1999 descriptor: Repair, unusual, complicated, over 7.5 cm, any area

How often do physicians in your specialty perform this service? (✓ one)

☒ Commonly      ☐ Sometimes      ☐ Rarely

Estimate the number of times this service might be provided nationally in a one-year period?

This procedure is performed on patients of all ages. 1997 Medicare data for CPT 13121 indicate a frequency of 17,478 which includes claims both as a primary procedure (89%) and as a multiple procedure (11%). This frequency also includes both facility (27%) and non-facility (73%) claims. 1997 Medicare data for CPT 13300 indicate a frequency of approximately 12,000 which includes repair over 7.5 cm for any area.

Is this service performed by many physicians across the United States?

Yes

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF RECOMMENDATION

(February 1999)

CPT Code: 13132

Tracking No.: A3

Global Period: ZZZ

Recommended RVW: 3.99

CPT Descriptor: Repair, complex, forehead, cheeks, chin, mouth, neck, axillae, genitalia, hands and/or feet;  
each additional 5 cm

(List separately in addition to code for primary procedure)

**Vignette Used in Survey:**

A 32-year-old woman was involved in a motor vehicle accident sustaining a 10 cm laceration to her forehead, a 6 cm laceration to her right cheek, a 5 cm laceration to her left cheek, a 4 cm laceration to her chin, and a 9 cm laceration to the dorsum of her right hand. Complex repairs were required for all of these wounds, a sum of 34 cm total length.

[IMPORTANT NOTE: This is an "add-on" code with a ZZZ global period. Therefore, in your responses below, you should consider ONLY the intra-operative work for each additional 5 cm. The pre- and post-operative work is part of the primary procedure, which is separately billable and not to be considered here.]

**CLINICAL DESCRIPTION OF SERVICE (This work description was NOT provided on the survey.):**

**Description of Pre-Service Work:**

N/A - pre-service work included in global of primary procedure.

**Description of Intra-Service Work:**

Intra-service work includes assessment and complex repair of wound length after the first 2.5 cm. This may involve: additional draping; additional injection of local anesthetic; additional removal of wound debris; additional irrigation with sterile saline; additional suturing of ligated vessels; additional electrocauterization for hemostasis; additional repair of muscle(s) and deep fascial layer(s); additional suturing of skin; and additional dressing application.

**Description of Post-Service Work:**

In general, post-service work is not applicable to add-on codes, however, if the total length of the complex repair is extensive, additional (and measurable) physician time may be required at the postoperative office visit to assess healing of the wound(s), remove sutures, and redress the wound(s).

**SURVEY DATA:**

Presenter(s): John Derr, MD  
Specialty(s): American Society of Plastic and Reconstructive Surgeons  
Type of Sample: Random

Survey n:	100											
Response:	41											
Rate %:	41%											
		RVW	PRE total min	INTRA total min	Same day total min	ICU		Hosp. - Other		Dischg day total min	Office	
						# visits	total min	# visits	total min		# visits	total min
		MED	4.00	n/a	30	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		low	1.29		10							
		25th%	3.50		25							
		75th%	6.00		60							
		high	21.00		180							

**KEY REFERENCE SERVICE(S):**

1999 RVW	Global	CPT	Descriptor
3.12	10	13100	Repair, complex, trunk; 1.1 cm to 2.5 cm
8.50	90	14060	Adjacent tissue transfer or rearrangement, eyelids, nose, ears and/or lips; defect 10 sq cm or less

# RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):

LOS and Time Estimates (Median)	Mean Intensity/Complexity Measures		
	13132A3	13100	14060
LOS	*	*	*
PRE-service time	*	*	*
INTRA-service time	30	25	60
POST-service time	*	*	*
Mental Effort and Judgment			
The number of possible diagnosis and/or the number of management options that must be considered	3.50	3.32	3.83
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	2.79	2.64	3.17
Urgency of medical decision making	3.56	3.50	3.50
Technical Skill/physical Effort			
Technical skill required	4.00	4.05	3.83
Physical effort required	3.29	3.18	3.67
Psychological Stress			
The risk of significant complications, morbidity and/or mortality	3.62	3.59	3.50
Outcome depends on skill and judgment of physician	4.05	3.91	3.83
Estimated risk of malpractice suit with poor outcome	3.64	3.64	3.50
Time Segments			
PRE-service intensity/complexity	*	*	*
INTRA-service intensity complexity	3.70	3.52	3.50
POST-service intensity complexity	*	*	*

\*Information request not included in survey.

## ADDITIONAL RATIONALE

ASPRS compared the survey responses for A1-A4 and the reference procedures to the Harvard work and Harvard intra-service time data. We reviewed the relationship of data within and between complex repair family codes for different anatomic sites. We also reviewed RUC 5-year-review issues which lead to the increase of work-rvu for CPT 13152 and referral of CPT 13300 to the CPT Editorial Panel for nomenclature revision. Following is a discussion of our findings and RVW recommendations.

First, the committee compared intra-service time and found the survey data to be consistent with Harvard data. For example, ASPRS surveyed intra-time was 25 minutes 13131 (up to 2.5 cm) and 30 minutes for each additional 5cm. This compares well with the Harvard intra-time of 50 minutes for 13132 (2.6 to 7.5 cm). For code pair 13120/-21, we determined that the typical patient chosen for the vignette may have resulted in intra-times that were lower than Harvard. We believe that a laceration of the arm or scalp would have yielded high intra-times because these areas would require more attention to the cosmetic technique of the repair. The table below compares the Harvard times with the survey times.

CPT	Repair, complex	Hvd Intra time
13100	trunk, 1.1 - 2.5 cm	33
13101	trunk, 2.6 - 7.5 cm	53
13120	scalp, arms, legs; 1.1 - 2.5 cm	35
13121	scalp, arms, legs; 2.6 - 7.5 cm	57
13131	head, neck, hands, feet; 1.1-2.5 cm	43
13132	head, neck, hands, feet; 2.6-7.5 cm	50
13151	eyes, nose, ears, lips; 1.1-2.5 cm	57
13152	eyes, nose, ears, lips; 2.6-7.5 cm	73

CPT	Repair, complex	ASPRS Swy Intra time	(up to 7.5 cm)
13100	trunk, 1.1 - 2.5 cm	20	
A1	trunk, each add'l 5 cm	28	(=48)
13120	scalp, arms, legs; 1.1 - 2.5 cm	20	
A2	scalp, arms, legs; each add'l 5 cm	23	(=43)
13131	head, neck, hands, feet; 1.1-2.5 cm	25	
A3	head, neck, hands, feet; each add'l 5 cm	30	(=55)
13151	eyes, nose, ears, lips; 1.1-2.5 cm	30	
A4	eyes, nose, ears, lips; each add'l 5 cm	45	(=75)

Second, the ASPRS committee considered the affect of the change in the global period from Q10 to ZZZ. Initially, this would require subtracting the work-RVUs for one office visit (CPT 99213 @ 0.67 rvu) from the work-RVUs for a 10 day global code. Column B in the table below shows the results of this calculation. This exercise, however, does not take into consideration decreased pre- and post-service work consideration on the day of the procedure for procedures with a ZZZ global period. Nor does it consider the possible increased intensity for longer and/or multiple lacerations or for more difficult cases (e.g., closure after tumor resection or after complex MH's chemosurgery not requiring skin graft).



		A	B	C	D	E
CPT		1999 RVW	99RVW minus 1x99213	ASPRS survey med RVW	Hvd Intra % work	"Intra-RVW" (col A x col D)
010 → ZZZ	Repair, complex					
13100	trunk, 1.1 - 2.5 cm	3.12			49%	
13101 → A1	trunk; 2.6 - 7.5 cm → each add 1.5 cm	3.92	3.25	3.30	58%	2.26
13120	scalp, arms, legs; 1.1 - 2.5 cm	3.30			53%	
13121 → A2	scalp, arms, legs; 2.6 - 7.5 cm → each add 1.5 cm	4.33	3.66	3.60	60%	2.62
13131	head, neck, hands, feet; 1.1 - 2.5 cm	3.79			60%	
13132 → A3	head, neck, hands, feet; 2.6 - 7.5 cm → each add 1.5 cm	5.95	5.28	4.00	67%*	3.99
13150	eyes, nose, ears, lips; 1.0 or less	3.81			56%	
13151	eyes, nose, ears, lips; 1.1 - 2.5 cm	4.45			57%	
13152 → A4	eyes, nose, ears, lips; 2.6 - 7.5 cm → each add 1.5 cm	6.33	5.66	5.00	68%	4.33

\*Rescaled to be consistent with the outcome of the 5-year-review which stated that the relationship of 13131/-32 and 13120/-21 should be the same.

With respect to the intensity/complexity measures, the data for A1-A4 are reasonably similar to the data for their parent codes. This was as expected. However, the committee would like to point out there may be variability in the intensity/complexity for each additional 5 cm of complex repair within and between cases. We offer the following examples of low and high intensity/complexity cases for each code to illustrate this point.

A1 - LOW: A 12-year-old boy drops a sharp hunting knife onto his chest resulting in a clean, linear 7 cm laceration in the pectoralis major muscle. A complex repair is required.

A1 - HIGH: A 12-year-old boy slips and falls from a cliff onto rocks suffering lacerations to 3 sites: a 10 cm left chest wall wound into the pectoralis major muscle, a 10 cm jagged laceration to the back into the trapezius muscle, and a 3 cm gouge laceration to the right flank, into muscle. A complex repair, including intra-operative repositioning and re-prepping, is required.

A2 - LOW: A 54-year-old male is showing off a new hunting knife when it slips from his hands, resulting in a 10 cm clean laceration into the right anterior thigh including the quadriceps muscle. A complex repair is required.

A2 - HIGH: A 54-year-old male is hit by a car, and thrown 50 feet, suffering a 12 cm laceration to the occipital scalp into the galea, a 15 cm laceration of the anterior thigh, and a 15 cm laceration to the left posterior calf. A complex repair, including intra-operative repositioning and re-prepping, is required.

A3 - LOW: A 32-year-old woman is holding an art piece of glass. It slips through her hands, and as she tries to save the art, she suffers glass cuts to both hands, consisting of parallel lacerations, each 5 cm, into the palmar fascia. A complex repair is required.

A3 - HIGH: A 32-year-old woman was involved in a MVA, sustaining a 10 cm laceration to the forehead into the frontalis muscle, a jagged 10 cm laceration into the right axilla, and a 14 cm laceration to the sole of the right foot into the plantar fascia. A complex repair is required, involves distant sites, and may require re-positioning and re-prepping.

A4 - LOW: A 17-year-old male is seen in the ER after an MVA and has a clean transverse laceration into muscle, 8 cm in length, extending from the left upper eyelid, across the nasal bridge and onto the right eyelid. A complex repair is required.

A4 - HIGH: A 17-year-old male is seen in the ER after an MVA and has a 6 cm laceration across the nose and into the upper lip, extending into muscle. Additionally, he is noted to have a deep, jagged 7 cm laceration in the right post-auricular region extending into cartilage. A complex repair is required and may require intra-operative, re-positioning, and re-prepping of the patient.

Because the Harvard intra-times were consistent with the survey intra-times, and because the relative relationship between the family codes for different anatomic sites appeared accurate, the ASPRS committee decided to use the percentage of intra-service work estimated during the Harvard study to calculate an estimated "intra-RVW." The results of this calculation (1999 RVW x Harvard intra percentage work) are shown in Column E of the table below. It is these values that ASPRS is recommending for codes A1-A4.

Recommendation for A1: 2.26 work rvu's

Recommendation for A2: 2.62 work rvu's

Recommendation for A3: 3.99 work rvu's

Recommendation for A4: 4.33 work rvu's

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**FREQUENCY INFORMATION****How was this service previously reported?**

13132 with a 1999 descriptor: Repair, complex, forehead, cheeks, chin, mouth, neck, axillae, genitalia, hands and/or feet; 2.6 cm to 7.5 cm

13300 with a 1999 descriptor: Repair, unusual, complicated, over 7.5 cm, any area

**How often do physicians in your specialty perform this service? (✓ one)**

☒ Commonly      ☐ Sometimes      ☐ Rarely

**Estimate the number of times this service might be provided nationally in a one-year period?**

This procedure is performed on patients of all ages. 1997 Medicare data for CPT 13132 indicate a frequency of 46,460 which includes claims both as a primary procedure (90%) and as a multiple procedure (10%).. This frequency also includes both facility (27%) and non-facility (73%) claims. 1997 Medicare data for CPT 13300 indicate a frequency of approximately 12,000 which includes repair over 7.5 cm for any area.

**Is this service performed by many physicians across the United States?**

Yes

**AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF RECOMMENDATION**

(February 1999)

CPT Code: 13152      Tracking No.: A4      Global Period: ZZZ      Recommended RVW: 4.33

CPT Descriptor: Repair, complex, eyelids, nose, ears and/or lips; each additional 5 cm  
(List separately in addition to code for primary procedure)

**Vignette Used in Survey:**

A 17-year-old male was brought to the emergency department with a through-and-through 4.5 cm laceration of the nose that extended across the upper and lower lip for 5.5 cm (total length = 10.0 cm). The wounds required complex repair. [IMPORTANT NOTE: This is an "add-on" code with a ZZZ global period. Therefore, in your responses below, you should consider ONLY the intra-operative work for each additional 5 cm. The pre- and post-operative work is part of the primary procedure, which is separately billable and not to be considered here.]

**CLINICAL DESCRIPTION OF SERVICE (This work description was NOT provided on the survey.):**

**Description of Pre-Service Work:**

N/A - pre-service work included in global of primary procedure.

**Description of Intra-Service Work:**

Intra-service work includes assessment and complex repair of wound length after the first 2.5 cm. This may involve: additional draping; additional injection of local anesthetic; additional removal of wound debris; additional irrigation with sterile saline; additional suturing of ligated vessels; additional electrocauterization for hemostasis; additional repair of muscle(s) and deep fascial layer(s); additional suturing of skin; and additional dressing application.

**Description of Post-Service Work:**

general, post-service work is not applicable to add-on codes, however, if the total length of the complex repair is extensive, additional (and measurable) physician time may be required at the postoperative office visit to assess healing of the wound(s), remove sutures, and redress the wound(s).

**SURVEY DATA:**

Presenter(s): John Derr, MD  
Specialty(s): American Society of Plastic and Reconstructive Surgeons  
Type of Sample: Random

Survey n: 100  
Response: 41  
Rate %: 41%

	RVW	PRE total min	INTRA total min	Same day total min	ICU		Hosp. - Other		Dischg day total min	Office	
					# visits	total min	# visits	total min		# visits	total min
MED	5.00	n/a	45	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
low	1.70		15								
25th%	4.20		30								
75th%	6.50		60								
high	15.00		180								

**KEY REFERENCE SERVICE(S):**

<u>1998 RVW</u>	<u>Global</u>	<u>CPT</u>	<u>Descriptor</u>
4.45	10	13151	Repair, complex, eyelids, nose, ears and/or lips; 1.1 cm to 2.5 cm
8.50	90	14060	Adjacent tissue transfer or rearrangement, eyelids, nose, ears and/or lips; defect 10 sq cm or less

## RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):

LOS and Time Estimates (Median)	Mean Intensity/Complexity Measures		
	13152	13151	14060
LOS	*	*	*
PRE-service time	*	*	*
INTRA-service time	45	30	60
POST-service time	*	*	*
Mental Effort and Judgment			
The number of possible diagnosis and/or the number of management options that must be considered	3.50	3.59	2.33
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	2.79	2.85	2.00
Urgency of medical decision making	3.81	3.85	2.33
Technical Skill/Physical Effort			
Technical skill required	4.24	4.33	3.67
Physical effort required	3.40	3.37	2.67
Psychological Stress			
The risk of significant complications, morbidity and/or mortality	3.83	3.93	3.67
Outcome depends on skill and judgment of physician	4.17	4.11	3.67
Estimated risk of malpractice suit with poor outcome	3.79	3.93	3.00
Time Segments			
PRE-service intensity/complexity	*	*	*
INTRA-service intensity complexity	4.04	4.00	3.33
POST-service intensity complexity	*	*	*

\*Information request not included in survey.

## ADDITIONAL RATIONALE

ASPRS compared the survey responses for A1-A4 and the reference procedures to the Harvard work and Harvard intra-service time data. We reviewed the relationship of data within and between complex repair family codes for different anatomic sites. We also reviewed RUC 5-year-review issues which lead to the increase of work-rvu for CPT 13152 and referral of CPT 13300 to the CPT Editorial Panel for nomenclature revision. Following is a discussion of our findings and RVW recommendations.

First, the committee compared intra-service time and found the survey data to be consistent with Harvard data. For example, ASPRS surveyed intra-time was 25 minutes 13131 (up to 2.5 cm) and 30 minutes for each additional 5cm. This compares well with the Harvard intra-time of 50 minutes for 13132 (2.6 to 7.5 cm). For code pair 13120/-21, we determined that the typical patient chosen for the vignette may have resulted in intra-times that were lower than Harvard. We believe that a laceration of the arm or scalp would have yielded high intra-times because these areas would require more attention to the cosmetic technique of the repair. The table below compares the Harvard times with the survey times.

CPT	Repair, complex	Hvd Intra time	CPT	Repair, complex	ASPRS Svy Intra time	(up to 7.5 cm)
13100	trunk, 1.1 - 2.5 cm	33	13100	trunk, 1.1 - 2.5 cm	20	
13101	trunk, 2.6 - 7.5 cm	53	A1	trunk; each add'l 5 cm	28	(=48)
13120	scalp, arms, legs; 1.1 - 2.5 cm	35	13120	scalp, arms, legs; 1.1 - 2.5 cm	20	
13121	scalp, arms, legs; 2.6 - 7.5 cm	57	A2	scalp, arms, legs; each add'l 5 cm	23	(=43)
13131	head, neck, hands, feet; 1.1-2.5 cm	43	13131	head, neck, hands, feet; 1.1-2.5 cm	25	
13132	head, neck, hands, feet; 2.6-7.5 cm	50	A3	head, neck, hands, feet; each add'l 5 cm	30	(=55)
13151	eyes, nose, ears, lips; 1.1-2.5 cm	57	13151	eyes, nose, ears, lips; 1.1-2.5 cm	30	
13152	eyes, nose, ears, lips; 2.6-7.5 cm	73	A4	eyes, nose, ears, lips; each add'l 5 cm	45	(=75)

Second, the ASPRS committee considered the affect of the change in the global period from 010 to ZZZ. Initially, this would require subtracting the work-RVUs for one office visit (CPT 99213 @ 0.67 rvu) from the work-RVUs for a 10 day global code. Column B in the table below shows the results of this calculation. This exercise, however, does not take into consideration decreased pre- and post-service work consideration on the day of the procedure for procedures with a ZZZ global period. Nor does it consider the possible increased intensity for longer and/or multiple lacerations or for more difficult cases (e.g., closure after tumor resection or after complex MH's chemosurgery not requiring skin graft).

CPT 010 →ZZZ		A	B	C	D	E
	Repair, complex	1999 RVW	99RVW minus 1x99213	ASPRS survey med RVW	Hvd Intra % work	"Intra-RVW" (col A xcol D)
13100	trunk, 1.1 - 2.5 cm	3.12			49%	
13101 →A1	trunk; 2.6 - 7.5 cm → each add'l 5 cm	3.92	3.25	3.30	58%	2.26
13120	scalp, arms, legs; 1.1 - 2.5 cm	3.30			53%	
13121 →A2	scalp, arms, legs; 2.6 - 7.5 cm → each add'l 5 cm	4.33	3.66	3.60	60%	2.62
13131	head, neck, hands, feet; 1.1-2.5 cm	3.79			60%	
13132 →A3	head, neck, hands, feet; 2.6-7.5 cm → each add'l 5 cm	5.95	5.28	4.00	67%*	3.99
13150	eyes, nose, ears, lips; 1.0 or less	3.81			56%	
13151	eyes, nose, ears, lips; 1.1-2.5 cm	4.45			57%	
13152 →A4	eyes, nose, ears, lips; 2.6-7.5 cm → each add'l 5 cm	6.33	5.66	5.00	68%	4.33

\*Rescaled to be consistent with the outcome of the 5-year-review which stated that the relationship of 13131/-32 and 13120/-21 should be the same.

With respect to the intensity/complexity measures, the data for A1-A4 are reasonably similar to the data for their parent codes. This was as expected. However, the committee would like to point out there may be variability in the intensity/complexity for each additional 5 cm of complex repair within and between cases. We offer the following examples of low and high intensity/complexity cases for each code to illustrate this point.

**A1 - LOW:** A 12-year-old boy drops a sharp hunting knife onto his chest resulting in a clean, linear 7 cm laceration in the pectoralis major muscle. A complex repair is required.

**A1 - HIGH:** A 12-year-old boy slips and falls from a cliff onto rocks suffering lacerations to 3 sites: a 10 cm left chest wall wound into the pectoralis major muscle, a 10 cm jagged laceration to the back into the trapezius muscle, and a 3 cm gouge laceration to the right flank, into muscle. A complex repair, including intra-operative repositioning and re-prepping, is required.

**A2 - LOW:** A 54-year-old male is showing off a new hunting knife when it slips from his hands, resulting in a 10 cm clean laceration into the right anterior thigh including the quadriceps muscle. A complex repair is required.

**A2 - HIGH:** A 54-year-old male is hit by a car, and thrown 50 feet, suffering a 12 cm laceration to the occipital scalp into the galea, a 15 cm laceration of the anterior thigh, and a 15 cm laceration to the left posterior calf. A complex repair, including intra-operative repositioning and re-prepping, is required.

**A3 - LOW:** A 32-year-old woman is holding an art piece of glass. It slips through her hands, and as she tries to save the art, she suffers glass cuts to both hands, consisting of parallel lacerations, each 5 cm, into the palmar fascia. A complex repair is required.

**A3 - HIGH:** A 32-year-old woman was involved in a MVA, sustaining a 10cm laceration to the forehead into the frontalis muscle, a jagged 10 cm laceration into the right axilla, and a 14 cm laceration to the sole of the right foot into the plantar fascia. A complex repair is required, involves distant sites, and may require re-positioning and re-prepping.

**A4 - LOW:** A 17-year-old male is seen in the ER after an MVA and has a clean transverse laceration into muscle, 8 cm in length, extending from the left upper eyelid, across the nasal bridge and onto the right eyelid. A complex repair is required.

**A4 - HIGH:** A 17-year-old male is seen in the ER after an MVA and has a 6 cm laceration across the nose and into the upper lip, extending into muscle. Additionally, he is noted to have a deep, jagged 7 cm laceration in the right post-auricular region extending into cartilage. A complex repair is required and may require intra-operative, re-positioning, and re-prepping of the patient.

Because the Harvard intra-times were consistent with the survey intra-times, and because the relative relationship between the family codes for different anatomic sites appeared accurate, the ASPRS committee decided to use the percentage of intra-service work estimated during the Harvard study to calculate an estimated "intra-RVW." The results of this calculation (1999 RVW x Harvard intra percentage work) are shown in Column E of the table below. It is these values that ASPRS is recommending for revised codes A1-A4.

Recommendation for A1: 2.26 work rvu's

Recommendation for A2: 2.62 work rvu's

Recommendation for A3: 3.99 work rvu's

Recommendation for A4: 4.33 work rvu's

---

**FREQUENCY INFORMATION****How was this service previously reported?**

13152 with a 1999 descriptor: Repair, complex, eyelids, nose, ears and/or lips; 2.6 cm to 7.5 cm

13300 with a 1999 descriptor: Repair, unusual, complicated, over 7.5 cm, any area

**How often do physicians in your specialty perform this service? (✓ one)**

☒ Commonly      ☐ Sometimes      ☐ Rarely

**Estimate the number of times this service might be provided nationally in a one-year period?**

This procedure is performed on patients of all ages. 1997 Medicare data for CPT 13152 indicate a frequency of 14,519 which includes claims both as a primary procedure (90%) and as a multiple procedure (10%). This frequency also includes both facility (35%) and non-facility (65%) claims. 1997 Medicare data for CPT 13300 indicate a frequency of approximately 12,000 which includes repair over 7.5 cm for any area.

**Is this service performed by many physicians across the United States?**

Yes

**AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE**  
**SUMMARY OF RECOMMENDATIONS**  
**May 1999**

**REMOVAL OF INTRA-AORTIC BALLOON ASSIST DEVICE**

***Work Relative Value Recommendations***

A new CPT code 33968 was created to describe *Removal of intra-aortic balloon assist device, percutaneous*. The procedure for the removal of Intra-Aortic Balloon Assist Device (IABAD) has been utilized for more than thirteen (13) years. IABAD procedures are frequently used in cardiogenic shock patients and hemodynamically unstable cardiac surgery patients.

CPT presently instructs physicians to report the percutaneous removal of an intra-aortic balloon device (IABAD) with “an appropriate E/M code.” The removal of such a device does not necessitate the performance of an Evaluation and Management (E/M) service, which includes a history, exam and medical decision-making. In addition, the code for percutaneous insertion of the device does not include removal, which is frequently performed by a physician other than the physician who originally inserted the device. Other codes related to IABAD removal, such as CPT 33971 *Removal of intra-aortic balloon assist device including repair of femoral artery, with or without graft* (work RVU = 9.69) and CPT 33974 *Removal of an intra-aortic balloon assist device from the ascending aorta, including repair of the ascending aorta, with or without graft* (work RVU = 14.41) are not appropriate because they apply to situations when the IABAD is removed surgically and a vascular surgical repair of the arteriotomy is performed.

In its development of a proposed work relative value unit, the RUC noted that the procedures described in the new code are most usually provided by physicians when treating unstable patients. It was the consensus that these particular services require some of the cognitive aspects associated with physician work for the provision of Critical Care services to patients. It was agreed that the work of removal of the assist device and the provision of associated cognitive services approximated 30 minutes of Critical Care services.

Based on this rationale, the RUC recommends a work relative value unit of 2.00 for CPT code 33968.

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### ***Practice Expense Recommendations***

The specialty society did not offer any recommendations on practice expense inputs for this new code. As such, the RUC is not making a practice expense recommendation for this code.

<b>CPT Code (•New)</b>	<b>Track- ing Number</b>	<b>CPT Descriptor</b>	<b>Global Period</b>	<b>Work RVU Recommendation</b>
•33968	D1	Removal of intra-aortic balloon assist device; percutaneous (For percutaneous insertion, use 93536)	000	2.00

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## Physician Work Data

33968

# AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS SUMMARY OF RECOMMENDATION

CPT Code: 9353x Tracking Number: D1 Global Period: 000 Recommended RVW: 4.00

CPT Descriptor: Percutaneous removal of previously placed intra-aortic balloon assist device

## CLINICAL DESCRIPTION OF SERVICE:

### Vignette Used in Survey:

A 69-year-old woman with triple-vessel coronary artery disease had undergone coronary artery bypass grafting with an intra-aortic balloon assist device in place. The device had been inserted by a cardiologist prior to surgery in the cardiac catheterization laboratory through a puncture wound in the femoral artery of the groin. The balloon was left in place for 48 hours after weaning from cardiopulmonary bypass because the patient remained hemodynamically unstable after the procedure.

When she stabilized, the surgeon proceeded to remove the balloon. The surgeon weaned her off the IABAD by slowly decreasing the assistance of the balloon from a 1-1 ratio of pump-to-normal beat to a 1-3 ratio of pump-to-normal beat. Cardiac output was measured continuously after each change. When it was determined that the patient's heart could beat satisfactorily on its own, the retaining sutures were cut and the IABAD was carefully removed from the aorta and exited through the femoral artery incision site. The surgeon then administered compression on the large femoral artery puncture site for a period of time to assure hemostasis. Femoral artery and lower extremity pulses were checked for thrombosis and assure viable vascularization to the lower legs and feet. The patient remained in bed for a period of time and was rechecked periodically to assure that there was no pseudoaneurysm formation.

*Description of Pre-Service Work:* An interval history is taken, the patient receives an extended problem-focused cardiovascular examination to assess her hemodynamic stability. The decision to remove the balloon is made. The patient is lightly sedated and the femoral artery puncture site is prepared. Monitoring equipment is positioned and checked.

*Description of Intra-Service Work:* The surgeon weans the patient off the IABAD by slowly decreasing the assistance of the balloon from a 1-1 ratio of pump-to-normal beat to a 1-3 ratio of pump-to-normal beat. Cardiac output is measured continuously after each change. When it is determined that the patient's heart is beating satisfactorily on its own, the retaining sutures are cut and the IABAD is carefully removed from the aorta and exited through the femoral artery incision site. The surgeon then administers compression on the large femoral artery puncture site for a period of time to assure hemostasis. Femoral artery and lower extremity pulses are checked for thrombosis and assure viable vascularization to the lower legs and feet.

*Description of Post-Service Work:* The patient is kept in bed for a period of time and is reexamined periodically within the next two hours to assure that there is no pseudoaneurysm formation at the femoral arterial exit site.

## SURVEY DATA:

Presenter(s) Sidney Levitsky, M.D.

Specialty(s): Society of Thoracic Surgeons/American Association for Thoracic Surgery

Sample Size: 50 Response Rate: (%) 11 (22%) Final Median RVW: 5.00

Type of Sample (Circle One): random, panel, convenience. Explanation of sample size: This is our normal sample size. We believe response rate was low because of added complexity of survey.

25th Percentile RVW: 4.00 75th Percentile RVW: 8.00 Low: 2.25 High: 9.69

Median Pre-Service Time: 20 min Median Intra-Service Time: 50 min

25th Percentile Intra-Svc Time: 30 min 75th Percentile Intra-Svc Time: 45 min Low: 15 min High: 60 min

Median Post-Service Time:

Total Time

Level of Service by CPT Code  
(List # of Visits)

Day of Procedure:

20 min

99231 x 1

ICU:

Other Hospital:

Office:

---

**KEY REFERENCE SERVICE:**

<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
33970	Intraaortic balloon assist device insertion; open femoral arterial	6.75

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. Make certain that you are including the data from the service that you are rating as well as the key reference services.

**TIME ESTIMATES (Median)**

	<u>CPT Code</u>	<u>Reference Service 1</u>	<u>Reference Service 2</u>
Median Pre-Time	17.5 min	15 min.	
Median Intra-Time	50 min	52.5 min	
Median Post-Time	20 min	30 min	

**INTENSITY/COMPLEXITY MEASURES (Mean)****Mental Effort and Judgement (Mean)**

The number of possible diagnosis and/or the number of management options that must be considered	3	3	
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3	3	
Urgency of medical decision making	3	3.5	

**Technical Skill/Physical Effort (Mean)**

Technical skill required	2	3	
Physical effort required	2	3	

**Psychological Stress (Mean)**

The risk of significant complications, morbidity and/or mortality	3	4	
Outcome depends on the skill and judgement of physician	3	3	
Estimated risk of malpractice suit with poor outcome	3	3	

**INTENSITY/COMPLEXITY MEASURES****CPT Code****Reference  
Service 1****Reference  
Service 2****Time Segments (Mean)**

Pre-Service intensity/complexity	3	3	
Intra-Service intensity/complexity	3	4	
Post-Service intensity/complexity	3	3	

**ADDITIONAL RATIONALE**

Describe the process by which your specialty society reached your final recommendation.

Because of the low survey response, we examined groups of related codes to get further guidance on a recommendation (see attached letter). Fortunately there were several reference codes and codes to which this service could be crosswalked that allowed us to analyze the ratios of existing arterial catheter insertions and removals. Based on established work values for other codes and relative difficulty and intensity of this service, we chose the 25<sup>th</sup> percentile RVW as our recommended work value.

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**FREQUENCY INFORMATION**

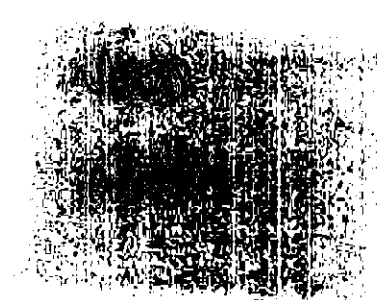
How was this service previously reported? (See attached)

How often do physicians in your specialty perform this service? Commonly Sometimes Rarely

Estimate the number of times this service might be provided nationally in a one-year period? 26,000

Do many physicians perform this service across the United States? Yes No

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**AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE**  
**SUMMARY OF RECOMMENDATIONS**  
**May 1999**

**INTRACARDIAC CARDIOVERSION**

***Work Relative Value Recommendations***

A new CPT code, 92961 *Cardioversion, elective, electrical conversion of arrhythmia; internal (separate procedure)*, was established to describe an effective therapy for patients unresponsive to external cardioversion. Although cardioversion does not reflect new technology, advancements in catheter technology and techniques have greatly increased the efficacy and applicability of this procedure. Currently, this procedure is being reported using codes 92960 *Cardioversion, elective, electrical conversion or arrhythmia; external* (work RVU=2.25), plus 93602 *Intra-atrial recording* (work RVU=2.12), plus 93603 *Right ventricular recording* (work RVU= 2.12), with appropriate modifiers. These codes are inadequate, as intracardiac cardioversion is quite different from external cardioversion in that intracardiac cardioversion requires vascular access, placement of catheters into the heart under fluoroscopy, and a much greater knowledge of electrophysiology procedures. Therefore, the physician work, risk and practice expense of intracardiac conversion are significantly greater than for external cardioversion. Therefore, the RUC accepted the specialty society's recommendation of 4.6. This value represents the final median RVW for CPT code 92961.

***Practice Expense Recommendations***

The specialty society did not offer any recommendations regarding direct practice expense inputs for this code. As such, the RUC is not making a practice expense recommendation for this code.

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<b>CPT Code (•New)</b>	<b>Track- ing Number</b>	<b>CPT Descriptor</b>	<b>Global Period</b>	<b>Work RVU Recommendation</b>
92960		Cardioversion, elective, electrical conversion of arrhythmia; external	000	2.25 ( No Change)
•92961	G1	internal (separate procedure)	000	4.6

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## Physician Work Data



**AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF RECOMMENDATION**

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CPT Code: 9296X Tracking Number:      Global Period:      Recommended RVW: 4.6

CPT Descriptor: Cardioversion, elective, electrical conversion of arrhythmia; internal (separate procedure)

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**CLINICAL DESCRIPTION OF SERVICE:**

Vignette Used in Survey: A 67-year-old female with atrial fibrillation fails an attempt at transthoracic cardioversion to return sinus rhythm. She then undergoes transvenous intracardiac cardioversion. Following a thorough discussion of the risks and benefits and obtaining informed consent, the patient is taken to the procedure room, local anesthesia administered, and an electrode catheter is placed in a vein and advanced to the right atrium under fluoroscopic guidance. A second electrode catheter is placed in the coronary sinus or pulmonary artery. The patient is then sedated, and synchronized cardioversion is performed. The electrode catheters are then removed, hemostasis obtained, and the patient is observed until the effect of sedation has cleared.

Description of Pre-Service Work: A thorough history is obtained, and physical examination is performed. All laboratory tests including blood tests, chest x-ray, and ECG are reviewed. The risk and benefits of and alternatives to the procedure are discussed with the patient, and informed consent is obtained. The history, physical examination, and subsequent discussion are thoroughly documented in the patient's chart. Consultation is made with the patient's primary physician, and the decision to proceed with the procedure is made.

Description of Intra-Service Work: The patient is brought to the procedure room where they are sterilely prepped and draped. Blood pressure, ECG, and pulse oximetry are monitored. Local anesthesia is administered, and an electrode catheter is placed in a vein using standard percutaneous techniques. The electrode catheter is advanced to the right atrium under fluoroscopic guidance and connected electrically to an external cardioverter defibrillator. A second electrode is placed in the coronary sinus or pulmonary artery and also connected to the external cardioverter defibrillator. Conscious sedation is then administered to the patient, and synchronized cardioversion is performed. The electrode catheters are then removed, hemostasis obtained, and the patient is observed until the effect of sedation has cleared. The results of the procedure are carefully documented by the physician and explained to the patient, family, and referring physician.

Description of Post-Service Work: The patient is observed until the effects of conscious sedation have cleared. They are either dismissed from the hospital or transferred back to their hospital room.

**SURVEY DATA:**Presenter: James D. Maloney - American College of CardiologySpecialty: CardiologySample Size: 46 Response Rate: (%): 13 Final Median RVW: 4.6

Explanation of Sampling Technique: Two hundred randomly selected American members of the North American Society for Pacing and Electrophysiology were asked if they were willing to respond to a survey on the relative value of this procedure. Forty-six responded that they would and they were subsequently sent the survey documents.

25th Percentile RVW: 4.0 75th Percentile RVW: 6.6 Low: 3.4 High: 10.5Median Pre-Service Time: 60 Median Intra-Service Time: 5325th Percentile Intra-Svc Time: 44 75th Percentile Intra-Svc Time: 65 Low: 10 High: 90Median Same Day Post-Service Time: 20Number of Post Procedure Visits: 2 Total Time of Post Procedure Visits: 55

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**KEY REFERENCE SERVICE:**

<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
92960	Cardioversion, elective, electrical conversion of arrhythmia, external	2.25

---

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. Make certain that you are including the data from the service that you are rating as well as the key reference services.

**TIME ESTIMATES (Median)**

	<u>CPT Code</u>	<u>Reference Service 1</u>	<u>Reference Service 2</u>
Median Pre-Time	60	58	
Median Intra-Time	53	20	
Median Post-Time	75	45	

**INTENSITY/COMPLEXITY MEASURES (Mean)****Mental Effort and Judgement (Mean)**

The number of possible diagnosis and/or the number of management options that must be considered	3.5	3.0	
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.5	3.2	
Urgency of medical decision making	2.8	3.0	

TECHNICAL SKILL/PHYSICAL EFFORT (Mean)

Technical skill required	4.0	2.3	
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Physical effort required	3.3	2.2	
--------------------------	-----	-----	--

Psychological Stress (Mean)

The risk of significant complications, morbidity and/or mortality	3.8	3.2	
---	-----	-----	--

Outcome depends on the skill and judgement of physician	3.7	3.0	
---	-----	-----	--

Estimated risk of malpractice suit with poor outcome	3.4	2.8	
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INTENSITY/COMPLEXITY MEASURESCPT CodeReference  
Service 1Reference  
Service 2Time Segments (Mean)

Pre-Service intensity/complexity	3.4	2.7	
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Intra-Service intensity/complexity	4.3	2.8	
------------------------------------	-----	-----	--

Post-Service intensity/complexity	2.8	2.7	
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ADDITIONAL RATIONALE

The new code is similar to the combination of existing codes 92960 (RVW = 2.25) and 93602 (RVW = 2.12) plus 93603 (RVW = 2.12) for the additional work.

FREQUENCY INFORMATION

How was this service previously reported? 92960 plus 93602 plus 93603 with appropriate modifiers

How often do physicians in your specialty perform this service? Commonly ☒ Sometimes ☐ Rarely

Estimate the number of times this service might be provided nationally in a one-year period? 750 -1,000

Do many physicians perform this service across the United States? ☒ Yes ☐ No

**AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE**  
**SUMMARY OF RECOMMENDATIONS**  
**May 1999**

**LAPAROSCOPIC DONOR NEPHRECTOMY**

***Work Relative Value Recommendations***

In 1998, CPT accepted the addition of a new code for inclusion in CPT 2000. CPT code 50547 *Laparoscopy, surgical; donor nephrectomy, from living donor (excluding preparation and maintenance of allograft)* was created to specifically address the use of new technology associated with this procedure.

The use of laparoscopic techniques for living donor nephrectomies has been in place since 1995. The typical patient is a male or female without major medical problems who consents to donate a kidney to a relative or close acquaintance with renal failure. Following an extensive medical and psychosocial evaluation confirming the health of the prospective donor, the donor is accepted for the procedure. The laparoscopic procedure is associated with decreased pain, length of stay and morbidity in comparison to those of the traditional open procedure.

As with other new codes, there is presently no nomenclature which captures the utilization of laparoscopic technology used in the performance of this code. Physicians are currently reporting this procedure using CPT code 50320 *Donor nephrectomy, with preparation and maintenance of allograft; from a cadaver donor, unilateral or bilateral* (work RVU= 22.21) and CPT 56399 *Unlisted procedure, laparoscopy, hysteroscopy* (work RVU= 0.00). (For your reference, CPT code 50320 was editorially revised for greater specificity regarding the services. Please refer to the table below.) Again, neither of these CPT codes appropriately include identification of the laparoscopic technology component used in conjunction with donor nephrectomy procedures.

The RUC considered results from work survey data, which provided for a survey median of 25.50. It was the consensus of the RUC that this value was appropriate. The RUC recommends a work relative value unit of 25.50 for CPT code 50547.

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### ***Practice Expense Recommendations***

The RUC also recommends that the practice expense value for CPT code 50547 be based on a *Laparoscopic fundoplasty*, CPT code 56349 with a practice expense value of 11.88, as the hospital stay and follow-up for both procedures are similar in time and expense.

<b>CPT Code (•New)</b>	<b>Tracking Number</b>	<b>CPT Descriptor</b>	<b>Global Period</b>	<b>Work RVU Recommendation</b>
50300		Donor nephrectomy, with preparation and maintenance of allograft, from cadaver donor, unilateral or bilateral	XXX	0.0 (No change)
50320		<u>Donor nephrectomy, open from living donor (excluding preparation and maintenance of allograft).</u>	090	21.22 (No Change)
•50547		<u>Laproscopy, surgical;</u> donor nephrectomy from living donor (excluding preparation and maintenance of allograft)	090	<b>25.50</b>

## Physician Work Data

**AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF RECOMMENDATION**

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CPT Code: 503XX Tracking Number: E1 Global Period: 90 Recommended RVW: 25.5

CPT Descriptor: Laparoscopic Donor Nephrectomy

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**CLINICAL DESCRIPTION OF SERVICE:**

**Vignette Used in Survey:** The typical patient is male or female without major medical problems who consents to donate a kidney to a relative or close acquaintance with renal failure. Following an extensive medical and psychosocial evaluation confirming the health of the prospective donor, the donor is accepted for the procedure. The laparoscopic procedure is associated with decreased pain, length-of-stay, and morbidity in comparison to those of the traditional open procedure.

**Description of Pre-Service Work:** Includes services provided from the day before the surgery until the time of the procedure and may include: 1) obtaining and reviewing hospital admission laboratory studies and urologic x-rays before the procedure; 2) communicating with other health care professionals (e.g., family physician, anesthesiologist); 3) communicating with the patient to explain operative risks and benefits and to obtain informed consent; 4) dressing for surgery, waiting for anesthesia (e.g., placing of central arterial and venous lines, administering general, spinal and/or epidural anesthesia), positioning, prepping and draping the patient, and scrubbing; 5) preparing and checking needed equipment for surgery and any other non "skin-to-skin" work in the operating room.

**Description of Intra-Service Work:** Patient under general anesthesia. The abdomen is insufflated with CO<sub>2</sub>. Four ports are placed. The left colon is reflected, the spleen is reflected, the renal vessels are isolated to the aorta, the ureter is divided at the iliac vessel, the kidney is completely freed up. A 6 cm incision for extraction of the kidney is made near the umbilicus, the renal artery and vein are stapled, the kidney is placed in a large retrieval bag and gently pulled out through the extraction incision. The incisions for the four ports and extraction are closed.

**Description of Post-Service Work:** Includes the following: (1) all post-operative care on the day of the procedure, including patient stabilization, post-operative orders, communicating with the family and referring physician (including written and telephone reports), and other non "skin-to-skin" work in the operating room; (2) all post-operative hospital visits and discharge day management; (3) all post-discharge office visits for this procedure for 90 days after the day of the operation are considered part of the post-operative work for this procedure (including evaluation of periodic laboratory reports and medication adjustment)

---

**SURVEY DATA:**

Presenter(s): Thomas P. Cooper, MD

Specialty(s): American Urological Association

Sample Size: 63 Response Rate: (%): 48% Final Median RVW: 25.5

Type of Sample (Circle One): panel Explanation of sample size: \_\_\_\_\_

25th Percentile RVW: 24.8 75th Percentile RVW: 30 Low: 16 High: 44.42

Median Pre-Service Time: 92.5 Median Intra-Service Time: 240

25th Percentile Intra-Svc Time: 220 75th Percentile Intra-Svc Time: 300 Low: 90 High: 480

Median Post-Service Time:	<u>Total Time</u>	<u>Level of Service by CPT Code</u> <u>(List # of Visits)</u>
---------------------------	-------------------	--

Day of Procedure:	<u>45</u>	_____
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ICU:	<u>0</u>	_____
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Other Hospital	<u>20</u>	<u>99221 (x2)</u>
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Discharge Day Mgmt:	<u>&gt;30</u>	<u>99238</u>
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Office Visit:	<u>30</u>	<u>99213 (x2)</u>
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**KEY REFERENCE SERVICE:**

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
Ref. 1	50320	Donor nephrectomy, with preparation and maintenance of allograft; from living donor	22.21
Ref. 2	56349	Laparoscopy, surgical; esophagogastric fundoplasty (e.g., Nissen, Belsey IV Hill, Toupet procedures)	17.25

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. Make certain that you are including the data from the service that you are rating as well as the key reference services.

**TIME ESTIMATES (Median)**

	<u>CPT Code</u>	<u>Reference Service 1</u>	<u>Reference Service 2</u>
Median Pre-Time	92.5	90	60
Median Intra-Time	240	180	150
Median Post-Time	45	30	30

**INTENSITY/COMPLEXITY MEASURES (Mean)****Mental Effort and Judgement (Mean)**

The number of possible diagnosis and/or the number of management options that must be considered	3.5	3	4
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4	4	4
Urgency of medical decision making	3	3	3

**Technical Skill/Physical Effort (Mean)**

Technical skill required	5	4	4
Physical effort required	5	4	3.5

**Psychological Stress (Mean)**

The risk of significant complications, morbidity and/or mortality	5	4	4
Outcome depends on the skill and judgement of physician	5	4	4.5
Estimated risk of malpractice suit with poor outcome	5	5	4

**INTENSITY/COMPLEXITY MEASURES****CPT Code****Reference  
Service 1****Reference  
Service 2****Time Segments (Mean)**

Pre-Service intensity/complexity	4	4	3
Intra-Service intensity/complexity	5	4	3.5
Post-Service intensity/complexity	3	3	3

**ADDITIONAL RATIONALE**

Describe the process by which your specialty society reached your final recommendation.

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**FREQUENCY INFORMATION**

How was this service previously reported? 56399 Unlisted procedure, laparoscopy

How often do physicians in your specialty perform this service? Commonly ☒ Sometimes ☐ Rarely

Estimate the number of times this service might be provided nationally in a one-year period? 3126 in 1995

Do many physicians perform this service across the United States? ☒ Yes ☐ No

---

## Practice Expense Data



## AMERICAN UROLOGICAL ASSOCIATION, INC.®

1120 North Charles Street • Baltimore, Maryland 21201-5559

Phone 410/727-1100

E-mail: [aua@auanet.org](mailto:aua@auanet.org)

Web site: [www.auanet.org](http://www.auanet.org)

January 13, 1999

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James G. Hoehn, MD

Chair, AMA Relative Value Update Committee

American Medical Association

515 North State Street

Chicago, IL 60610

Dear Dr. Hoehn:

Attached is the American Urological Association (AUA)'s recommendation for the work and practice expense associated with a laparoscopic donor nephrectomy.

This past fall, the AUA surveyed a RUC-savvy panel of urologists using the revised RUC survey. The results, unfortunately, were dismal. Of the 40-member panel, only seven attempted to complete the survey. A common reason cited for this non-participation was the survey's confusing and complex format. Furthermore, the scant data that was gathered proved to be unusable, as much of it was based on a misunderstanding of the questions.

Staff then created and mailed out a simplified version of the practice expense survey. However, this version also proved too complex. Even when virtually walked through the survey by staff, many panel members were unable to provide meaningful data. Of those surveyed, only one valid response was received.

As a result of this experience, the AUA, with the permission of Robert Florin, MD, Research Committee Chair, resurveyed its members using the old RVW survey. The successful outcome of this survey reinforced the AUA's belief that the survey for physician work should not be changed. The old survey, which was quite successfully used in the 5-year review, is more than sufficient to collect the data necessary to make sound recommendations to the RUC. While the AUA understands the Research Committee's desire to gather a variety of detailed information, such as physician intensity, we wonder whether this level of added detail will truly result in more accurate RVWS.

Therefore, the AUA's recommendations for work associated with a laparoscopic donor nephrectomy is based upon data gleaned from the 1997 RUC survey. In light of the difficulties in obtaining meaningful practice expense data, the AUA recommends that HCFA base its practice expense value on a laparoscopic fundoplasty, with a practice expense of 11.88, as the hospital days and follow-up for both procedures is similar in time and expense.

Sincerely,

William F. Gee, MD

AUA RUC Representative

cc: Robert Florin, MD  
Sherry Smith  
Tracy Kiely



AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE  
SUMMARY OF RECOMMENDATIONS  
May 1999

LAPAROSCOPIC UROLOGICAL PROCEDURES

*Work Relative Value Recommendations*

**CPT Code 50541**

Newly created CPT code 50541 *Laparoscopy, surgical; ablation of renal cysts* was developed to describe new technology in this area of medical services. The technology of laparoscopy provides a minimal incision to drain and ablate the cyst wall. The new technology also spares the patient a large incision. The procedure is currently coded using CPT code 53899 *Unlisted procedure, urinary system*.

When evaluating the physician work, RUC members agreed that the physician work was similar to CPT code 50280 *Excision or unroofing of cyst(s) of kidney* (work RVU =15.67) and used this as a reference. In addition, they also considered the survey median of 16.00. Based on their discussion, the RUC agreed that a work RVU of 16.00 was appropriate.

**CPT Code 50544**

CPT code 50544 *Laparoscopy, surgical; pyeloplasty* was developed to reflect new laparoscopic technology in use, similar to the previous code. Laparoscopic techniques have evolved, and currently allow for treatment of this and other conditions without necessitating a large incision. The procedure has been performed for nearly five years and is reported under CPT code 53899. By using the unlisted procedure, it fails to capture the technical aspect of the surgery. There are no codes for laparoscopic pyeloplasty.

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In considering proposed work relative value units, the RUC referred to the reference code used in the survey, particularly CPT code 50400 *Pyeloplasty, (Foley Y-pyeloplasty), plastic operation on renal pelvis, with or without plastic operation on ureter, nephropexy, nephrostomy, pyelostomy, or ureteral splinting simple* (work RVU = 19.5). The RUC also relied on survey data, and agreed that the survey median was an appropriate valuation of physician work. The RUC therefore recommends a physician work rvu of 22.40.

### **CPT Code 50546**

A new code was adopted (CPT 50546) for use in CPT 2000 to report *Laparoscopy, surgical; nephrectomy*. Laparoscopy has evolved over the past five years to allow for minimally invasive removal of the kidney and ureter. The procedure has been reported for the past five years under CPT code 53899 *Unlisted procedure, urinary system*. The laparoscopic procedures require different instrumentation and procedural steps to safely remove the kidney. There are currently codes for open nephrectomy, but none for laparoscopic.

In considering potential work relative values, the RUC reviewed and referenced CPT code 50220 *Nephrectomy, including partial ureterectomy, any approach using rib section* (work rvu= 17.15), and noted differences in time and intensity for the new procedure. The RUC agreed that the survey median of 20.48 was an appropriate final value for the new code.

### **CPT Code 50548**

CPT also approved a fourth code in this series for inclusion in CPT 2000. CPT 50548 was created to report *Laparoscopically assisted nephroureterectomy*. As with previous codes, no codes currently exist to report the new technology. At present, physicians currently report this procedure by using CPT 53899.

In proposing a final work relative value unit, the RUC noted CPT code 50234 *Nephrectomy with total ureterectomy and bladder cuff; through same incision* (work rvu= 22.40). RUC members agreed that the physician time and related data was extremely similar to this procedure. They also considered the survey median and agreed that the median RVW was appropriate. The RUC recommends a work relative unit of 24.40 for newly adopted code 50548.

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### **CPT Code 50945**

CPT code 50945 was constructed to describe *Laparoscopy, surgical; ureterolithotomy*. These services are currently reported under CPT 53899. The new code incorporates and captures the technical aspects of the laparoscopic procedure. As with the previous codes in the urinary system, there are no codes that capture this information.

In considering proposed physician work relative values, the RUC reviewed survey data and also examined the reference code of CPT 50610 *Ureterolithotomy, upper one-third of ureter* (work RVU= 15.92). The RUC also examined survey results and various responses regarding physician work. The RUC agreed that the survey median of 17.00 was an appropriate value.

### **CPT Code 51990**

Another CPT code (51990) was adopted to report *Laparoscopy, surgical; urethral suspension for stress incontinence*. The services are currently reported under 58999 *Unlisted procedure, female genital surgery*.

The RUC considered the responses presented by various specialties regarding time, intensity, and complexity measures. It was the consensus of the RUC that a work relative value 12.5 accurately represented the physician work involved in the laparoscopic procedure. The value of 12.5 also represents the survey median.

### **CPT Code 51992**

CPT code 51992 *Laparoscopy, surgical; sling operation for stress incontinence (eg, fascia or synthetic)* was adopted for inclusion in CPT 2000. The code was implemented in order for the technique to be captured in the new code.

In formulating its recommendation for physician work, the RUC reviewed reference code 57288 *Sling operation for stress incontinence (fascia or synthetic)* (work RVU= 13.02) and also considered median rvw adopted from the survey results.

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Noting the differences in the laparoscopic approach to the procedure, the RUC agreed the survey median of 14.01 adequately represented the physician work involved in the procedure.

### **CPT Code 54692**

Currently coded under CPT 55899 *Unlisted procedure, Urinary Male Genital System*, newly created CPT Code 54692 *Laparoscopy, surgical; orchiopexy for intra-abdominal testis* was adopted for inclusion in CPT 2000. As previously noted throughout this section, the new code describes laparoscopic orchiopexy. When performing this procedure laparoscopically, the laparoscope allows for the magnification of minute blood vessels. Laparoscopic procedures have evolved with respect to these services. The services described under the new codes that have been utilized for nearly five years.

Similar to the previous code, the RUC referenced procedures 54650 *Orchiopexy, abdominal approach, for intrabdominal testis (eg Fowler-Stephens)* (work RVU=11.45). In addition, the RUC also evaluated the survey data and agreed that the survey median of 12.88 was an accurate value representing physician work.

### ***Practice Expense Recommendations***

The direct inputs for these codes were developed by a consensus panel which estimated clinical staff time, supplies and equipment required to perform this service in only the facility settings. The RUC accepted the direct inputs listed as representative of the expenses incurred in providing these services. The RUC agreed that the direct inputs for these codes are very similar with some variation in clinical staff time and only minor differences in supplies. Although the physician work varies to a much greater extent for these codes, the direct inputs do not have the same differences among these codes. See attached direct input data.



<b>CPT Code (•New)</b>	<b>Track- ing Number</b>	<b>CPT Descriptor</b>	<b>Global Period</b>	<b>Work RVU Recommendation</b>
Surgical laparoscopy always includes diagnostic laparoscopy. To report a diagnostic laparoscopy (peritoneoscopy) (separate procedure) use 49320.				
•50541	Z6	Laparoscopy, surgical; ablation of renal cysts	090	16.00
•50544	Z5	pyeloplasty	090	22.40
•50546	Z8	nephrectomy	090	20.48
Surgical laparoscopy always includes diagnostic laparoscopy. To report a diagnostic laparoscopy (peritoneoscopy) (separate procedure) use 49320.				
•50548	Z7	Laparoscopically assisted nephroureterectomy	090	24.40
•50945	Z1	Laparoscopy, surgical; ureterolithotomy	090	17.00
Surgical laparoscopy always includes diagnostic laparoscopy. To report a diagnostic laparoscopy (peritoneoscopy) (separate procedure), use 49320.				
•51990	Z2	Laparoscopy, surgical; urethral suspension for stress incontinence	090	12.50
•51992	Z3	sling operation for stress incontinence (eg, fascia or synthetic)	090	14.01

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<b>CPT Code (•New)</b>	<b>Track- ing Number</b>	<b>CPT Descriptor</b>	<b>Global Period</b>	<b>Work RVU Recommendation</b>
Surgical laparoscopy always includes diagnostic laparoscopy. To report a diagnostic laparoscopy (peritoneoscopy) (separate procedure), use 49320.				
Existing code (56318) which has been renumbered •54690	Not Surveyed	Laparoscopy, surgical; orchiectomy	090	10.96 ( No Change)
•54692	Z4	ochiopexy for intra-abdominal testis	090	12.88
Existing code (56399) which has been renumbered •54699	Not Surveyed	Unlisted laparoscopy procedure, testis	090	Carrier Priced

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## Physician Work Data

### Staff Note

CPT Editorial Research & Development editorially revised the descriptor language for the CPT codes contained in this section subsequent to the CPT Panel meetings. As such, the descriptor language contained on the “Summary of Recommendation” forms prepared by specialty societies may not be identical to that which appears in the RUC’s final recommendations. The editorial changes that were adopted did not affect the survey process or the relative value recommendations.

**AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF RECOMMENDATION**

---

CPT Code: 505X1 Tracking Number: Z6 Global Period: 90 Recommended RVW: 16

CPT Descriptor: Laparoscopy, surgical; ablation of renal cysts

---

**CLINICAL DESCRIPTION OF SERVICE:**

**Vignette Used in Survey:** A 55-year old woman is seen with a history of left flank discomfort of 4-5 years duration. The fullness in the flank is never sharp but persists most of the time and is aggravating her life. An examination reveals a soft mass in the left flank. Subsequent ultrasound demonstrates two large posterior renal cysts. A CT examination confirms no internal mass lesions and the patient's urine demonstrates no red blood cells. The patient is apprised of the findings and the options of watchful waiting, surgical exploration or laparoscopic decortication of the cysts. She is actively employed and wishes to minimize her sick-leave time and chooses the laparoscopic approach.

**Description of Pre-Service Work:** Includes services provided from the day before the surgery until the time of the procedure and may include: 1) obtaining and reviewing hospital admission laboratory studies and urologic x-rays before the procedure; 2) communicating with other health care professionals (e.g., family physician, anesthesiologist); 3) communicating with the patient to explain operative risks and benefits and to obtain informed consent; 4) dressing for surgery, waiting for anesthesia (e.g., placing of central arterial and venous lines, administering general, spinal and/or epidural anesthesia), positioning, prepping and draping the patient, and scrubbing; 5) preparing and checking needed equipment for surgery and any other non "skin-to-skin" work in the operating room.

**Description of Intra-Service Work:** After appropriate surgical induction, the patient is placed in an oblique position to allow the abdominal contents to be displaced to the right. The Hasson cannula is passed and ports established in a triangular fashion approaching the flank and avoiding the colon. The lateral attachments of the descending colon are taken down and the cysts easily exposed to the renal cortical margin. The ureter is displaced medially. An aspiration needle is used to remove 200 cc of clear yellow urine from one cyst and 300cc from the other. The cyst wall is incised next to the parenchyma and the inner surface is electrodesiccated. The perinephric fat is allowed to fall back into the flank, the cannula is removed and the sites are closed with 2-0 PD. The skin is then closed with 5-0 Monocryl.

**Description of Post-Service Work:** Includes the following: (1) all post-operative care on the day of the procedure, including patient stabilization, post-operative orders, communicating with the family and referring physician (including written and telephone reports), and other non "skin-to-skin" work in the operating room; (2) all post-operative hospital visits and discharge day management; (3) all post-discharge office visits for this procedure for 90 days after the day of the operation are considered part of the post-operative work for this procedure (including evaluation of periodic laboratory reports and medication adjustment)

---

**SURVEY DATA:**Presenter(s): Thomas P. Cooper, MDSpecialty(s): American Urological AssociationSample Size: 66 Response Rate: (%): 45% (30) Median RVW: 16Type of Sample (Circle One): random, panel, convenience. Explanation of sample size: \_\_\_\_\_25th Percentile RVW: 15.13 75th Percentile RVW: 16.88 Low: 6.27 High: 20Median Pre-Service Time: 60 Median Intra-Service Time: 12025th Percentile Intra-Svc Time: 90 75th Percentile Intra-Svc Time: 180 Low: 60 High: 180

Median Post-Service Time:

	<u>Total Time</u>	<u>Level of Service by CPT Code</u> <u>(List # of Visits)</u>
Immediate Post Service Time:	<u>15</u>	
Critical Care		
Other Hospital Visit:	<u>32.5</u>	<u>99231 x 2</u>
Discharge Day Mgmt.:	<u>15</u>	<u>99238</u>
Office Visits:	<u>22.5</u>	<u>99213 x 2</u>

---

**KEY REFERENCE SERVICE:**

<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
50280	Excision or unroofing of cyst(s) of kidney	15.67

---

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including the data from the service that you are rating as well as the key reference services.**

**TIME ESTIMATES (Median)**

	<u>CPT Code</u>	<u>Reference Service 1</u>
Median Pre-Time	60	33
Median Intra-Time	120	110
Median Post-Time	85	110

### INTENSITY/COMPLEXITY MEASURES (Mean)

#### Mental Effort and Judgement (Mean)

The number of possible diagnosis and/or the number of management options that must be considered	3	3
--	---	---

The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3	3
--	---	---

Urgency of medical decision making	2	2
------------------------------------	---	---

#### Technical Skill/Physical Effort (Mean)

Technical skill required	4	4
--------------------------	---	---

Physical effort required	4	4
--------------------------	---	---

#### Psychological Stress (Mean)

The risk of significant complications, morbidity and/or mortality	4	3
---	---	---

Outcome depends on the skill and judgement of physician	5	5
---	---	---

Estimated risk of malpractice suit with poor outcome	4	4
--	---	---

### INTENSITY/COMPLEXITY MEASURES

#### CPT Code

#### Reference Service 1

#### Time Segments (Mean)

Pre-Service intensity/complexity	3	3
----------------------------------	---	---

Intra-Service intensity/complexity	4	4
------------------------------------	---	---

Post-Service intensity/complexity	3	3
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### **ADDITIONAL RATIONALE**

Describe the process by which your specialty society reached your final recommendation.

---

## FREQUENCY INFORMATION

How was this service previously reported? 53899, Unlisted procedure, urinary system

How often do physicians in your specialty perform this service? ☐ Commonly ☒ Sometimes ☐ Rarely

Estimate the number of times this service might be provided nationally in a one-year period?       

According to the BMAD data, 508 open procedures for the excision of renal cysts (CPT code 50280) were performed in 1997. The AUA believes that 10-20% of these will be performed laparoscopically.

Do many physicians perform this service across the United States? ☐ Yes ☒ No

---



**AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF RECOMMENDATION**

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CPT Code: 505X2 Tracking Number: Z5 Global Period: 90 Recommended RVW: 22.40

CPT Descriptor: Laparoscopy, surgical; pyeloplasty

---

**CLINICAL DESCRIPTION OF SERVICE:**

**Vignette Used in Survey:** A 22-year old college co-ed presents noting that when she drinks alcohol, she has right flank pain. Evaluation with an IVP demonstrates a right ureteropelvic junction obstruction. Renal imaging reveals a 40% function on the right side with markedly delayed drainage after lasix administration. This also reproduces the pain. The options for treatment were discussed including endoscopic incision, open pyeloplasty and laparoscopic pyeloplasty. She elects for a laparoscopic pyeloplasty.

**Description of Pre-Service Work:** Includes services provided from the day before the surgery until the time of the procedure and may include: 1) obtaining and reviewing hospital admission laboratory studies and urologic x-rays before the procedure; 2) communicating with other health care professionals (e.g., family physician, anesthesiologist); 3) communicating with the patient to explain operative risks and benefits and to obtain informed consent; 4) dressing for surgery, waiting for anesthesia (e.g., placing of central arterial and venous lines, administering general, spinal and/or epidural anesthesia), positioning, prepping and draping the patient, and scrubbing; 5) preparing and checking needed equipment for surgery and any other non "skin-to-skin" work in the operating room.

**Description of Intra-Service Work:** After appropriate anesthesia induction, a cystoscopy is performed and an internal double pigtail 7 French stent, 26 cm in length is placed in her right ureter. A 16 French Foley catheter is placed in her bladder. She is then placed in a modified right flank-up position and the flank is prepped and draped in a sterile fashion. The pneumoperitoneum is achieved and three trocars are placed. The peritoneum overlying the dilator renal pelvis is incised and a large renal pelvis is seen with a vessel seen going to the lower pole to the kidney kinking the ureter. The ureter and pelvis are freed from surrounding tissue and the ureter is then transected. The ureter is moved anterior to the vessels and spatulated. A primary anastomosis is performed with interrupted and a running 4-0 vicryl suture. A 10mm round drain is placed through a separate stab incision in the flank and sutured to the skin. The drain is positioned behind the anastomosis. The pressure is lowered and once adequate hemostasis has been achieved, all gas and trocars are removed under direct vision. The skin is closed with a 4-0 vicryl and steri strips. The Foley catheter is removed the second post-operative day. A stent is left indwelling for one month.

**Description of Post-Service Work:** Includes the following: (1) all post-operative care on the day of the procedure, including patient stabilization, post-operative orders, communicating with the family and referring physician (including written and telephone reports), and other non "skin-to-skin" work in the operating room; (2) all post-operative hospital visits and discharge day management; (3) all post-discharge office visits for this procedure for 90 days after the day of the operation are considered part of the post-operative work for this procedure (including evaluation of periodic laboratory reports and medication adjustment)

---

**SURVEY DATA:**Presenter(s): Thomas P. Cooper, MDSpecialty(s): American Urological AssociationSample Size: 66 Response Rate: (%): 41% (27) Median RVW: 22.40Type of Sample (Circle One): random, panel, convenience. Explanation of sample size: \_\_\_\_\_25th Percentile RVW: 21.5 75th Percentile RVW: 24.13 Low: 19.5 High: 40Median Pre-Service Time: 60 Median Intra-Service Time: 24025th Percentile Intra-Svc Time: 180 75th Percentile Intra-Svc Time: 262.5 Low: 110 High: 360

Median Post-Service Time:

	<u>Total Time</u>	<u>Level of Service by CPT Code</u> <u>(List # of Visits)</u>
Immediate Post Service Time:	<u>15</u>	
Critical Care	<u>--</u>	
Other Hospital Visit:	<u>45</u>	<u>99231 x 3</u>
Discharge Day Mgmt.:	<u>20</u>	<u>99238</u>
Office Visits:	<u>30</u>	<u>99213 x 2</u>

---

**KEY REFERENCE SERVICE:**

<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
50400	Pyeloplasty (Foley Y-pyeloplasty), plastic operation on renal pelvis, with or without plastic operation on ureter, nephropexy, nephrostomy, pyelostomy, or ureteral splinting; simple	19.5

---

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including the data from the service that you are rating as well as the key reference services.**

**TIME ESTIMATES (Median)**

	<u>CPT Code</u>	<u>Reference Service 1</u>
Median Pre-Time	60	37
Median Intra-Time	240	148
Median Post-Time	110	55

### INTENSITY/COMPLEXITY MEASURES (Mean)

#### Mental Effort and Judgement (Mean)

The number of possible diagnosis and/or the number of management options that must be considered	4	4
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4	4
Urgency of medical decision making	3	3

#### Technical Skill/Physical Effort (Mean)

Technical skill required	5	5
Physical effort required	5	5

#### Psychological Stress (Mean)

The risk of significant complications, morbidity and/or mortality	5	4
Outcome depends on the skill and judgement of physician	5	4
Estimated risk of malpractice suit with poor outcome	4	4

### INTENSITY/COMPLEXITY MEASURES

#### CPT Code

#### Reference Service 1

#### Time Segments (Mean)

Pre-Service intensity/complexity	4	3
Intra-Service intensity/complexity	5	5
Post-Service intensity/complexity	3	3

### **ADDITIONAL RATIONALE**

Describe the process by which your specialty society reached your final recommendation.

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## FREQUENCY INFORMATION

How was this service previously reported? 53899, Unlisted procedure urinary system

How often do physicians in your specialty perform this service? Commonly ☒ Sometimes ☐ Rarely

Estimate the number of times this service might be provided nationally in a one-year period?

According to 1997 BMAD data, there were 598 open pveloplasties (CPT 50400) performed in the US. The AUA estimates that 10-20% will be performed laparoscopically.

Do many physicians perform this service across the United States? ☐ Yes ☒ No

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**AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF RECOMMENDATION**

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CPT Code: 505X3    Tracking Number: Z8    Global Period: 90    Recommended RVW: 20.48

CPT Descriptor: Laparoscopy, surgical; nephrectomy

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**CLINICAL DESCRIPTION OF SERVICE:**

**Vignette Used in Survey:** A 45-year old male presents with headaches and dizzy spells and is found to have an elevated blood pressure of 156/110. Subsequent work-up demonstrates a small contracted left kidney with renal vein renin which lateralizes to the left. A glucoheptanate renal scan demonstrates 97% function on the right and 3% function on the left kidney. Attempts at blood pressure control with medical therapy are partially successful but the patient remains symptomatic. The options are: increasing his drug regimen to three anti-hypertensive agents; open surgical removal; or laparoscopic approach. These are outlined for the patient, who chooses the laparoscopic means of repair. A renal vein renin confirms that the patient's BP elevation was due to renovascular cause.

**Description of Pre-Service Work:** Includes services provided from the day before the surgery until the time of the procedure and may include: 1) obtaining and reviewing hospital admission laboratory studies and urologic x-rays before the procedure; 2) communicating with other health care professionals (e.g., family physician, anesthesiologist); 3) communicating with the patient to explain operative risks and benefits and to obtain informed consent; 4) dressing for surgery, waiting for anesthesia (e.g., placing of central arterial and venous lines, administering general, spinal and/or epidural anesthesia), positioning, prepping and draping the patient, and scrubbing; 5) preparing and checking needed equipment for surgery and any other non "skin-to-skin" work in the operating room.

**Description of Intra-Service Work:** After administration of anesthesia, the patient is prepped and put in an oblique position. A Hasson catheter is inserted and the abdomen is insufflated with CO<sub>2</sub>. The two or three additional ports are inserted and the dissection begins with mobilization of the meso-colon, allowing entry into the retroperitoneal space. Careful dissection outlines the left renal vein crossing the aorta, which is retracted. The left spermatic vein is then identified, isolated and clipped. The left ureter and renal pelvis are identified and used to gain posterior access to the renal artery. By careful dissection, the artery is isolated and clipped allowing secondary clipping of the renal vein. Superior attachments with isolation and clipping of the left adrenal vein are carried out allowing mobilization of the upper pole of the kidney. Capsular collateral vessels are individually treated allowing the mobilization of the kidney. The ureter is doubly clipped and the tissue specimen bagged and morcellated so as to bring it out of the 10-12mm port site. Partial deflation of the abdomen allows for careful evaluation of the surgical field for bleeding. The port sites are closed with a 0 - PDS suture and the skin with a 5-0 Monocryl.

**Description of Post-Service Work:** Includes the following: (1) all post-operative care on the day of the procedure, including patient stabilization, post-operative orders, communicating with the family and referring physician (including written and telephone reports), and other non "skin-to-skin" work in the operating room; (2) all post-operative hospital visits and discharge day management; (3) all post-discharge office visits for this procedure for 90 days after the day of the operation are considered part of the post-operative work for this procedure (including evaluation of periodic laboratory reports and medication adjustment)

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**SURVEY DATA:**Presenter(s): Thomas P. Cooper, MDSpecialty(s): American Urological AssociationSample Size: 66 Response Rate: (%): 45% (30) Median RVW: 20.48Type of Sample (Circle One): random, panel, convenience. Explanation of sample size: \_\_\_\_\_25th Percentile RVW: 18.63 75th Percentile RVW: 22 Low: 17.15 High: 28Median Pre-Service Time: 60 Median Intra-Service Time: 20525th Percentile Intra-Svc Time: 180 75th Percentile Intra-Svc Time: 240 Low: 80 High: 350

Median Post-Service Time:

	<u>Total Time</u>	<u>Level of Service by CPT Code</u> <u>(List # of Visits)</u>
Immediate Post Service Time:	<u>17.5</u>	
Critical Care	<u>---</u>	
Other Hospital Visit:	<u>45</u>	<u>99231 x 3</u>
Discharge Day Mgmt.:	<u>20</u>	<u>99238</u>
Office Visits:	<u>30</u>	<u>99213 x 2</u>

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**KEY REFERENCE SERVICE:**

<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
50220	Nephrectomy, including partial ureterctomy, any approach including rib section;	17.15

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**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including the data from the service that you are rating as well as the key reference services.**

**TIME ESTIMATES (Median)**

	<u>CPT Code</u>	<u>Reference</u> <u>Service 1</u>
Median Pre-Time	60	60
Median Intra-Time	205	120
Median Post-Time	112.5	135

### INTENSITY/COMPLEXITY MEASURES (Mean)

#### Mental Effort and Judgement (Mean)

The number of possible diagnosis and/or the number of management options that must be considered	4	3
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The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4	4
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Urgency of medical decision making	3	3
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#### Technical Skill/Physical Effort (Mean)

Technical skill required	5	5
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Physical effort required	5	5
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#### Psychological Stress (Mean)

The risk of significant complications, morbidity and/or mortality	5	5
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Outcome depends on the skill and judgement of physician	5	4
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Estimated risk of malpractice suit with poor outcome	4	4
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### INTENSITY/COMPLEXITY MEASURES

#### CPT Code

#### Reference Service 1

#### Time Segments (Mean)

Pre-Service intensity/complexity	3	3
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Intra-Service intensity/complexity	5	5
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Post-Service intensity/complexity	3	3
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### **ADDITIONAL RATIONALE**

Describe the process by which your specialty society reached your final recommendation.

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## FREQUENCY INFORMATION

How was this service previously reported? 53899, Unlisted procedure urinary system

How often do physicians in your specialty perform this service? Commonly ☒ Sometimes ☐ Rarely

Estimate the number of times this service might be provided nationally in a one-year period?

1997 BMAD indicates that 4,880 nephrectomies (CPT code 50220) are performed per year in the US. The AUA anticipates that 10-20% of these will be performed annually.

Do many physicians perform this service across the United States? ☐ Yes ☒ No

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**AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF RECOMMENDATION**

CPT Code: 505X4 Tracking Number: Z7 Global Period: 90 Recommended RVW: 24.4

CPT Descriptor: Laparoscopically assisted nephroureterectomy

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**CLINICAL DESCRIPTION OF SERVICE:**

**Vignette Used in Survey:** A 26-year old female patient presents with a history of UTI infections which were treated medically as a child. She had no work-up at the time and now has a VCUG which demonstrates Grade III reflux in her (small) right kidney. Glucoheptanate Renal Scan demonstrates 5% function in that kidney and 95% on the left. The left kidney has no scars. The creatinine clearance is 80 ml/min. The patient is a single-mother caring for two children and cannot afford to miss a lot of work. The options of Open vs. Laparoscopic Nephroureterectomy are presented, and the patient chooses the laparoscopic approach.

**Description of Pre-Service Work:** Includes services provided from the day before the surgery until the time of the procedure and may include: 1) obtaining and reviewing hospital admission laboratory studies and urologic x-rays before the procedure; 2) communicating with other health care professionals (e.g., family physician, anesthesiologist); 3) communicating with the patient to explain operative risks and benefits and to obtain informed consent; 4) dressing for surgery, waiting for anesthesia (e.g., placing of central arterial and venous lines, administering general, spinal and/or epidural anesthesia), positioning, prepping and draping the patient, and scrubbing; 5) preparing and checking needed equipment for surgery and any other non "skin-to-skin" work in the operating room.

**Description of Intra-Service Work:** After appropriate anesthesia evaluation, the patient is prepped in an extended oblique position and the flank and abdomen are prepared for cannula placement. The abdomen is inflated with CO<sub>2</sub> and the appropriate ports are placed for camera and working ports for the laparoscopic procedure. The line of Toldt is incised to reflect the colon medially out of the operative field so that the atrophic kidney with its perinephric scars can be freed by sharp and blunt dissection. The ureter is identified in the retroperitoneal space as a guide and marker and individual ovarian vessels are individually clipped to guide the operator to the renal vein. The medial and lateral dissection of the small kidney was carried cephalad to find a plane between the right adrenal and the upper pole of the kidney. Mobilization of the vessels allows the placement of clips on the renal artery and vein, freeing the kidney for distal mobilization. The ascending colon, cecum and appendix are mobilized medially. The peritoneum is incised over the broad ligament using electrocautery. The ureter is followed toward the bladder, clipping the major branches of ureteral blood supply at the common iliac, and internal iliac vessels. The ureter is swept medially in its course into the true pelvis behind the uterine vessels. Gentle traction is applied to allow dissection in the intramural position of the ureter, at which time the ureter is double clipped at the mucosal level. The specimen is placed in a tissue specimen bag and either morcelated or the port site enlarged to remove the specimen. Careful inspection of the retroperitoneal space reveals no bleeding and the abdomen is desufflated of the carbon dioxide and the ports are sutured.

**Description of Post-Service Work:** Includes the following: (1) all post-operative care on the day of the procedure, including patient stabilization, post-operative orders, communicating with the family and referring physician (including written and telephone reports), and other non "skin-to-skin" work in the operating room; (2) all post-operative hospital visits and discharge day management; (3) all post-discharge office visits for this procedure for 90 days after the day of the operation are considered part of the post-operative work for this procedure (including evaluation of periodic laboratory reports and medication adjustment)

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**SURVEY DATA:**Presenter(s): Thomas P. Cooper, MDSpecialty(s): American Urological AssociationSample Size: 66 Response Rate: (%) 44% (29) Median RVW: 24.4Type of Sample (Circle One): random, **panel**, convenience. Explanation of sample size: \_\_\_\_\_25th Percentile RVW: 23 75th Percentile RVW: 26 Low: 19.15 High: 40Median Pre-Service Time: 60 Median Intra-Service Time: 27025th Percentile Intra-Svc Time: 240 75th Percentile Intra-Svc Time: 300 Low: 90 High: 480

Median Post-Service Time:

	<u>Total Time</u>	<u>Level of Service by CPT Code</u> <u>(List # of Visits)</u>
Immediate Post Service Time:	<u>20</u>	
Critical Care	<u>--</u>	
Other Hospital Visit:	<u>45</u>	<u>99231 x 3</u>
Discharge Day Mgmt.:	<u>20</u>	<u>99238</u>
Office Visits:	<u>30</u>	<u>99213 x 2</u>

**KEY REFERENCE SERVICE:**

<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
50234	Nephrectomy with total ureterectomy and bladder cuff; through same incision	22.40

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**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including the data from the service that you are rating as well as the key reference services.**

**TIME ESTIMATES (Median)**

	<u>CPT Code</u>	<u>Reference Service 1</u>
Median Pre-Time	60	39
Median Intra-Time	270	180
Median Post-Time	115	74

**INTENSITY/COMPLEXITY MEASURES (Mean)****Mental Effort and Judgement (Mean)**

The number of possible diagnosis and/or the number of management options that must be considered	4	3.5
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The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4	4
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Urgency of medical decision making	4	4
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**Technical Skill/Physical Effort (Mean)**

Technical skill required	5	5
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Physical effort required	5	5
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**Psychological Stress (Mean)**

The risk of significant complications, morbidity and/or mortality	5	5
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Outcome depends on the skill and judgement of physician	5	5
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Estimated risk of malpractice suit with poor outcome	4	4
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**INTENSITY/COMPLEXITY MEASURES****CPT Code****Reference  
Service 1****Time Segments (Mean)**

Pre-Service intensity/complexity	3	3
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Intra-Service intensity/complexity	5	5
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Post-Service intensity/complexity	3	3
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**ADDITIONAL RATIONALE**

Describe the process by which your specialty society reached your final recommendation.

## FREQUENCY INFORMATION

How was this service previously reported? 53899, Unlisted procedure, urinary system

How often do physicians in your specialty perform this service? Commonly ☒ Sometimes ☐ Rarely

Estimate the number of times this service might be provided nationally in a one-year period?

1997 BMAD indicates that there were 2,351 nephroureterectomies (CPT 50234) performed in the US. Of these, the AUA anticipates that 10-20% will be performed laparoscopically.

Do many physicians perform this service across the United States? ☐ Yes ☒ No

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**AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF RECOMMENDATION**

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CPT Code: 509X1    Tracking Number: Z1    Global Period: 90    Recommended RVW: 17

CPT Descriptor: Laparoscopy, surgical; ureterolithotomy

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**CLINICAL DESCRIPTION OF SERVICE:**

**Vignette Used in Survey:** A 45-year old man with cystinuria presents with acute renal colic with IVPs demonstrating a partially radio dense 1 cm. calculus impacted in the right ureter just above the common iliac artery with proximal hydronephrosis. It was possible to by-pass the stone with a stenting catheter, but attempts to break-up the stone with ultrasound and laser have been unsuccessful. The patient was apprised of open surgical and laparoscopic, and chooses the laparoscopic approach.

**Description of Pre-Service Work:** Includes services provided from the day before the surgery until the time of the procedure and may include: 1) obtaining and reviewing hospital admission laboratory studies and urologic x-rays before the procedure; 2) communicating with other health care professionals (e.g., family physician, anesthesiologist); 3) communicating with the patient to explain operative risks and benefits and to obtain informed consent; 4) dressing for surgery, waiting for anesthesia (e.g., placing of central arterial and venous lines, administering general, spinal and/or epidural anesthesia), positioning, prepping and draping the patient, and scrubbing; 5) preparing and checking needed equipment for surgery and any other non "skin-to-skin" work in the operating room.

**Description of Intra-Service Work:** The patient is placed in an oblique position. A Hasson catheter is inserted under direct vision and the abdomen is inflated to gain access to the retroperitoneal space. The cecum and appendix are freed from mesenteric attachments and reflected cephalad. Careful dissection of the ureter is carried out medially and laterally to allow compression of the ureter above the stone. A vertical ureterotomy is made and the stone is extracted from the ureter. A single suture is used to close the muscularis and adventitial of the ureter. Since a stent is in place, no drain is left in the retroperitoneal space. The cecum is allowed to return to its anatomic location. The abdomen is deflated and the port sites closed.

**Description of Post-Service Work:** Includes the following: (1) all post-operative care on the day of the procedure, including patient stabilization, post-operative orders, communicating with the family and referring physician (including written and telephone reports), and other non "skin-to-skin" work in the operating room; (2) all post-operative hospital visits and discharge day management; (3) all post-discharge office visits for this procedure for 90 days after the day of the operation are considered part of the post-operative work for this procedure (including evaluation of periodic laboratory reports and medication adjustment)

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**SURVEY DATA:**Presenter(s): Thomas P. Cooper, MDSpecialty(s): American Urological AssociationSample Size: 66 Response Rate: (%): 42% (28) Median RVW: 17Type of Sample (Circle One): random, panel, convenience. Explanation of sample size: \_\_\_\_\_25th Percentile RVW: 15.91 75th Percentile RVW: 17.5 Low: 10 High: 20Median Pre-Service Time: 60 Median Intra-Service Time: 12025th Percentile Intra-Svc Time: 90 75th Percentile Intra-Svc Time: 175 Low: 50 High: 240

Median Post-Service Time:

	<u>Total Time</u>	<u>Level of Service by CPT Code</u> <u>(List # of Visits)</u>
Immediate Post Service Time:	<u>17.5</u>	
Critical Care	<u>---</u>	
Other Hospital Visit:	<u>30</u>	<u>99231 x 2</u>
Discharge Day Mgmt.:	<u>15</u>	<u>99238</u>
Office Visits:	<u>30</u>	<u>99213 x 2</u>

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**KEY REFERENCE SERVICE:**

<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
50610	Ureterolithotomy; upper one-third of ureter	15.92

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**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including the data from the service that you are rating as well as the key reference services.**

**TIME ESTIMATES (Median)**

	<u>CPT Code</u>	<u>Reference</u> <u>Service 1</u>	<u>Reference</u> <u>Service 2</u>
Median Pre-Time	60	32	
Median Intra-Time	120	88	
Median Post-Time	92.5	55	

**INTENSITY/COMPLEXITY MEASURES (Mean)****Mental Effort and Judgement (Mean)**

The number of possible diagnosis and/or the number of management options that must be considered	3	3	
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3	3	
Urgency of medical decision making	3	3	

**Technical Skill/Physical Effort (Mean)**

Technical skill required	4	4	
Physical effort required	4	4	

**Psychological Stress (Mean)**

The risk of significant complications, morbidity and/or mortality	4	3	
Outcome depends on the skill and judgement of physician	4	4	
Estimated risk of malpractice suit with poor outcome	4	4	

**INTENSITY/COMPLEXITY MEASURES****CPT Code****Reference  
Service 1****Reference  
Service 2****Time Segments (Mean)**

Pre-Service intensity/complexity	3	3	
Intra-Service intensity/complexity	4	4	
Post-Service intensity/complexity	3	3	

**ADDITIONAL RATIONALE**

Describe the process by which your specialty society reached your final recommendation.

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## FREQUENCY INFORMATION

How was this service previously reported? 53899, Unlisted procedure, urinary system

How often do physicians in your specialty perform this service? Commonly ☒ Sometimes ☐ Rarely

Estimate the number of times this service might be provided nationally in a one-year period?

According to 1997 BMAD data, 1,063 open ureterolithotomies were performed in the US. The AUA believes that 20-30% of these will be performed laparoscopically.

Do many physicians perform this service across the United States? ☐ Yes ☒ No

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**AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF RECOMMENDATION**

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CPT Code: 519X1 Tracking Number: Z2 Global Period: 90 Recommended RVW: 12.5

CPT Descriptor: Laparoscopy, surgical; urethral suspension for stress incontinence

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**CLINICAL DESCRIPTION OF SERVICE:**

**Vignette Used in Survey:** A 55-year old woman with genuine stress urinary incontinence has failed medical therapy and wears 4-5 pads a day. Urodynamic testing demonstrates a compliant bladder without uninhibited contractions and good detrusor activity. She has tried Kegel exercises without success. When offered open surgery and laparoscopic repair, she chooses the laparoscopic urethral suspension. Following discharge, patient receives normal follow up care in office.

**Description of Pre-Service Work:** Includes services provided from the day before the surgery until the time of the procedure and may include: 1) obtaining and reviewing hospital admission laboratory studies and urologic x-rays before the procedure; 2) communicating with other health care professionals (e.g., family physician, anesthesiologist); 3) communicating with the patient to explain operative risks and benefits and to obtain informed consent; 4) dressing for surgery, waiting for anesthesia (e.g., placing of central arterial and venous lines, administering general, spinal and/or epidural anesthesia), positioning, prepping and draping the patient, and scrubbing; 5) preparing and checking needed equipment for surgery and any other non "skin-to-skin" work in the operating room.

**Description of Intra-Service Work:** The patient is placed in low lithotomy positioned. An extraperitoneal or transperitoneal approach is employed using 4 trocar-sheath units, placed in a diamond configuration to access the pelvic organs. The bladder neck region is determined and then the periurethral tissue and Cooper's ligament is exposed. Two stitches of 2-0 non-absorbable suture are laparoscopically placed into the endopelvic fascia at the bladder neck region on each side and secured to the ipsilateral Cooper's ligament. The sutures are tied using extracorporeal or intracorporeal knots, so as to create a hammock-type suspension of the bladder neck. The ports were removed and sites closed in the usual fashion.

**Description of Post-Service Work:** Includes the following: (1) all post-operative care on the day of the procedure, including patient stabilization, post-operative orders, communicating with the family and referring physician (including written and telephone reports), and other non "skin-to-skin" work in the operating room; (2) all post-operative hospital visits and discharge day management; (3) all post-discharge office visits for this procedure for 90 days after the day of the operation are considered part of the post-operative work for this procedure (including evaluation of periodic laboratory reports and medication adjustment)

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**SURVEY DATA:**

Presenter(s): Thomas P. Cooper, MD and Barbara Levy, MD

Specialty(s): American Urological Association and American College of Obstetricians and Gynecologists

Sample Size: 97 Response Rate: (%): 36%(35) Median RVW: 12.5

Type of Sample (Circle One): random, panel, convenience. Explanation of sample size: \_\_\_\_\_

25th Percentile RVW: 11 75th Percentile RVW: 14 Low: 7 High: 16.55

Median Pre-Service Time: 60 Median Intra-Service Time: 120

25th Percentile Intra-Svc Time: 90 75th Percentile Intra-Svc Time: 135 Low: 30 High: 240

Median Post-Service Time:

	<u>Total Time</u>	<u>Level of Service by CPT Code</u> <u>(List # of Visits)</u>
Immediate Post Service Time:	<u>20</u>	
Critical Care	<u>---</u>	
Other Hospital Visit:	<u>30</u>	<u>99231 x 2</u>
Discharge Day Mgmt.:	<u>15</u>	<u>99238</u>
Office Visits:	<u>30</u>	<u>99213 x 2</u>

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**KEY REFERENCE SERVICE:**

<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
51840	Anterior vesicourethropexy, or urethropexy (e.g., Marshall-Marchetti-Krantz, Burch); simple	10.71

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**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. Make certain that you are including the data from the service that you are rating as well as the key reference services.

**TIME ESTIMATES (Median)**

	<u>CPT Code</u>	<u>Reference Service 1</u>	<u>Reference Service 2</u>
Median Pre-Time	<u>60</u>	<u>27</u>	
Median Intra-Time	<u>120</u>	<u>78</u>	
Median Post-Time	<u>95</u>	<u>55</u>	

**INTENSITY/COMPLEXITY MEASURES (Mean)****Mental Effort and Judgement (Mean)**

The number of possible diagnosis and/or the number of management options that must be considered	3	3	
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3	3	
Urgency of medical decision making	3	2	

**Technical Skill/Physical Effort (Mean)**

Technical skill required	5	5	
Physical effort required	4	3	

**Psychological Stress (Mean)**

The risk of significant complications, morbidity and/or mortality	3	3	
Outcome depends on the skill and judgement of physician	5	4	
Estimated risk of malpractice suit with poor outcome	5	5	

**INTENSITY/COMPLEXITY MEASURES****CPT Code****Reference  
Service 1****Reference  
Service 2****Time Segments (Mean)**

Pre-Service intensity/complexity	3	3	
Intra-Service intensity/complexity	4	4	
Post-Service intensity/complexity	3	3	

**ADDITIONAL RATIONALE**

Describe the process by which your specialty society reached your final recommendation.

The AUA's response rate was 27/66 (median 12.5), ACOG's response rate was 8/30 (median 12.95). The specialty RVS's committees met and decided to combine the responses - thereby arriving at a combined response rate of 35/97 with a median of 12.5.

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## FREQUENCY INFORMATION

How was this service previously reported? 58999, Unlisted procedure, female genital surgery

How often do physicians in your specialty perform this service? Commonly ☒ Sometimes ☐ Rarely

Estimate the number of times this service might be provided nationally in a one-year period?

According to 1997 BMAD data, 11,343 open urethral suspensions (CPT code 51840) were performed in the US. The AUA believes that 10-20% of these will be performed laparoscopically.

Do many physicians perform this service across the United States? ☐ Yes ☒ No

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**AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF RECOMMENDATION**

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CPT Code: • 519X2 Tracking Number: Z3 Global Period: 90 Recommended RVW: 14.01

CPT Descriptor: Laparoscopy, surgical; sling operation for stress incontinence (e.g., fascia or synthetic)

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**CLINICAL DESCRIPTION OF SERVICE:**

**Vignette Used in Survey:** A 55-year old woman with genuine stress urinary incontinence has failed medical therapy and wears 4-5 pads a day. Urodynamic testing demonstrates a compliant bladder without uninhibited contractions and good detrusor activity. She has tried Kegel exercises without success. When offered open surgery and laparoscopic repair, she chooses the laparoscopic sling operation. Following discharge, patient receives normal follow up care in office.

**Description of Pre-Service Work:** Includes services provided from the day before the surgery until the time of the procedure and may include: 1) obtaining and reviewing hospital admission laboratory studies and urologic x-rays before the procedure; 2) communicating with other health care professionals (e.g., family physician, anesthesiologist); 3) communicating with the patient to explain operative risks and benefits and to obtain informed consent; 4) dressing for surgery, waiting for anesthesia (e.g., placing of central arterial and venous lines, administering general, spinal and/or epidural anesthesia), positioning, prepping and draping the patient, and scrubbing; 5) preparing and checking needed equipment for surgery and any other non "skin-to-skin" work in the operating room.

**Description of Intra-Service Work:** The patient is placed in low lithotomy position. An extraperitoneal or transperitoneal approach is employed using 5-trocar sheaths. The bladder neck region is exposed as well as Cooper's ligament. The endopelvic fascia is opened and a tunnel is dissected between the urethra and vaginal mucosa. Sling material (cadaver or synthetic) is then passed through the tunnel and then secured to Cooper's ligament bilaterally. The ports were removed and sites closed in the usual fashion.

**Description of Post-Service Work:** Includes the following: (1) all post-operative care on the day of the procedure, including patient stabilization, post-operative orders, communicating with the family and referring physician (including written and telephone reports), and other non "skin-to-skin" work in the operating room; (2) all post-operative hospital visits and discharge day management; (3) all post-discharge office visits for this procedure for 90 days after the day of the operation are considered part of the post-operative work for this procedure (including evaluation of periodic laboratory reports and medication adjustment)

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**SURVEY DATA:**

Presenter(s): Thomas P. Cooper, MD and Barbara Levy, MD

Specialty(s): American Urological Association and American College of Obstetricians and Gynecologists

Sample Size: 96 Response Rate: (%): 33 % (32) Median RVW: 14.01

Type of Sample (Circle One): random, panel, convenience. Explanation of sample size: \_\_\_\_\_

25th Percentile RVW: 13.02 75th Percentile RVW: 15.12 Low: 11 High: 26

Median Pre-Service Time: 60 Median Intra-Service Time: 120

25th Percentile Intra-Svc Time: 103.75 75th Percentile Intra-Svc Time: 180 Low: 75 High: 240

Median Post-Service Time:

	<u>Total Time</u>	<u>Level of Service by CPT Code</u> <u>(List # of Visits)</u>
Immediate Post Service Time:	<u>20</u>	
Critical Care	<u>---</u>	
Other Hospital Visit:	<u>35</u>	<u>99231 x 2</u>
Discharge Day Mgmt.:	<u>20</u>	<u>99238</u>
Office Visits:	<u>30</u>	<u>99213 x 2</u>

---

**KEY REFERENCE SERVICE:**

<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
57288	Sling operation for stress incontinence (e.g., fascia or synthetic)	13.02

---

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including the data from the service that you are rating as well as the key reference services.**

**TIME ESTIMATES (Median)**

	<u>CPT Code</u>	<u>Reference Service 1</u>	<u>Reference Service 2</u>
Median Pre-Time	60	29	
Median Intra-Time	120	64	
Median Post-Time	105	55	

### INTENSITY/COMPLEXITY MEASURES (Mean)

#### Mental Effort and Judgement (Mean)

The number of possible diagnosis and/or the number of management options that must be considered	3.5	3	
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4	3	
Urgency of medical decision making	2	2	

#### Technical Skill/Physical Effort (Mean)

Technical skill required	4	4	
Physical effort required	4	4	

#### Psychological Stress (Mean)

The risk of significant complications, morbidity and/or mortality	4	3	
Outcome depends on the skill and judgement of physician	4	4	
Estimated risk of malpractice suit with poor outcome	3	3	

### INTENSITY/COMPLEXITY MEASURES

#### CPT Code

#### Reference Service 1

#### Reference Service 2

#### Time Segments (Mean)

Pre-Service intensity/complexity	3	3	
Intra-Service intensity/complexity	4	4	
Post-Service intensity/complexity	3	3	

### **ADDITIONAL RATIONALE**

Describe the process by which your specialty society reached your final recommendation.

The AUA's response rate was 26/66 (median 14.2) and ACOG's response rate was 7/30 (median 13.01). The specialty RVS's committees met and decided to combine the responses – thereby arriving at a combined response rate of 32/97 with a median of 14.01.

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## FREQUENCY INFORMATION

How was this service previously reported? 58999, Unlisted procedure, female genital surgery

How often do physicians in your specialty perform this service? ☐ Commonly ☒ Sometimes ☐ Rarely

Estimate the number of times this service might be provided nationally in a one-year period?

According to 1997 BMAD data, 10,401 open sling procedures (CPT 57288) were performed in the US. The AUA believes that 10-20% of these will be performed laparoscopically.

Do many physicians perform this service across the United States? ☐ Yes ☒ No

---



**AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF RECOMMENDATION**

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CPT Code: 54622 Tracking Number: Z4 Global Period: 90 Recommended RVW: 12.88

CPT Descriptor: Laparoscopy, surgical; orchiopexy, for intra-abdominal testis

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**CLINICAL DESCRIPTION OF SERVICE:**

**Vignette Used in Survey:** A 2-year-old baby boy presents with a right undescended testis. The mother reports that the child has never had a palpable testis and was full-term at birth. Physical examination reveals a closed inguinal ring on the right. The left testis does not appear hypertrophied. The options of laparoscopy, laparoscopy with open exploration and orchiopexy, Fowler-Stephens orchiopexy, are explained to the parents, who elect for laparoscopy.

**Description of Pre-Service Work:** Includes services provided from the day before the surgery until the time of the procedure and may include: 1) obtaining and reviewing hospital admission laboratory studies and urologic x-rays before the procedure; 2) communicating with other health care professionals (e.g., family physician, anesthesiologist); 3) communicating with the patient to explain operative risks and benefits and to obtain informed consent; 4) dressing for surgery, waiting for anesthesia (e.g., placing of central arterial and venous lines, administering general, spinal and/or epidural anesthesia), positioning, prepping and draping the patient, and scrubbing; 5) preparing and checking needed equipment for surgery and any other non "skin-to-skin" work in the operating room.

**Description of Intra-Service Work:** The child is anesthetized and positioned with placement of the inflation cannula and the abdomen to 10-15 mm Hg with carbon dioxide insufflation. The 5 mm laparoscope is used to visualize the right lateral gutter and the glistening white globe of the testis is noted in the peritoneal cavity draped over the common iliac vessels. The vas deferens and spermatic chord are visualized extending to the lower pole and upper margin of the surrounding epididymis, respectively. Dissection begins with traction on the testis to outline the peritoneal attachments to the chord and the incision in the peritoneum is carried cephalad to the level of the lower pole of the kidney. The incision is then carried around the testis laterally and carried inferior and medially just outside the course of the ductus deferens in the retroperitoneal space. With appropriate measurement it was evident that there was enough chord length to reach the dependent scrotum. A 5-10 mm trocar is inserted from the subdartos pouch up the inguinal canal and into the peritoneal cavity usually just medial to the inferior epigastric vessels. The testis is gently grasped and brought down into the scrotum and fixed. An incision is made at the level of Cowper's ligament and a dissection and spreading technique is used to develop the cavity of the scrotum to accept the testis. A dependent scrotal incision is made and the testis brought into a dartos pouch and fixed with its equal sized mate in the scrotum. The scrotal incision is closed with a 5-0 Maxon and the abdomen is partially decompressed to check for any retroperitoneal bleeding.

**Description of Post-Service Work:** Includes the following: (1) all post-operative care on the day of the procedure, including patient stabilization, post-operative orders, communicating with the family and referring physician (including written and telephone reports), and other non "skin-to-skin" work in the operating room; (2) all post-operative hospital visits and discharge day management; (3) all post-discharge office visits for this procedure for 90 days after the day of the operation are considered part of the post-operative work for this procedure (including evaluation of periodic laboratory reports and medication adjustment)

---

**SURVEY DATA:**Presenter(s): Thomas P. Cooper, MDSpecialty(s): American Urological AssociationSample Size: 66 Response Rate: (%): 39% (25) Median RVW: 12.88Type of Sample (Circle One): random, panel, convenience. Explanation of sample size: \_\_\_\_\_25th Percentile RVW: 11.45 75th Percentile RVW: 13.45 Low: 6.9 High: 15.5Median Pre-Service Time: 60 Median Intra-Service Time: 12025th Percentile Intra-Svc Time: 75 75th Percentile Intra-Svc Time: 120 Low: 30 High: 240

Median Post-Service Time:

	<u>Total Time</u>	<u>Level of Service by CPT Code</u> <u>(List # of Visits)</u>
Immediate Post Service Time:	<u>15</u>	
Critical Care	<u>--</u>	
Other Hospital Visit:	<u>30</u>	<u>99231 x 2</u>
Discharge Day Mgmt.:	<u>15</u>	<u>99338</u>
Office Visits:	<u>30</u>	<u>99213 x 2</u>

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**KEY REFERENCE SERVICE:**

<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
54650	Orchiopexy, abdominal approach, for intrabdominal testis (eg, Fowler-Stephens)	11.45

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**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including the data from the service that you are rating as well as the key reference services.**

**TIME ESTIMATES (Median)**

	<u>CPT Code</u>	<u>Reference Service 1</u>
Median Pre-Time	60	60
Median Intra-Time	120	120
Median Post-Time	90	90

**INTENSITY/COMPLEXITY MEASURES (Mean)****Mental Effort and Judgement (Mean)**

The number of possible diagnosis and/or the number of management options that must be considered	3	3
--	---	---

The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3	3
--	---	---

Urgency of medical decision making	3	3
------------------------------------	---	---

**Technical Skill/Physical Effort (Mean)**

Technical skill required	4	4
--------------------------	---	---

Physical effort required	4	4
--------------------------	---	---

**Psychological Stress (Mean)**

The risk of significant complications, morbidity and/or mortality	4	3
---	---	---

Outcome depends on the skill and judgement of physician	4	4
---	---	---

Estimated risk of malpractice suit with poor outcome	4	4
--	---	---

**INTENSITY/COMPLEXITY MEASURES****CPT Code****Reference  
Service 1****Time Segments (Mean)**

Pre-Service intensity/complexity	3	3
----------------------------------	---	---

Intra-Service intensity/complexity	4	4
------------------------------------	---	---

Post-Service intensity/complexity	3	3
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**ADDITIONAL RATIONALE**

Describe the process by which your specialty society reached your final recommendation.

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## FREQUENCY INFORMATION

How was this service previously reported? 55899, Unlisted procedure, male genital system

How often do physicians in your specialty perform this service? Commonly ☒ Sometimes ☐ Rarely

Estimate the number of times this service might be provided nationally in a one-year period?

According to 1997 BMAD data, there were 257 open orchidiopexies (CPT code 54640) in the US. The AUA anticipates that 5-10% of these will be performed laparoscopically and that eventually this procedure will become the procedure of choice.

Do many physicians perform this service across the United States? ☐ Yes ☒ No

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## Practice Expense Data

CPT Code: \_\_\_\_\_

**AMA/SPECIALTY SOCIETY UPDATE PROCESS  
SUMMARY OF PRACTICE EXPENSE  
RECOMMENDATION**

**505X1 Laparoscopy, surgical;ablation of renal cysts**

Tracking Number: Z6 - Renal CystsGlobal Period: 90Reference Code 56342

**OUT-OF-OFFICE**

CLINICAL LABOR	Median Pre-Service Time	Median Intra-Service Time	Median Post-Service Time	Mean Number of ICU Visits	Mean Total ICU Time	Mean Other Hospital Number of Visits	Mean Other Hospital Total Time	Mean Number of Office Visits	Mean Total Time of Office Visits
RN	60		37.5					2	22.5
LPN									
MA									
Other									
Other									
Other									

ICAL SUPPLIES	Quantity of Supplies	Units used for purchase
bag, biohazard (5 gallon)	2	1
exam table paper	2	1
pillow case, disposable	2	1
gloves, non-sterile	4	1
thermometer probe cover, disposable	2	1
gloves, sterile	2	1
swab, alcohol	4	1
cotton tipped applicators	8	1
gauze, sterile 4x4	1	1
steri-stripes	1	6
tape	1	6
suture removal kit	1	1
Betadine	10cc	10cc
hydrogen peroxide	20cc	20cc

CPT Code: \_\_\_\_\_

PROCEDURE SPECIFIC MEDICAL		
	Mean Minutes of Use per Procedure	Mean Number of Hours per Week in Operation
N/A		
OVERHEAD MEDICAL EQUIPMENT		
	Mean Minutes of Use per Procedure	Mean Number of Hours per Week in Operation
power table	11.2	Depends on the number performed
exam lamp	11.2	***
autoclave	11.2	***

CPT Code: \_\_\_\_\_

**AMA/SPECIALTY SOCIETY UPDATE PROCESS  
SUMMARY OF PRACTICE EXPENSE  
RECOMMENDATION**

**505X2 Laparoscopy, surgical;pyeloplasty**

Tracking Number: Z5 PyeloplastyGlobal Period: 90Reference Code 56342

**OUT-OF-OFFICE**

CLINICAL LABOR	Median Pre-Service Time	Median Intra-Service Time	Median Post-Service Time	Mean Number of ICU Visits	Mean Total ICU Time	Mean Other Hospital Number of Visits	Mean Other Hospital Total Time	Mean Number of Office Visits	Mean Total Time of Office Visits
RN	60		45					2	30
LPN									
MA									
Other									
Other									
Other									

JICAL SUPPLIES	Quantity of Supplies	Units used for purchase
bag, biohazard (5 gallon)	3	1
exam table paper	3	1
pillow case, disposable	3	1
gloves, non-sterile	6	1
thermometer probe cover, disposable	3	1
gloves, sterile	3	1
swab, alcohol	6	1
cotton tipped applicators	12	1
gauze, sterile 4x4	1	1
steri-strips	1	6
tape	1	6
suture removal kit	1	1
Betadine	10cc	10cc
hydrogen peroxide	20cc	20cc



CPT Code: \_\_\_\_\_

PROCEDURE SPECIFIC MEDICAL		
	Mean Minutes of Use per Procedure	Mean Number of Hours per Week in Operation
N/A		
OVERHEAD MEDICAL EQUIPMENT		
	Mean Minutes of Use per Procedure	Mean Number of Hours per Week in Operation
power table	15	Depends on the number performed
exam lamp	15	***
autoclave	15	***

CPT Code: \_\_\_\_\_

**AMA/SPECIALTY SOCIETY UPDATE PROCESS  
SUMMARY OF PRACTICE EXPENSE  
RECOMMENDATION**

**505X3 Laparoscopy, surgical;nephrectomy**

Tracking Number: Z8 - Nephrectomy

Global Period: 90Reference Code 1 56342

**OUT-OF-OFFICE**

CLINICAL LABOR	Median Pre-Service Time	Median Intra-Service Time	Median Post-Service Time	Mean Number of ICU Visits	Mean Total ICU Time	Mean Other Hospital Number of Visits	Mean Other Hospital Total Time	Mean Number of Office Visits	Mean Total Time of Office Visits
RN	60		45					2	30
LPN									
MA									
Other									
Other									
Other									

CLINICAL SUPPLIES	Quantity of Supplies	Units used for purchase
bag, biohazard (5 gallon)	2	1
exam table paper	2	1
pillow case, disposable	2	1
gloves, non-sterile	4	1
thermometer probe cover, disposable	2	1
gloves, sterile	2	1
swab, alcohol	4	1
cotton tipped applicators	8	1
gauze, sterile 4x4	1	1
steri-stripes	1	6
tape	1	6
suture removal kit	1	1
Betadine	10cc	10cc
hydrogen peroxide	20cc	20cc

CPT Code: \_\_\_\_\_

PROCEDURE SPECIFIC MEDICAL		
	Mean Minutes of Use per Procedure	Mean Number of Hours per Week in Operation
N/A		
OVERHEAD MEDICAL EQUIPMENT		
	Mean Minutes of Use per Procedure	Mean Number of Hours per Week in Operation
		Depends on the number of procedures performed
power table	15	""
exam lamp	15	""
autoclave	15	""

CPT Code: \_\_\_\_\_

**AMA/SPECIALTY SOCIETY UPDATE PROCESS  
SUMMARY OF PRACTICE EXPENSE  
RECOMMENDATION**

**505X4 Laparoscopically assisted  
nephroureterectomy**

Tracking Number: Z7 NephroureterectomyGlobal Period: 90Reference Code 56342

**OUT-OF-OFFICE**

CLINICAL LABOR	Median Pre-Service Time	Median Intra-Service Time	Median Post-Service Time	Mean Number of ICU Visits	Mean Total ICU Time	Mean Other Hospital Number of Visits	Mean Other Hospital Total Time	Mean Number of Office Visits	Mean Total Time of Office Visits
RN	60		45					2	30
LPN									
MA									
Other									
Other									
Other									

MEDICAL SUPPLIES	Quantity of Supplies	Units used for purchase
bag, biohazard (5 gallon)	2	1
exam table paper	2	1
pillow case, disposable	2	1
gloves, non-sterile	4	1
thermometer probe cover, disposable	2	1
gloves, sterile	2	1
swab, alcohol	4	1
cotton tipped applicators	8	1
gauze, sterile 4x4	1	1
steri-stripes	1	6
tape	1	6
suture removal kit	1	1
Betadine	10cc	10cc
hydrogen peroxide	20cc	20cc

CPT Code: \_\_\_\_\_

PROCEDURE SPECIFIC MEDICAL		
	Mean Minutes of Use per Procedure	Mean Number of Hours per Week in Operation
N/A		
OVERHEAD MEDICAL EQUIPMENT		
	Mean Minutes of Use per Procedure	Mean Number of Hours per Week in Operation
		Depends on the number of procedures
power table	15	""
exam lamp	15	""
autoclave	15	""

CPT Code: \_\_\_\_\_

**AMA/SPECIALTY SOCIETY UPDATE PROCESS  
SUMMARY OF PRACTICE EXPENSE  
RECOMMENDATION**

**509X1 Laparoscopy, surgical; ureterolithotomy**

Tracking Number: Z1 - UreterolithotomyGlobal Period: 90Reference Code 56342

**OUT-OF-OFFICE**

CLINICAL LABOR	Median Pre-Service Time	Median Intra-Service Time	Median Post-Service Time	Mean Number of ICU Visits	Mean Total ICU Time	Mean Other Hospital Number of Visits	Mean Other Hospital Total Time	Mean Number of Office Visits	Mean Total Time of Office Visits
RN	60		45					2	30
LPN									
MA									
Other									
Other									
Other									

ICAL SUPPLIES	Quantity of Supplies	Units used for purchase
bag, biohazard (5 gallon)	2	1
exam table paper	2	1
pillow case, disposable	2	1
gloves, non-sterile	4	1
thermometer probe cover, disposable	2	1
gloves, sterile	2	1
swab, alcohol	4	1
cotton tipped applicators	8	1
gauze, sterile 4x4	1	1
steri-stripes	1	6
tape	1	6
suture removal kit	1	1
Betadine	10cc	10cc
hydrogen peroxide	20cc	20cc

CPT Code: \_\_\_\_\_

PROCEDURE SPECIFIC MEDICAL		
	Mean Minutes of Use per Procedure	Mean Number of Hours per Week in Operation
N/A		
OVERHEAD MEDICAL EQUIPMENT		
	Mean Minutes of Use per Procedure	Mean Number of Hours per Week in Operation
		Depends on the number of procedures
power table	15	""
exam lamp	15	""
autoclave	15	""

CPT Code: \_\_\_\_\_

**AMA/SPECIALTY SOCIETY UPDATE PROCESS  
SUMMARY OF PRACTICE EXPENSE  
RECOMMENDATION**

**519X1 Laparoscopy, surgical; urethral suspension  
for stress incontinence**

Tracking Number: Z2 Suspension

Global Period: 90Reference Code 56342

**OUT-OF-OFFICE**

CLINICAL LABOR	Median Pre-Service Time	Median Intra-Service Time	Median Post-Service Time	Mean Number of ICU Visits	Mean Total ICU Time	Mean Other Hospital Number of Visits	Mean Other Hospital Total Time	Mean Number of Office Visits	Mean Total Time of Office Visits
RN	60		75					2	30
LPN									
MA									
Other									
Other									
Other									

MEDICAL SUPPLIES	Quantity of Supplies	Units used for purchase
biohazard (5 gallon)	2	1
exam table paper	2	1
pillow case, disposable	2	1
gloves, non-sterile	4	1
thermometer probe cover, disposable	2	1
gloves, sterile	2	1
swab, alcohol	4	1
cotton tipped applicators	8	1
gauze, sterile 4x4	1	1
steri-stripes	1	6
tape	1	6
suture removal kit	1	1
Batadine	10cc	10cc
hydrogen peroxide	20cc	20cc
female catheter	x3	1



CPT Code: \_\_\_\_\_

PROCEDURE SPECIFIC MEDICAL		
	Mean Minutes of Use per Procedure	Mean Number of Hours per Week in Operation
N/A		
OVERHEAD MEDICAL EQUIPMENT		
	Mean Minutes of Use per Procedure	Mean Number of Hours per Week in Operation
power table	15	Depends on the number of procedures
exam lamp	15	""
autoclave	15	""

CPT Code: \_\_\_\_\_

**AMA/SPECIALTY SOCIETY UPDATE PROCESS  
SUMMARY OF PRACTICE EXPENSE  
RECOMMENDATION**

**5728X Laparoscopy, surgical;slng operation for  
stress incontinence (e.g., fascia or synthetic)**

Tracking Number: Z3 Sling

Global Period: 90Reference Code 56342

**OUT-OF-OFFICE**

CLINICAL LABOR	Median Pre-Service Time	Median Intra-Service Time	Median Post-Service Time	Mean Number of ICU Visits	Mean Total ICU Time	Mean Other Hospital Number of Visits	Mean Other Hospital Total Time	Mean Number of Office Visits	Mean Total Time of Office Visits
RN	60		75					2	30
LPN									
MA									
Other									
Other									
Other									

CLINICAL SUPPLIES	Quantity of Supplies	Units used for purchase
gloves, biohazard (5 gallon)	2	1
exam table paper	2	1
pillow case, disposable	2	1
gloves, non-sterile	4	1
thermometer probe cover, disposable	2	1
gloves, sterile	2	1
swab, alcohol	4	1
cotton tipped applicators	8	1
gauze, sterile 4x4	1	1
steri-strips	1	6
tape	1	6
suture removal kit	1	1
Batadine	10cc	10cc
hydrogen peroxide	20cc	20cc
female catheter	x3	1

CPT Code: \_\_\_\_\_

PROCEDURE SPECIFIC MEDICAL		
	Mean Minutes of Use per Procedure	Mean Number of Hours per Week in Operation
N/A		
OVERHEAD MEDICAL EQUIPMENT		
	Mean Minutes of Use per Procedure	Mean Number of Hours per Week in Operation
		Depends on the number of procedures
power table	15	""
exam lamp	15	""
autoclave	15	""

CPT Code: \_\_\_\_\_

**AMA/SPECIALTY SOCIETY UPDATE PROCESS  
SUMMARY OF PRACTICE EXPENSE  
RECOMMENDATION**

**546X2 Laparoscopy, surgical; orchiopexy for intra-abdominal testis**

Tracking Number: Z4 - Orchiopexy

Global Period: 90Reference Code 56316

**OUT-OF-OFFICE**

CLINICAL LABOR	Median Pre-Service Time	Median Intra-Service Time	Median Post-Service Time	Mean Number of ICU Visits	Mean Total ICU Time	Mean Other Hospital Number of Visits	Mean Other Hospital Total Time	Mean Number of Office Visits	Mean Total Time of Office Visits
RN	60		45					2	30
LPN									
MA									
Other									
Other									
Other									

ICAL SUPPLIES	Quantity of Supplies	Units used for purchase
bag, biohazard (5 gallon)	2	1
exam table paper	2	1
pillow case, disposable	2	1
gloves, non-sterile	4	1
thermometer probe cover, disposable	2	1
gloves, sterile	2	1
swab, alcohol	4	1
cotton tipped applicators	8	1
gauze, sterile 4x4	2	1
steri-stripes	2	6
tape	1	6
suture removal kit	1	1
Betadine	10cc	10
hydrogen peroxide	20cc	20

CPT Code: \_\_\_\_\_

PROCEDURE SPECIFIC MEDICAL		
	Mean Minutes of Use per Procedure	Mean Number of Hours per Week in Operation
N/A		
OVERHEAD MEDICAL EQUIPMENT		
	Mean Minutes of Use per Procedure	Mean Number of Hours per Week in Operation
		Depends on the number of procedures
power table	15	****
exam lamp	15	****
autoclave	15	****

**AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE**  
**SUMMARY OF RECOMMENDATIONS**  
**May 1999**

**LOW INTENSITY BONE ULTRASOUND**

***Work Relative Value Recommendations***

The CPT Editorial Panel at its August 1998 meeting approved CPT code 20979 *Low intensity ultrasound stimulation to aid bone healing, noninvasive (nonoperative)*. Throughout the remaining RUC and CPT cycles for CPT 2000, no specialty society indicated an interest in surveying the new code for work or practice expense values. At its May RUC 1999 meeting, specialty societies did discuss and comment on potential values despite the absence of formal survey data. Many physicians agreed that the work described in CPT code 20979 was very similar to the procedure reported under CPT 20974 *Electrical stimulation to aid bone healing; noninvasive (nonoperative)* (work RVU= .62, Non-Facility PE RVU=.33). Other RUC members indicated that the code was very similar to CPT 76880 *Echography, extremity, non-vascular, B-Scan and/or real time with image documentation* (work RVU = .59, Non-Facility PE RVU = 1.64).

The RUC recommends that HCFA consider this information when formulating a final work relative value unit. However, based on the absence of formal survey data, the RUC is unable to make a final recommendation regarding physician work at this time.

***Practice Expense Recommendations***

The RUC's discussion of practice expense for this particular issue was very limited. As such, based on the absence of formal survey data, the RUC is unable to make a final recommendation regarding practice expense at this time.



November 16, 1998

Terrence L. Kay, Director  
Division of Practitioner and Ambulatory Care  
Center for Health Plans and Providers  
Health Care Financing Administration  
7500 Security Boulevard  
Baltimore, Maryland

RE: FAR042

Dear Mr. Kay:

This is in response to your correspondence of August 10<sup>th</sup> to Ms. Sherry Smith of the American Medical Association (AMA) regarding extremity ultrasound. The American College of Radiology (ACR) is concerned that, in responding to Dr. Solomon's inquiry, HCFA is deviating from the process followed during the last Five-Year Review. Unlike Dr. Solomon, the ACR believes that extremity ultrasound is appropriately valued. It would be inappropriate to revise the work relative value for extremity ultrasound (code 76880) based on a single physician's request.

Reconsideration of work relative values (RVWs) for existing codes has followed the HCFA Five-Year Review process. The next Review is scheduled to begin next year. In the time between the reviews, the AMA's RVS Update Committee (RUC) has addressed the issue of RVWs for new and/or revised codes. Therefore, since code 76880 is neither a new or revised code, it seems inconsistent for the RUC to reconsider this code a year prior to the official commencement of the Review. We are aware of no other existing service being re-evaluated by the RUC at this time.

In previous correspondence, the ACR advised HCFA that compelling evidence should be the basis to refer any procedure to the RUC for RVW reassessment. We observed that, during the first Review, many procedures were submitted without adequate rationale. This is the case with respect to Dr. Solomon's request. Nowhere in Dr. Solomon's letter does he provide sufficient justification to warrant the RUC's reconsideration of this procedure (e.g., change in physician work, change in the typical patient, change in technology).



The ACR believes that the RVW currently assigned to extremity ultrasound (0.64) appropriately reflects the procedure. In shoulder ultrasound, the physician will interpret approximately 10 to 15 images, whereas shoulder MRI (Dr. Solomon's reference procedure) involves the interpretation of 72 to 96 images. Furthermore, the current RVW for extremity ultrasound places it within the RVWs for other ultrasound procedures. For example, scrotal ultrasound (code 76870) has an RVW of 0.64, breast ultrasound (code 76645) has an RVW of 0.54, and ultrasound of infant hips has RVWs of 0.62 or 0.72 depending if manipulation is performed (codes 76886 and 76885, respectively). Therefore, the ACR believes that revising the RVW for extremity ultrasound is both unnecessary and may create a rank-order anomaly amongst the other ultrasound procedures.

Thank you for your attention in this matter.

Sincerely,

A handwritten signature in black ink, reading 'Michael R. Mabry'.

Michael R. Mabry  
Associate Director

ACR Department of Economics and Health Policy

cc: Harvey L. Neiman, M.D.  
William T. Thorwarth, Jr., M.D.  
James M. Moorefield, M.D.  
Ann Rosser  
Sherry L. Smith (AMA)



**AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE  
SUMMARY OF RECOMMENDATIONS  
May 1999**

**LOWER EXTREMITY ARTERIAL BYPASS**

***Work Relative Value Recommendations***

New CPT codes were added to describe work performed on established lower extremity bypass graft in order to prevent thrombosis of the graft and subsequent limb loss. The intraservice work involved with CPT Code 35879 *Revision, lower extremity arterial bypass, without thrombectomy, open; with vein patch angioplasty* equals that of two comparison codes, CPT 35876 *Thrombectomy of arterial or venous graft (other than hemodialysis graft or fistula); with revision of arterial or venous graft* (work RVU= 17.00) and CPT 35256 *Repair blood vessel with vein graft; lower extremity* (work RVU=11.38). The pre-service time is higher than the comparison code while the post-service time is less than in 35876 but more than in 35256. The intensity factors for the new code are very similar to those of 35876, but generally greater than those of 35256. Based upon the survey data, the RUC supports the specialty society's recommended RVU of 16.00 for CPT code 35879, which represents the median RVU.

The RUC recommends that CPT Code 35881 *Revision, lower extremity arterial bypass, without thrombectomy, open; with segmental vein interposition* be assigned a work value of 18.00, based on a survey of 42 vascular surgeons. The recommendation of 18.00 for 35881 also represents the median RVU.

***Practice Expense Recommendations***

Since these are new codes, there currently are no direct inputs assigned to these codes. The specialty chose to crosswalk these codes to an existing code which is similar in not only in the physician work involved but also has inputs that the specialty believes is representative of the expenses associated with the new codes. The RUC therefore recommends that the direct inputs associated with code 35301 *Thromboendarterectomy, with or without patch graft; carotid, vertebral, subclavian, by neck incision* also apply to the new codes 35879 and 35881.

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<b>CPT Code (•New)</b>	<b>Track- ing Number</b>	<b>CPT Descriptor</b>	<b>Global Period</b>	<b>Work RVU Recommendation</b>
●35879	W1	Revision, lower extremity arterial bypass, without thrombectomy, open; with vein patch angioplasty	090	16.00
●35881	W2	with segmental vein interposition	090	18.00

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## Physician Work Data

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF WORK RECOMMENDATION

April 1999

Recommended RVW: 16.00

CPT (tracking): 3587X1 (W1)

Global: 090

Descriptor: Revision, lower extremity arterial bypass, without thrombectomy, open; with vein patch angioplasty

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**Vignette Used in Survey:**

A 75-year-old man has a critical stenosis in a one-year old femoral-peroneal arterial bypass graft. The graft was constructed with autogenous saphenous vein. Pre-service work includes review of duplex ultrasound, angiogram, and other preoperative tests. At operation, a focal region of intimal hyperplasia is found within the graft. A segment of donor vein is harvested, and graft revision is accomplished by vein patch angioplasty. Post-service work includes all postoperative inpatient care and related outpatient care for 90 days.

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**CLINICAL DESCRIPTION OF SERVICE (This work description was NOT provided on the survey.):**

**Description of Pre-Service Work:**

Pre-service work begins after the decision to operate, from the day before operation until the procedure. This activity includes obtaining and reviewing the previous work-up, reviewing the angiogram and vein mapping study; and consulting with the referring physician, anesthesiologist, and other health care professionals as needed within 24 hours prior to the operation. The surgeon reviews operative risks and benefits with the patient (and/or the family) in order to obtain informed consent. Preoperative work also includes dressing, scrubbing, and waiting to begin the operation; supervising the positioning, prepping, and draping of the patient; and ensuring that the necessary surgical instruments and supplies are available.

**Description of Intra-Service Work:**

A longitudinal skin incision is made over the area of graft stenosis. The dissection is carried through the previous scar and soft tissue until the graft is located. It is dissected free from surrounding tissue. A Doppler is used to confirm the exact region of stenosis. The dissection of carried proximal and distal to the stenosis, and vessel loops are passed around the graft. A vein segment of adequate length is harvested from the vein donor site using a longitudinal skin incision and a subcutaneous dissection. The branches of the vein are ligated and divided. Once an adequate segment dissected free from the surrounding tissue, the vein is ligated at its proximal and distal end and cut. The segment of vein is irrigated with heparinized saline and kept in that solution until used. The patient is anticoagulated with intravenous heparin. After three minutes the graft is clamped proximal and distal to the stenosis. The graft is then opened longitudinally using a fine scalpel, and the incision is elongated with vascular scissors. For patch angioplasty the segment of harvested vein is opened longitudinally, fashioned to appropriate size and shape, then sutured in place across the stenosis with a continuous, fine polypropylene stitch under loupe magnification. Before tying the suture, the clamps are opened briefly, allowing forward and backward flow to irrigate the site and wash out any small clots or debris that may have accumulated. Following placement of the patch the vascular occluding clamps are removed and the distal pulse evaluated. Technical adequacy of the reconstruction is assessed prior to closing the wounds. When the repair is found satisfactory and homeostasis is achieved, the subcutaneous tissue and skin are closed.

**Description of Post-Service Work:**

Post-service work begins after skin closure and includes application of dressings, supervising transport to the recovery area, writing postoperative orders, and communicating with family and referring physicians. The operative note is dictated. The patient is checked in the recovery area for hemodynamic stability, homeostasis at the surgical site, and patency of the reconstruction. Postoperative in-hospital work also includes pain management, wound care, and Doppler examination to assure continuous function of the bypass graft. Discharge management includes the surgeon's final examination of the patient, instructions for outpatient wound care and pain management, and arrangement for follow-up visits. All post-discharge office visits for 90 days after the procedure are included in post-service work. This includes wound checks, removal of sutures, arrangement for subsequent graft surveillance studies, and whatever other diagnostic or therapeutic maneuvers may be necessary for complete postoperative care for the typical patient who more than likely also has a number of cardiovascular and pulmonary comorbidities.

**SURVEY DATA****Presenters:** Gary Seabrook, MD and Robert Zwolak, MD**Specialty:** Society for Vascular Surgery**Sample Size:** 90      **Response Rate (No. and %):** 42 (47%)**Type of Sample:** ~~random~~ Panel ~~-convenience~~


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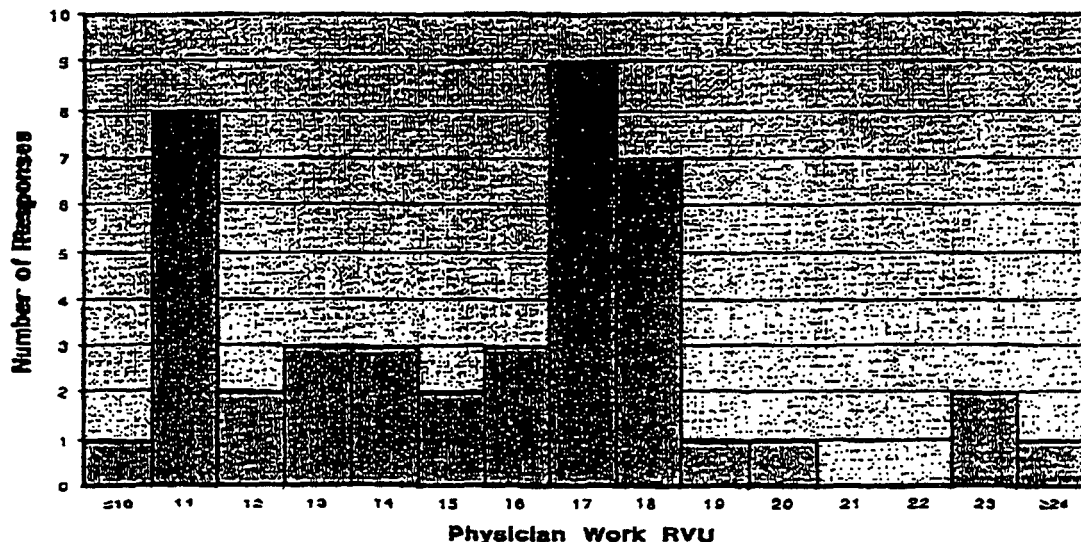
<b><u>Survey RVU</u></b>	Low: 8.00	25th%: 11.87	Med: 16.00	75th%: 17.50	High: 27.00
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**TIME (min) AND VISITS****24 Hr Preceding Service:** Med: 45**Day of Service****Pre-service time:** Med: 30**Intra-service time:** Low: 60      25th%: 90      Med: 120      75th%: 150      High: 240

<b><u>Post Service</u></b>	<b><u>Total Time</u></b>	<b><u>CPT Code / # of visits</u></b>
Same Day	25	99232 x 1
After Same Day		
Critical Care	0	
Other Hospital	45	99231 x 2
Discharge Mgmt	30	99238
Office	35	99214 x 1 and 99213 x 1

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**3587X1 RVU Data Histogram**

**KEY REFERENCE SERVICE(S):**

<u>1999 RVW</u>	<u>Global</u>	<u>CPT</u>	<u>Descriptor</u>
17.00	090	35876	Thrombectomy of arterial or venous graft (other than hemodialysis graft or fistula); with revision of arterial or venous graft
11.38	090	35256	Repair blood vessel with vein graft; lower extremity

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Time Estimates (Median)	<i>Mean</i> Intensity/Complexity Measures		
	3587X1	35876	35256
PRE-service time	75	65	60
INTRA-service time	120	120	120
POST-service time	135	150	105
<b>Mental Effort and Judgment</b>			
The number of possible diagnosis and/or the number of management options that must be considered	3.62	3.68	3.20
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	3.86	3.95	3.10
Urgency of medical decision making	3.45	3.74	3.40
<b>Technical Skill/physical Effort</b>			
Technical skill required	4.07	4.05	3.50
Physical effort required	3.50	3.58	3.20
<b>Psychological Stress</b>			
The risk of significant complications, morbidity and/or mortality	3.86	4.10	3.70
Outcome depends on skill and judgment of physician	4.12	4.21	3.90
Estimated risk of malpractice suit with poor outcome	3.57	3.74	3.30
<b>Time Segments</b>			
PRE-service intensity/complexity	3.71	3.74	3.30
INTRA-service intensity complexity	3.88	4.05	3.60
POST-service intensity complexity	3.29	3.37	3.00

**ADDITIONAL RATIONALE** (describe the process by which your specialty society reached your final recommendation): Intraservice time for the new service equals that of the two comparison codes. Pre-service time for the new code is greater than that of the comps. Post-service time is less than 35876 but more than 35256. Intensity factors for the new code are very similar to those of 35876 but generally greater than those of 35256. Thus, the overall the rated work of new service (median 16) is close to but slightly less than that of 35876 (RVW=17) and reasonably higher than that of 35256 (RVW=11.38).

**FREQUENCY INFORMATION****How was this service previously reported?**

37799      Unlisted procedure, vascular surgery

*plus* a small but unknown percentage of the following three codes:35876 Thrombectomy of arterial or venous graft (other than hemodialysis graft or fistula); with revision  
of arterial or venous graft

35226 Repair blood vessel, direct, lower extremity

35256 Repair blood vessel with vein graft, lower extremity

**How often do physicians in your specialty perform this service?**~~Commonly~~Sometimes~~Rarely~~**Estimate the number of times this service might be provided nationally in a one-year period?**

No accurate data exists, but we estimate less than 1,000.

**Is this service performed by many physicians across the United States?**~~Yes~~No

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF WORK RECOMMENDATION

April 1999

**Recommended RVW:** 19.00

**CPT (tracking):** 3587X2 (W2)

**Global:** 090

**Descriptor:** Revision, lower extremity arterial bypass, without thrombectomy, open; with segmental vein interposition

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**Vignette Used in Survey:**

A 75-year-old man has a critical stenosis in a one-year old femoral-peroneal arterial bypass graft. The graft was constructed with autogenous saphenous vein. Pre-service work includes review of duplex ultrasound, angiogram, and other preoperative tests. At operation, an extensive region of intimal hyperplasia is found within the graft. A segment of donor vein is harvested, and graft revision is accomplished by segmental interposition of the donor vein conduit across the region of stenosis. Post-service work includes all postoperative inpatient care and related outpatient care for 90 days.

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**CLINICAL DESCRIPTION OF SERVICE** (This work description was NOT provided on the survey.):

**Description of Pre-Service Work:**

Pre-service work begins after the decision to operate, from the day before operation until the procedure. This activity includes obtaining and reviewing the previous work-up, reviewing angiogram and vein mapping study; and consulting with the referring physician, anesthesiologist, and other health professionals as needed within 24 hours prior to operation. In addition, the surgeon reviews operative risks and benefits with the patient (and/or the family) in order to obtain informed consent. Preoperative work also includes dressing, scrubbing, and waiting to begin the operation; supervising the positioning, prepping, and draping of the patient; and ensuring that the necessary surgical instruments and supplies are present in the OR.

**Description of Intra-Service Work:**

A longitudinal skin incision is made over the area of graft stenosis. The dissection is carried through the previous scar and soft tissue until the graft is located. It is dissected free from surrounding tissue. A Doppler is used to confirm exact region of stenosis. The dissection is carried proximal and distal, and vessel loops are passed around the graft. A vein segment of adequate length is harvested from a donor site using a longitudinal skin incision and a subcutaneous dissection. The branches of the vein are ligated and divided. Once an adequate segment is dissected from the surrounding tissue, the vein is ligated at proximal and distal ends and cut. The vein is irrigated with heparinized saline and kept in solution until used. The patient is anticoagulated with heparin. After three minutes the graft is clamped proximal and distal to the stenosis. The graft is opened longitudinally using a fine scalpel, and the incision is elongated. Segmental vein graft interposition is performed. The new segment of vein is gently distended with saline and tested for leaks. These are usually repaired with 7-0 polypropylene suture. The bypass graft is transected proximal and distal to the stenotic region. The new segment is interposed by performing two end-to-end anastomoses, under loupe magnification. Forward and back flows are allowed to irrigate the area prior to tying the sutures. Following placement of interposition graft, the vascular occluding clamps are removed and the distal pulse evaluated. Technical adequacy of the reconstruction is assessed prior to closing the wounds. When the repair is found satisfactory and homeostasis is achieved, the subcutaneous tissue and skin are closed.

**Description of Post-Service Work:**

Post-service work begins after skin closure and includes application of dressings, supervising transport to the recovery area, writing postoperative orders, and communicating with family and referring physicians. The operative note is dictated. The patient is checked in the recovery area for hemodynamic stability, homeostasis, and patency of the reconstruction. Postoperative in-hospital work also includes pain management, wound care, and Doppler examination to assure continuous function of the bypass graft. Discharge management includes the surgeon's final exam of the patient, instructions for outpatient wound care and pain management, and arrangement for follow-up visits. All post-discharge office visits for 90 days after the procedure are included in post-service work. This includes wound checks, removal of sutures, arrangement for graft surveillance, and other diagnostic or therapeutic maneuvers necessary for complete postoperative care of the typical patient who also has cardiovascular and pulmonary comorbidities.



**SURVEY DATA****Presenters:** Gary Seabrook, MD and Robert Zwolak, MD**Specialty:** Society for Vascular Surgery**Sample Size:** 90      **Response Rate (No. and %):** 42 (47%)**Type of Sample:** ~~random~~ Panel ~~convenience~~


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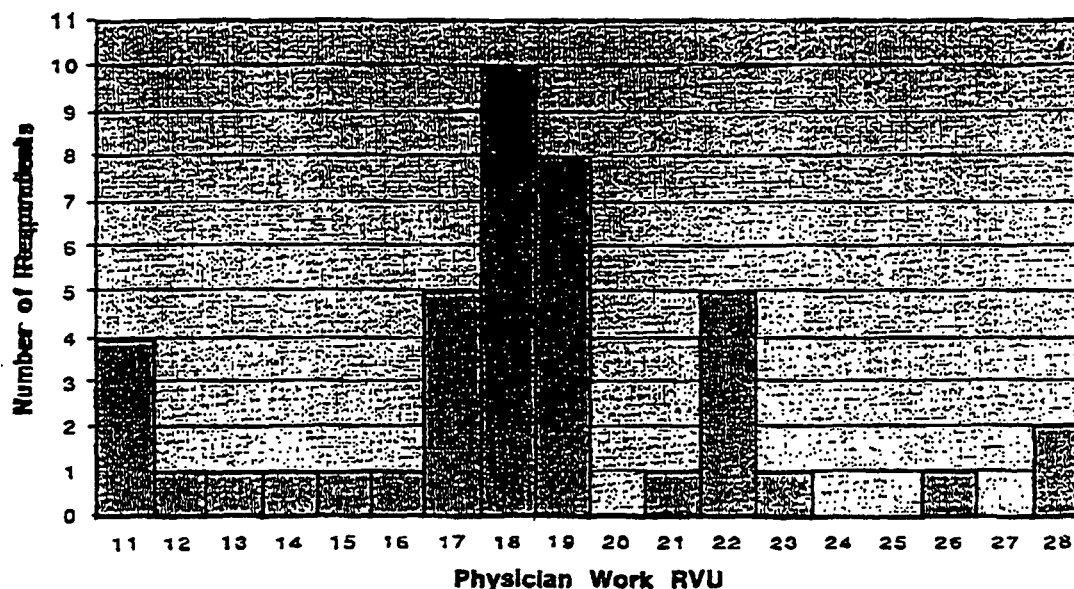
**Survey RVU**      Low: 11.00    25th%: 17.00      Med: 18.00    75th%: 19.50    High: 28.00
 

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**TIME (min) AND VISITS****24 Hr Preceding Service:**      Med: 45**Day of Service****Pre-service time:**      Med: 30**Intra-service time:** Low: 90      25th%: 120      Med: 150      75th%: 180      High: 270

<u>Post Service</u>	<u>Total Time</u>	<u>CPT Code / # of visits</u>
Same Day	25	99232 x 1
After Same Day		
Critical Care	0	
Other Hospital	50	99231 x 3
Discharge Mgmt	30	99238
Office	40	99213 x 2 and 99212 x 1

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**3587X2 RVU Data Histogram**

**KEY REFERENCE SERVICE(S):**

<u>1999 RVW</u>	<u>Global</u>	<u>CPT</u>	<u>Descriptor</u>
21.76	090	35556	Bypass graft, with vein; femoral-popliteal
17.00	090	35876	Thrombectomy of arterial or venous graft (other than hemodialysis graft or fistula); with revision of arterial or venous graft

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Time Estimates (Median)	<i>Mean</i> Intensity/Complexity Measures		
	3587X2	35556	35876
PRE-service time	75	70	75
INTRA-service time	150	150	120
POST-service time	145	165	135
<b>Mental Effort and Judgment</b>			
The number of possible diagnosis and/or the number of management options that must be considered	3.70	3.43	3.71
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	3.83	3.43	4.00
Urgency of medical decision making	3.53	3.00	3.57
<b>Technical Skill/physical Effort</b>			
Technical skill required	4.28	3.71	4.00
Physical effort required	3.83	3.71	3.64
<b>Psychological Stress</b>			
The risk of significant complications, morbidity and/or mortality	3.98	3.71	3.93
Outcome depends on skill and judgment of physician	4.35	3.71	4.14
Estimated risk of malpractice suit with poor outcome	3.58	3.43	3.71
<b>Time Segments</b>			
PRE-service intensity/complexity	3.71	3.29	3.67
INTRA-service intensity complexity	4.10	3.86	4.00
POST-service intensity complexity	3.27	3.29	3.33

**ADDITIONAL RATIONALE** (describe the process by which your specialty society reached your final recommendation): The survey RVWs are nicely distributed about the median of 18, but the relationship table justifies a substantially higher RVW. The intraservice time of the new code equals that of the primary comparison, CPT 35556. Pre service time exceeds 35556 by 5 minutes, and post-service time is 20 minutes less, one or two short visits. Ten of the eleven intensity factors are greater for the new code than 35556, and the last is essentially equal. Thus, the new code has slightly less time but more intensity than 35556. This argues for a new code value equal or almost equal to the RVW of 35556, or 21.76 RVUs.

Comparison with the second code also provides justification for an RVW greater than the median survey. The new code has 30 minutes more intraservice time than 35876, equal pre-service time, and 30 minutes more post-service time. The intensity factor comparison is pretty much a draw. At a very conservative rate of 4 RVUs per hour for OR time the extra 30 minutes justifies 2 RVUs. In addition, 2 extra 99212s would justify an extra 0.90 RVUs. The value of 35876 is 17.00. Adding 2 RVUs for intraservice and 0.9 RVUs for post-service time indicates a value of 19.9 RVUs for the new service.

Thus, based on the data in this comparison table we feel there exists a compelling justification to recommend an RVW one unit higher than the median survey, or 19 RVUs.

**FREQUENCY INFORMATION****How was this service previously reported?**

37799 Unlisted procedure, vascular surgery

*plus* a small but unknown percentage of the following two codes:

35876 Thrombectomy of arterial or venous graft (other than hemodialysis graft or fistula); with revision of arterial or venous graft

35256 Repair blood vessel with vein graft; lower extremity

**How often do physicians in your specialty perform this service?**~~Commonly~~    Sometimes    ~~Rarely~~**Estimate the number of times this service might be provided nationally in a one-year period?**

No data exists to make a reasonable prediction, but we guesstimate less than 1,000.

**Is this service performed by many physicians across the United States?**~~Yes~~    No

**AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE**  
**SUMMARY OF RECOMMENDATIONS**  
**May 1999**

**PACING CARDIOVERTER-DEFIBRILLATOR PACEMAKER SYSTEMS**

***Work Relative Value Recommendations***

Several editorial and substantive changes were adopted by the CPT Editorial Panel for inclusion in CPT 2000. CPT codes that report services related to the implantation of pacing cardioverter-defibrillator generators. These changes are thoroughly outlined in the summary table below.

As a result of these changes, the RUC examined physician work relative values for two CPT codes within this section. The changes to the descriptor language necessitated a review of these codes. All other modifications were considered editorial by physicians. However, they have been included in the summary as a reference tool.

**CPT Code 33244**

CPT code 33244 was revised in part to describe *Removal of single or dual chamber pacing cardioverter-defibrillator electrode(s); by transvenous extraction*. The physician work associated with CPT code 33244 had been valued at 8.97.

In developing an appropriate work relative value unit for the revised code, the RUC backed out 3.24 rvu's from the proposed rvu of 17.00 presented in the survey data. The value of 3.24 represents the physician work associated with a generator removal (CPT code 33241 *Removal of implantable cardioverter defibrillator pulse generator only*, work rvu = 3.24). It is expected that CPT code 33241 will also be billed with 33244.

The proposed rvw of 17.00 was the median survey value derived from specialty society's surveys. The RUC reasoned that surveyed physicians did not consider that 33241 would be separately coded, and that they included the physician work of 33241 in their estimate of the work for revised code 33244.

As such, RUC members reached a consensus that 13.76 was an appropriate work relative value unit for the revised CPT code.

### **CPT Code 33249**

CPT code 33249 was modified for CPT 2000 to report *Insertion or repositioning of electrode lead(s) for single or dual chamber pacing cardioverter-defibrillator and insertion of pulse generator*. The physician work value assigned to this code previously was 13.28.

In considering the work involved in the new descriptor for CPT 33249, the RUC used a building block methodology to determine a new relative value unit. It was noted that the primary procedure is the insertion of leads (CPT 33247 *Insertion or replacement of implantable cardioverter-defibrillator lead(s), by other than thoracotomy*, work RVU = 10.21). The RUC added one-half the value of the implantation of a single chamber device plus an additional lead (CPT 33207 *Insertion or replacement of permanent pacemaker with transvenous electrodes* work, work rvu= 8.04) to arrive at a total work RVU of 14.23. The RUC agreed that the additional work of another chamber and lead justified an increased work rvu. As such, the RUC supports adoption of 14.23 as the new rvu for revised CPT code 33249.

### ***Practice Expense Recommendations***

No practice expense data was presented for these revised codes. As such, the RUC does not have any formal recommendations at this time.

*CPT five-digit codes, two-digit modifiers, and descriptions only are copyright by the American Medical Association.*

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
		<p>A pacemaker system includes a pulse generator containing electronics and a battery, and one or more electrodes (leads) <del>inserted one of several ways</del>. Pulse generators <del>may be</del> <u>are</u> placed in a subcutaneous “pocket” created in either a subclavicular <del>or intra-abdominal</del> site <u>or underneath the abdominal muscles just below the ribcage</u>. Electrodes may be inserted through a vein (transvenous) or <u>they may be placed</u> on the surface of the heart (epicardial). <u>The epicardial location of electrodes requires a thoracotomy for electrode insertion.</u></p> <p>A single chamber <u>pacemaker</u> system includes a pulse generator and one electrode inserted in either the atrium or the ventricle. A dual chamber <u>pacemaker</u> system includes a pulse generator and one electrode inserted in the atrium and one electrode inserted in the ventricle.</p> <p><del>Similarly,</del> <u>Like a pacemaker system,</u> a pacing cardioverter-defibrillator system <del>also</del> includes a pulse generator and electrodes, <del>although pacing cardioverter-defibrillators may require multiple leads, even when only a single chamber is being paced.</del> <u>A pacing cardioverter-defibrillator system may be inserted in a single chamber (pacing in the ventricle) or in dual chambers (pacing in atrium and ventricle).</u></p>		

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CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
<p><u>These devices use a combination of antitachycardia pacing, low energy cardioversion or defibrillating shocks to treat ventricular tachycardia or ventricular fibrillation.</u></p> <p><u>The Pacing cardioverter-defibrillator pulse generators may also be placed- implanted in a subcutaneous subinfraclavicular pocket or in an intraabdominal pocket. Removal of a pacing cardioverter-defibrillator pulse generator requires opening of the existing subcutaneous pocket and disconnection of the pulse generator from its electrode(s). A thoracotomy (or laparotomy in the case of abdominally-placed pulse generators) is not required to remove the pulse generator.</u></p> <p><u>These electrodes (leads) of a pacing cardioverter-defibrillator system are positioned in the heart via the venous system (transvenously) may also be inserted transvenously or epicardially, in most circumstances. Electrode positioning on the epicardial surface of the heart requires a thoracotomy (codes 33245-33246). Removal of electrode(s) may first be attempted by transvenous extraction (code 33244). However, if transvenous extraction is unsuccessful, a thoracotomy may be required to remove the electrodes (code 33243).</u></p> <p><u>When the “battery” of a pacemaker or pacing cardioverter-defibrillator is changed, it is actually the pulse generator that is changed. Replacement of a pulse generator for either a pacemaker or defibrillator system, requires selection of should be reported with a code for removal of the pulse generator and another code for the insertion of a pulse generator.</u></p> <p>These procedures include repositioning or replacement in the first 14 days after the insertion (or replacement) of the device.</p> <p>Modifiers ‘-76’ and ‘-77’ are not reported with pacemaker or <u>pacing cardioverter-defibrillator</u> codes after 14 days as these are considered new, not repeat, services.</p>				
▲33216		Insertion, <del>replacement</del> or repositioning of permanent transvenous electrode(s) <del>only</del> (15 days or more after initial insertion); single chamber (one electrode), atrial or ventricular permanent pacemaker or single chamber pacing cardioverter-defibrillator	090	5.39 (No Change)

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CPT Code (●New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
▲33217		dual chamber (two electrodes permanent <u>pacemaker or a dual chamber pacing cardioverter-defibrillator</u> )  (Do not report codes 33216-33217 in conjunction with code 33214)	090	5.75 (No Change)
▲33218		Repair of <u>single transvenous electrode for a pacemaker electrode(s) only; single chamber, atrial or ventricular permanent pacemaker or single chamber pacing cardioverter-defibrillator</u>	090	5.44 (No Change)
▲33220		Repair of <u>two transvenous electrodes for a dual chamber permanent pacemaker or dual chamber pacing cardioverter-defibrillator</u>	090	5.52 (No Change)
▲33223		Revision <del>or relocation</del> of skin pocket for <u>implantable single or dual chamber pacing cardioverter-defibrillator</u>	090	6.46 (No Change)
▲33240		Insertion <del>or replacement of implantable</del> <u>of single or dual chamber pacing cardioverter-defibrillator pulse generator only</u>	090	7.60 (No Change)

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CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
▲33241		<p><del>Subcutaneous R</del>removal of <del>implantable single or dual chamber pacing</del> cardioverter-defibrillator pulse generator only</p> <p>(For removal of electrode(s) by thoracotomy, use 33243 in conjunction with code 33241)</p> <p>(For removal of electrode(s) by transvenous extraction, use 33244 in conjunction with code 33241)</p> <p>(For removal and reinsertion of a pacing cardioverter-defibrillator system (pulse generator and electrodes), report 33241 and 33243 or 33244 and 33249)</p>	090	<p>3.24</p> <p>( No Change)</p>
▲33242		<p><del>Repair of implantable single or dual chamber pacing cardioverter-defibrillator pulse generator and/or leads</del></p> <p>(33242 has been deleted. To report, see 33218, 33220)</p>	090	<p>6.17</p> <p>(Deleted Code)</p>
▲33243		<p>Removal of <del>implantable single or dual chamber pacing cardioverter-defibrillator electrode(s); pulse generator and/or lead(s) system;</del> by thoracotomy</p>	090	<p>22.64</p> <p>(No Change)</p>
▲33244	B1	<p>by <del>other than thoracotomy</del> <u>transvenous extraction</u></p> <p>(For subcutaneous removal of the pulse generator, use 33241 in conjunction with code 33243 or 33244)</p>	090	<p>13.76</p>

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CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
▲33245		<del>Implantation or replacement</del> <u>Insertion of epicardial implantable single or dual chamber pacing cardioverter-defibrillator pads electrodes by thoracotomy; with or without sensing electrodes;</u>	090	14.30 ( No Change
▲33246		<del>with insertion of implantable cardioverter-defibrillator</del> pulse generator	090	20.71 ( No Change)
▲33247		<del>Insertion or replacement of implantable cardioverter-defibrillator lead(s), by other than thoracotomy</del>  (33247 has been deleted. To report, use 33216)	090	10.21 <b>Deleted Code</b>
▲33249	B2	<del>with insertion of cardio-defibrillator pulse-generator</del>  <u>Insertion or repositioning of electrode lead(s) for single or dual chamber pacing cardioverter-defibrillator and insertion of pulse generator</u>  (For removal and reinsertion of a pacing cardioverter-defibrillator system (pulse generator and electrodes), report 33241 and 33243 or 33244 and 33249)	090	14.23

CPT five-digit codes, two-digit modifiers, and descriptions only are copyright by the American Medical Association.

## Physician Work Data

### Staff Note

CPT Editorial Research & Development editorially revised the descriptor language for the CPT codes contained in this section subsequent to the CPT Panel meetings. As such, the descriptor language contained on the "Summary of Recommendation" forms prepared by specialty societies may not be identical to that which appears in the RUC's final recommendations. The editorial changes that were adopted did not affect the survey process or the relative value recommendations.

**AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF RECOMMENDATION**

CPT Code: 33244 Tracking Number: B1 Global Period: 090 Recommended RVW: 17.00

CPT Descriptor: Removal of pacing cardioverter-defibrillator pulse generator lead(s); by transvenous extraction<sup>1</sup>

**CLINICAL DESCRIPTION OF SERVICE:**

**Vignette Used in Survey:** Three years ago, a 72 year old male with a history of coronary heart disease, symptomatic sinus bradycardia and cardiac arrest, underwent insertion of a combination implantable cardioverter defibrillator (ICD) pacemaker pulse generator capable of dual chamber (atrial or ventricular) rate responsive pacing with a transvenous tined defibrillator electrode lead in the right ventricle, a second transvenous coil defibrillator lead in the superior vena cava innominate vein, and a third transvenous active fixation pacing-sensing lead in the right atrium. One year ago, the patient underwent elective ICD pulse generator replacement and then developed an inflammatory response (suspect infection) of the pulse generator pocket and lead system. He underwent three courses of antibiotic therapy over the next several months. However, he continued to have recurrence of low-grade fevers, erythema, and effusion of the pulse generator pocket. Recent blood cultures were positive for staphylococcus epidermitis and gram negative bacilli. It is now recognized that the ICD system, including the pulse generator and all leads, are infected and that total extraction of the hardware is required. His current cardiac evaluation identified a left ventricular ejection fraction of 25%, mild congestive heart failure, and no evidence of amiodarone toxicity. Analysis of his ICD system demonstrated multiple episodes of ventricular tachycardia successfully terminated by anti-tachycardia pacing and three episodes of ventricular fibrillation requiring high-energy defibrillation shocks. The physician prepares for an initial superior subclavian vein extraction approach of the three leads, as well as an inferior femoral vein extraction approach if the former proves unsuccessful for any one of the three leads, using the laser extraction system or the locking stillete system. Following the procedure, the patient will require multiple days of intensive care unit monitoring, possible temporary bradycardia pacing and standby cardiac defibrillation because of recurrent ventricular tachycardia and ventricular fibrillation while the infection is resolving.

**Description of Pre-Service Work:** A pertinent history and physical examination are performed. All laboratory tests, including blood tests, chest x-ray, and ECG, are reviewed. The risks and benefits and alternatives to the procedure are discussed with the patient and family, and informed consent is obtained. The pertinent history, physical examination, and subsequent discussion are documented in the patient's hospital chart. Consultation is made with the patient's primary physician, and the decision to proceed with surgery is made.

**Description of Intra-Service Work:** The procedure is performed under ECG, intraarterial blood pressure, and pulse oximetry monitoring. The patient is prepped, given conscious sedation, and local anesthesia. General anesthesia may be warranted in selected cases. An incision is made over the previously made generator pocket, and the pulse generator is exposed and removed from the fibrous capsule. The leads, including suture ties, are freed from the capsule. The generator is disconnected from the leads and removed from the pocket. The leads are cut to expose their inner cores and are then sized to accept the locking stylet which is passed through the inner core of the lead to its distal end where it is engaged under gentle traction. A firm plastic sheath is placed over the stylet and lead, freeing the lead from intravascular adhesions as it is advanced toward the lead's distal end. Firm traction is applied to the locking stylet while countertraction is applied to the endocardial surface with the plastic sheath. This process is repeated for a possible second and third transvenous lead as part of the ICD and pacemaker system. Alternatively, and at times in the same setting, leads are extracted from the femoral approach. A large bore sheath is inserted in the femoral vein and advanced to the right atrium. A deflectable tip wire and a dotter basket are passed through the sheath to the right atrium. Leads can be grasped with the wire and withdrawn into the basket where they are ensnared. While applying traction to the lead, the sheath is passed

<sup>1</sup> This was the descriptor provided for use in the survey. The CPT panel subsequently revised the descriptor to read, "Removal of *single or dual chamber* pacing cardioverter-defibrillator pulse generator lead(s); by transvenous extraction." Adding the term "single or dual chamber" is an editorial change.

over the wire, basket, and lead to the endocardial surface for countertraction. Once freed, a lead is withdrawn into the sheath, and both are removed from the vein where pressure is applied and hemostasis is achieved. (Leads can also be removed with a laser lead extraction system. The proximal portion of the lead is cut, and the laser sheath is placed over the body of the lead. The laser sheath is then advanced over the lead through the vascular system into the heart to break up adhesions and free the lead from the endocardial surface. Such sheaths are large, being 14 french, because of the large diameter of the ICD leads. The laser sheath and lead are then removed from the heart and venous system). If a subcutaneous patch lead is part of the ICD system, an incision is made over the patch and extended to the surrounding capsule. The patch is then dissected free from the capsule, and the lead is removed. The wounds are closed and dressed. The physician documents these services, generates a report, and communicates with the referring physician and family.

Description of Post-Service Work: The patient must be monitored throughout the anesthesia and surgical recovery period for potential postoperative complications which include pericardial effusion with tamponade. Such patients often undergo this procedure because there is a problem with integrity of the device or infection is present and the implantable defibrillator is removed. Therefore, life-threatening ventricular arrhythmias are a significant risk and must be treated appropriately until a new device can be placed. A minimum of 24 hours of ICU care is required, and the patient is then transferred to a telemetry unit.

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**SURVEY DATA:**

Presenter: Stephen Hammill, M.D., F.A.C.C. – American College of Cardiology/North American Society of Pacing and Electrophysiology

Specialty: Cardiology

Sample Size: 116 Response Rate: (%): 44% Final Median RVW: 17

Explanation of Sampling Technique: Three hundred randomly selected American members of the North American Society for Pacing and Electrophysiology were asked if they were willing to respond to a survey on the relative value of this procedure. One hundred sixteen responded that they would and they were subsequently sent the survey documents.

25th Percentile RVW: 11.5 75th Percentile RVW: 20 Low: 6.5 High: 35

Median Pre-Service Time: 60 Median Intra-Service Time: 180

25th Percentile Intra-Svc Time: 120 75th Percentile Intra-Svc Time: 225 Low: 45 High: 400

Median Number of Post Procedure Visits: 5 Median Total Time of Post Procedure Visits: 190

**KEY REFERENCE SERVICE:**

<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
1) 33235	Removal of transvenous pacemaker electrode(s); dual lead system	9.4

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. Make certain that you are including the data from the service that you are rating as well as the key reference services.

**TIME ESTIMATES (Median)**

	<u>CPT Code</u>	<u>Reference Service 1</u>	<u>Reference Service 2</u>
Median Pre-Time	60	60	
Median Intra-Time	180	120	
Median Post-Time	190	135	

**INTENSITY/COMPLEXITY MEASURES (Mean)****Mental Effort and Judgement (Mean)**

The number of possible diagnosis and/or the number of management options that must be considered	4.31	3.96	
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.27	3.8	

33244

Urgency of medical decision making	4.49	4.04	
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**Technical Skill/Physical Effort (Mean)**

Technical skill required	4.84	4.56	
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Physical effort required	4.73	4.44	
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**Psychological Stress (Mean)**

The risk of significant complications, morbidity and/or mortality	4.84	4.44	
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Outcome depends on the skill and judgment of physician	4.80	4.6	
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Estimated risk of malpractice suit with poor outcome	4.61	4.44	
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**INTENSITY/COMPLEXITY MEASURES****CPT Code****Reference  
Service 1****Reference  
Service 2****Time Segments (Mean)**

Pre-Service intensity/complexity	4.2	3.8	
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Intra-Service intensity/complexity	4.86	4.44	
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Post-Service intensity/complexity	4.02	3.4	
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**ADDITIONAL RATIONALE****FREQUENCY INFORMATION**

How was this service previously reported? 33235 with a 22 modifier ("service provided is greater than that usually required for the listed procedure...")

How often do physicians in your specialty perform this service? \_\_Commonly \_\_Sometimes x Rarely

Estimate the number of times this service might be provided nationally in a one-year period? 200

Do many physicians perform this service across the United States? x Yes \_\_No



**AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF RECOMMENDATION**

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CPT Code: 33249 Tracking Number: B2 Global Period: 090 Recommended RVW: 15.41

CPT Descriptor: Insertion or repositioning of electrode lead(s) for pacing cardioverter-defibrillator and insertion of pulse generator

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**CLINICAL DESCRIPTION OF SERVICE:**

Vignette Used in Survey: A 66 year old self-employed grocer with coronary artery disease, history of myocardial infarction (2 years ago) presents with a left ventricular ejection fraction of 38% with re-current sustained ventricular tachycardia. His clinical state is further complicated by frequent episodes of paroxysmal atrial fibrillation and atrial flutter requiring therapy. In the presence of anti rhythmic agents he also demonstrates symptomatic bradycardia episodes consistent with drug aggravated sick sinus syndrome. Insertion of an implantable cardioverter-defibrillator system using non-thoracotomy leads including an atrial lead to provide dual chamber physiological pacing and enhanced tachycardia detection is indicated.

Description of Pre-Service Work: A pertinent history and physical examination are performed. All laboratory tests, including blood tests, chest x-ray, and ECG are reviewed. The risks and benefits of and alternatives to the procedure are discussed with the patient, and informed consent is obtained. The pertinent history and physical examination and subsequent discussion are documented in the patient's records. Consultation is made with the patient's primary physician, and the decision to proceed with surgery is made.

Description of Intra-Service Work: The procedure is performed under ECG, intraarterial blood pressure, and pulse oximetry monitoring. The patient is prepped, given IV antibiotic prophylaxis, and placed under conscious sedation or general anesthesia. Local anesthetic is injected into the region where the incision is made (unless the patient is under general anesthesia), and an incision is then made in the prepectoral region below either the right or left clavicle. Subcutaneous dissection is performed, and the ICD leads are inserted into the subclavian or cephalic vein and passed into the right ventricle and right atrium. The leads are positioned, and adequate pacing, sensing, and impedance characteristics are confirmed with a pacing system analyzer. The leads may require repositioning to ensure adequate sensing and pacing. A combination dual-chamber pacemaker/ICD pulse generator is attached to the atrial and ventricular leads, and both the pulse generator and leads are placed in the pacemaker pocket. Sensing, pacing, and impedance characteristics of both the atrial and ventricular leads are again assessed through the new generator. Several episodes of ventricular fibrillation are then induced to make certain the arrhythmia is properly detected and terminated by the ICD, and the defibrillation threshold is determined. The defibrillation lead may require repositioning to ensure an adequate defibrillation threshold. The incision is then closed and the wound is dressed. The physician documents these services, generates a report, and communicates with the referring physician, patient, and family.

Description of Post-Service Work: After monitoring the vital signs and obtaining and reviewing a chest x-ray and electrocardiogram, the ICD sensing, pacing, and impedance characteristics are assessed, and final settings for the ICD and dual-chamber pacemaker are determined. The wound is assessed and instruction for postoperative care is given. The patient returns to the pacemaker clinic where appropriate pacemaker sensing and capture are once again determined, and the ICD is interrogated. The patient is exercised to assess rate-responsive settings. The wound is assessed with respect to appropriate healing. The dressing is removed. Any required antibiotics or analgesic medications are prescribed.

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**SURVEY DATA:**

Presenter: Stephen Hammill, M.D., F.A.C.C. American College of Cardiology/North American Society of Pacing and Electrophysiology

Specialty: Cardiology

Sample Size: 116 Response Rate: (%): 40 Final Median RVW: 13

Explanation of Sampling Technique: Three hundred randomly selected American members of the North American Society for Pacing and Electrophysiology were asked if they were willing to respond to a survey on the relative value of this procedure. One hundred sixteen responded that they would and they were subsequently sent the survey documents.

25th Percentile RVW: 11 75th Percentile RVW: 15 Low: 7 High: 20

Median Pre-Service Time: 60 Median Intra-Service Time: 120

25th Percentile Intra-Svc Time: 90 75th Percentile Intra-Svc Time: 140 Low: 45 High: 240

Median Number of Post Procedure Visits: 3 Median Total Time of Post Procedure Visits: 77.5

**KEY REFERENCE SERVICES:**

<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
1) 33247	Insertion or replacement of implantable cardioverter-defibrillator lead(s), by other than thoracotomy	10.21
Additional:		
33240	Insertion or replacement of implantable cardioverter-defibrillator pulse generator only.	7.6
33216	Insertion, replacement or repositioning of permanent transvenous electrode(s) only (15 days or more after initial insertion); single chamber, atrial or ventricular.	5.39

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. Make certain that you are including the data from the service that you are rating as well as the key reference services.

<u>TIME ESTIMATES (Median)</u>	<u>CPT Code</u>	<u>Reference Service 1</u>	<u>Reference Service 2</u>
Median Pre-Time	60	60	
Median Intra-Time	120	90	
Median Post-Time	77.5	60	

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**INTENSITY/COMPLEXITY MEASURES (Mean)**

**Mental Effort and Judgement (Mean)**

The number of possible diagnosis and/or the number of management options that must be considered	4.32	4.12	
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.32	4.17	
Urgency of medical decision making	4.26	4.22	

**Technical Skill/Physical Effort (Mean)**

Technical skill required	4.57	4.24	
Physical effort required	4.04	3.9	

**Psychological Stress (Mean)**

The risk of significant complications, morbidity and/or mortality	4.49	4.37	
Outcome depends on the skill and judgement of physician	4.53	4.41	
Estimated risk of malpractice suit with poor outcome	4.25	4.13	

**INTENSITY/COMPLEXITY MEASURES**

**CPT Code**

**Reference  
Service 1**

**Reference  
Service 2**

**Time Segments (Mean)**

Pre-Service intensity/complexity	4.08	3.95	
Intra-Service intensity/complexity	4.55	4.22	
Post-Service intensity/complexity	3.62	3.66	

**ADDITIONAL RATIONALE**

The recommended RVW for 33249 is a combined value. It equals 100% of the value of 33247 (insertion or replacement of implantable cardioverter-defibrillator lead(s), by other than thoracotomy; valued at 10.21), and 40% of the combined values for 33240 (insertion or replacement of implantable cardioverter-defibrillator pulse generator only; valued at 7.6 RVW) and 33216 (insertion, replacement or repositioning of permanent transvenous electrode(s) only [15 days or more after initial insertion]; single chamber, atrial or ventricular; valued at 5.39 RVW).

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**FREQUENCY INFORMATION**

How was this service previously reported? 33247 + 33240 + 33216

How often do physicians in your specialty perform this service? ☒ Commonly ☐ Sometimes ☐ Rarely

Estimate the number of times this service might be provided nationally in a one-year period? 15,000

Do many physicians perform this service across the United States? ☒ Yes ☐ No

**AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE  
SUMMARY OF RECOMMENDATIONS**

**May 1999**

**PERCUTANEOUS LYSIS OF EPIDURAL ADHESIONS**

***Work Relative Value Recommendations***

A new code was created (CPT 62263) was created to describe *Percutaneous lysis of epidural adhesions using solution injection (eg, hypertonic saline, enzyme) or mechanical means (eg, spring-wound catheter) including radiologic localization (includes contrast when administered)*. The new code describes percutaneous catheter-based treatment to reduce or eliminate inflammation and scarring in and around nerve roots or spinal nerves. After the catheter is placed, under fluoroscopic guidance, a series of injections or infusions are given over a span of one to four days, with repeat epidurograms to verify correct catheter placement and evaluate the opening of constricted scar areas around the target nerves/nerve roots.

The procedure is performed about 1,000-2,000 times annually at multiple centers. This is a very selected technique for a specific subset of patients with chronic low back pain with radiculopathy. The services performed are currently reported under 64999 *Unlisted procedure, nervous system*.

Physicians developed a building block approach when proposing a work relative value unit. The building block approach estimates the typical patient as having a 2.5 injections /infusions over a two-three day hospital stay. Four components were included in this analysis:

Component 1: Catheter Placement and Injection of Anesthetic and Contrast: CPT 62279 *Injection of diagnostic or therapeutic anesthetic or antispasmodic substance (including narcotics); epidural, lumbar or caudal, continuous* (work RVU = 1.58) most accurately covers this phase of the service, since it includes insertion of a catheter into the lumbar epidural space for injection of a diagnostic or therapeutic substance. Twice the total work of CPT 62279 is approximately equal to the first part of 62263 in that it

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covers catheter insertion into a scarred epidural space, injection of contrast and analgesic, and steering the catheter tip into the position to deliver a neurolytic substance aimed at the adhesions. This equates to 3.16 rvus (2 x 1.58 rvus).

Component 2: Injections/Infusions: CPT 62282 *Injection of neurolytic substance (eg alcohol, phenol, iced saline solutions); epidural, lumbar or caudal* (work rvu= 2.33) is used as a reference for this component since it covers the injection of neurolytic material into the lumbar epidural space. CPT 62282 has a rvu of 2.33 and a global period of 10 days. The RUC estimated that the “injection” portion of 62282 is approximately 1/3 of the total work or .77 rvus. It was also estimated that the typical patient will receive between two to three injections. This equates to 1.94 rvus (2.33 rvus x .33% x 2.5 injections).

Component 3: Fluoroscopic Guidance: New code 7600 (M13) is used as a reference code for this component which is included as part of new code 62263 and not separately billable. It is estimated that fluoroscopic guidance will be required for the initial catheter steering and placement, and once more during one of the repeat injections to further examine catheter position. This equates to 1.20 rvu's (2 x .60 rvus).

Component 4: Evaluation and Management: The survey results indicate, and RUC members agreed, that there would be two Level 2 post discharge office visits. This equates to .90 rvu's (2 x .45 rvus).

These components equal 7.20 rvus (3.16 + 1.94+ 1.20 + .90). The RUC agreed that this value was a reasonable recommendation for this new code, which has bundled procedures and work from several codes into one. Based on this analysis, the RUC recommends acceptance of 7.20 as the work relative value unit for newly created CPT code 62263.

### ***Practice Expense Recommendations***

The RUC is not making any practice expense recommendations for this code. The RUC agreed to table the practice expense recommendations since it was not able to fully evaluate the specialties' recommended crosswalk for this code.

<b>CPT Code (•New)</b>	<b>Track- ing Number</b>	<b>CPT Descriptor</b>	<b>Global Period</b>	<b>Work RVU Recommendation</b>
•62263	S1	Percutaneous lysis of epidural adhesions using solution injection (eg, hypertonic saline, enzyme) or mechanical means (eg, spring-wound catheter) including radiologic localization (includes contrast when administered)	010	7.20

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## Physician Work Data



**Recommended RVW:** 7.20

**CPT Code/ Tracking:** 6226X (S1)

**Global Period:** 010

**CPT Descriptor:** Percutaneous lysis of epidural adhesions, with or without endoscopic guidance, using solution injection (e.g., hypertonic saline, enzyme) or mechanical means (e.g., spring-wound catheter) including x-ray localization with or without contrast

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**Vignette Used in Survey:** A 35-year-old male has severe pain (rated at 8/10) located in the right lower back and radiates down the outside of the right leg to the top of the foot and the big toe after multiple back operations over a 10-year period. Various systemic medications (oral narcotic and non-narcotic) and physical therapy have failed to provide significant long-term pain relief. A catheter is placed percutaneously in the epidural space; an epidurogram is performed to identify the areas of scar, nerve constriction, and possible nerve inflammation and degree of fluid flow (or lack thereof) in the epidural space; and the epidural adhesions are lysed. *[Please note that this service has a global period of 10 days.]*

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## **CLINICAL DESCRIPTION OF SERVICE** (This work description was NOT provided on the survey.):

### **Description of Pre-Service Work:**

Review of records and any pertinent imaging studies (e.g., spine MRI); examine patient for evidence of a single nerve root or spinal nerve dysfunction; communicating with other professionals, patient, and family; and obtaining consent. The pre-operative work also includes dressing, scrubbing, and waiting before the procedure, preparing the patient and needed equipment for the procedure, positioning the patient on the x-ray table, and draping of the catheter puncture site.

### **Description of Intra-Service Work:**

The skin is locally anesthetized. The introduction needle is directed into the epidural space at the proper vertebral level or the caudal epidural space, under x-ray fluoroscopy. A flexible, directable catheter is introduced through the needle into the epidural space. The catheter tip is carefully maneuvered in the epidural space around bands of scar tissue until it is in the focal scar tissue at the target spinal nerve-nerve root. A contrast injection is performed to confirm needle tip or catheter location and determine degree of free flow of liquid in the epidural space (e.g., determine areas of scarring in the epidural space). This injection also is used with temporary fluorogram monitor views to evaluate the nerve roots and spinal nerves in the area and any focal constriction or swelling of the nerve. The free flow of dye through the epidural space adjacent to this target spinal nerve-nerve root is also determined. A decision on the number, type, and quantity of injections/infusions is made. For the typical patient described above, an injection is given at this point of hyaluronidase, local anesthetic, and steroid, followed 30 minutes later by an injection of hypertonic (10%) saline. The catheter exit site is dressed for sterility and secured and the patient is admitted to the hospital for two days. At 12-24 hours and at 24-48 hours later, injections are repeated, using local anesthetic, hyaluronidase, steroid, and hypertonic saline. Also, at each series of injections, a repeat epidural contrast injection is performed with temporary fluorogram monitor views to verify correct catheter placement. Also evaluated is the surrounding epidural space, including the gradual opening of constricted scar areas around the target nerves/nerve roots. After the third series of injections, the catheter is removed and a sterile dressing applied.

### **Description of Post-Service Work:**

The patient is closely observed for one to two hours after each injection/infusion, for any new/ unexpected neurologic deficits. The physician communicates findings with the patient and other professionals (including written and telephone reports and orders). Additionally, two follow-up office visits are scheduled within the 10-day global period to monitor the patient for clinical response to the procedure and for wound care.

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**SURVEY DATA**

**Presenter(s):** Samuel Hassenbusch, MD (AANS/CNS)  
Peter Dempsey, MD (AANS)

**Specialty(s):** American Association of Neurological Surgeons/Congress of Neurological Surgeons

**Sample Size:** 59      **Response Rate (No. and %):** 34 (58%)

**Type of Sample:** Random

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<b><u>Survey RVW</u></b>	Low: 3.40	25th%: 11.43	Med: 12.45	75th%: 13.43	High: 21.00
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**TIME (min) AND VISITS**

**24 Hr Preceding Service:**      **Med: 38**

**Day of Service**

Pre-service time:      **Med: 20**

Intra-service time:      Low: 30      25th%: 60      **Med: 75**      75th%: 90      High: 150

<b><u>Post Service</u></b>	<b><u>Total Time</u></b>	<b><u>CPT Code / # of visits</u></b>
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Same Day:	40	99233
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After Same Day:

Critical Care	0	
Other Hospital	20	99232 x 1
Discharge Mgmt	30	99238
Office	20	99212 x 2

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**KEY REFERENCE SERVICE(S):**

<b><u>99 RVW</u></b>	<b><u>Global</u></b>	<b><u>CPT</u></b>	<b><u>Descriptor</u></b>
6.74	90	63650	Percutaneous implantation of neurostimulator electrode array, epidural
2.33	10	62282	Injection of neurolytic substance (eg, alcohol, phenol, iced saline solutions); epidural, lumbar or caudal
0.60*	XXX	7600X	Fluoroscopic guidance and localization of needle or catheter tip for spine or paraspinal diagnostic or therapeutic injection procedures (epidural, transforaminal epidural, subarachnoid, paravertebral facet joint) including neurolytic agent destruction, paravertebral facet joint nerve or sacroiliac joint

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\*This RVW is proposed for new code 7600X (M13). To be presented at April/May 1999 RUC meeting.

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Time Estimates (Median)	<i>Mean</i> Intensity/Complexity Measures		
	6226X (S1)	62282	63650
PRE-service time	58	40	65
INTRA-service time	75	75	60
POST-service time	110	40	45
<b>Mental Effort and Judgment</b>			
The number of possible diagnosis and/or the number of management options that must be considered	4.48	4.00	4.67
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	4.21	3.14	4.58
Urgency of medical decision making	2.91	2.29	3.25
<b>Technical Skill/physical Effort</b>			
Technical skill required	4.76	3.86	4.50
Physical effort required	3.79	3.14	3.75
<b>Psychological Stress</b>			
The risk of significant complications, morbidity and/or mortality	4.52	3.86	4.17
Outcome depends on skill and judgment of physician	4.58	4.14	4.42
Estimated risk of malpractice suit with poor outcome	4.70	4.14	4.17
<b>Time Segments</b>			
PRE-service intensity/complexity	3.48	2.29	4.25
INTRA-service intensity complexity	4.58	3.57	4.50
POST-service intensity complexity	3.42	2.00	4.00

**ADDITIONAL RATIONALE :**

New code 6226X (S1) describes percutaneous catheter-based treatment to reduce or eliminate inflammation and scarring in and around nerve roots or spinal nerves. After the catheter is placed, under fluoroscopic guidance, a series of injections or infusions are given over a span of one to four days, with repeat epidurograms to verify correct catheter placement and evaluate the opening of constricted scar areas around the target nerves/nerve roots.

The consensus committee reviewing the survey data for this code determined that the survey respondents may have used a "building block" approach to include all the services provided within the 10-day global, but may not have "adjusted" for multiple procedures with different global periods. For this reason, the survey median and survey 25th percentile have not been recommended.

The RVW of 7.20 recommended for this code is based on a building block approach that estimates the typical patient as having 2.5 injections/infusions over a two-three day hospital stay.

Component 1, catheter placement and injection of anesthetic and contrast: CPT 62279 most accurately covers this phase of the service, since it includes insertion of a catheter into the lumbar epidural space for injection of a diagnostic or therapeutic substance. Twice the total work of CPT 62279 is approximately equal to the first part of 6226X (S1) that covers catheter insertion into a scarred epidural space, injection of contrast and analgesic, and steering the catheter tip into position to deliver a neurolytic substance aimed at the adhesions. This equates to 3.16 RVUs (2 x 1.58 RVUs).

Component 2, injections/infusions: CPT 62282 is used as reference for this component since it covers the injection of neurolytic material into the lumbar epidural space. CPT 62282 has an RVW of 2.33 and a global of 10 days. We estimate that the "injection" portion of 62282 is approximately 1/3 of the total work or 0.77 RVUs. We also estimate

that the typical patient will receive between two to three injections. This equates to 1.94 RVUs (2.33 RVUs x 33% x 2.5 injections).

Component 3, fluoroscopic guidance: New code 7600X (M13) is used as reference for this component which is included as part of new code 6226X (S1) and not separately billable. We estimate that fluoroscopic guidance will be required for the initial catheter steering and placement, and once more during one of the repeat injections to further examine catheter position.. This equates to 1.20 RVUs (2 x 0.60 RVUs ).

Component 4, evaluation and management: The survey indicates, and we concur, that there will be two level 2 post discharge office visits. This equates to 0.90 RVUs (2 x 0.45 RVUs).

These components equal 7.20 RVUs (3.16 + 1.94 + 1.20 + 0.90), which we believe to be a reasonable recommendation for this new code, which has "bundled" procedures and work from several codes into one.

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## FREQUENCY INFORMATION

### How was this service previously reported?

64999 Unlisted procedure, nervous system

### How often do physicians in your specialty perform this service?

~~Commonly~~ Sometimes Rarely

### Estimate the number of times this service might be provided nationally in a one-year period?

This procedure is performed about 1,000-2,000 times annually at multiple centers. This is a very selected technique for a specific subset of patients with chronic low back pain with radiculopathy.

### Is this service performed by many physicians across the United States?

~~Yes~~ No

**AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE**  
**SUMMARY OF RECOMMENDATIONS**  
**May 1999**

**PHOTODYNAMIC THERAPY**

***Work Relative Value Recommendations***

In August 1998, the CPT Editorial Panel approved the addition of two new codes to report photodynamic therapy: CPT 96570 *Photodynamic therapy by endoscopic application of light to ablate abnormal tissue via activation of photosensitive drug(s); first 30 minutes*, and CPT 96571 *Photodynamic therapy by endoscopic application of light to ablate abnormal tissue via activation of photosensitive drug(s); each additional 15 minutes*.

Throughout the remaining RUC and CPT cycles for CPT 2000, only one specialty society indicated an interest in surveying the new codes for work and practice expense values. At a later date, the society expressed concern regarding their physician sample size, and stated that their data would potentially be invalid and not statistically significant due to the low response rate. Their request to survey was subsequently withdrawn. You may refer to the correspondence for information regarding these new codes.

Based on the absence of formal survey data, the RUC is unable to make a final recommendation regarding physician work at this time.

***Practice Expense Recommendations***

Based on the absence of formal survey data, the RUC is unable to make a final recommendation regarding practice expense at this time.

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
(96570, 96571 are to be used in addition to bronchoscopy, endoscopy codes)				
•96570	H1	Photodynamic therapy by endoscopic application of light to ablate abnormal tissue via activation of photosensitive drug(s); first 30 minutes <u>(List separately in addition to code for endoscopy or bronchoscopy procedures of lung and esophagus)</u>	ZZZ	No Recommendation
•96571	H2	each additional 15 minutes <u>(List separately in addition to code for endoscopy or bronchoscopy procedures of lung and esophagus)</u>  <u>(Use codes 96570, 96571 in conjunction with 31641, 43228 as appropriate)</u>	ZZZ	No Recommendation

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## AMERICAN GASTROENTEROLOGICAL ASSOCIATION

7910 Woodmont Avenue, 7th Floor • Bethesda, Maryland 20814-3015  
301-654-2055 • Fax 301-654-5920 • member@gastro.org

NATIONAL OFFICE  
Executive Vice President  
Robert B. Greenberg

### PRESIDENT

Donald O. Castell, MD  
The Graduate Hospital  
Department of Medicine  
Pepper Pavilion  
1800 Lombard Street  
Philadelphia, PA 19146-1497  
215-893-7128  
FAX: 215-893-2472  
E-mail: dcastell@wpolab.edu

### PRESIDENT-ELECT

Ralph A. Giannella, MD  
513-558-5244  
FAX: 513-558-1744  
E-mail: ralph.giannella@uc.edu

### VICE PRESIDENT

Thomas A. Brasitus, MD  
773-702-9898  
FAX: 773-702-2182  
E-mail: tbrasitu@medicine.bsd.uchicago.edu

### SECRETARY

Joanne A. P. Wilson, MD  
919-684-2169  
FAX: 919-681-8955  
E-mail: joanne.wilson@duke.edu

### TREASURER

Mark S. McPhee, MD  
816-932-2047  
FAX: 816-932-5179  
E-mail: mmcphee@saint-lukes.org

### COUNCILLORS

Randall W. Burt, MD  
Martin H. Fisch, MD  
Ira S. Goldman, MD  
James H. Grendell, MD  
Phillip P. Toeskes, MD  
Tadazuka Yamada, MD

### POSTGRADUATE COURSE

May 15-16, 1999  
Orlando, Florida

### ANNUAL MEETING

May 16-19, 1999  
Orlando, Florida

### OFFICIAL PUBLICATION

Gastroenterology  
Editor: Daniel K. Podolsky, MD

March 10, 1999

Jill Zanutto  
Policy Associate  
Relative Value Systems  
American Medical Association  
515 North State Street  
Chicago, Illinois 60610

Dear Ms. Zanutto:

This letter serves to inform you that the American Gastroenterological Association will not be participating in the RUC survey for the two new photodynamic codes to be included in CPT 2000. At this point, we are concerned that the sample size for such a survey would be quite small and therefore lack the validity needed for the RUC process.

If I can provide you with any further assistance, please do not hesitate to contact me at (301)654-2055. Thank you for your assistance.

Sincerely,

Wendy Cohen, MPH  
Director of Practice Economics

**AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE**  
**SUMMARY OF RECOMMENDATIONS**  
**May 1999**

**PROSTATE VOLUME STUDY**

***Work Relative Value Recommendations***

A new CPT Code, 76873 *Echography, transrectal; prostate volume study for brachytherapy treatment planning (separate procedure)*, was developed to more accurately describe mapping the prostate and plan seed prostate weeks prior to the interstitial radioactive seed placement. This procedure is currently being reported using 76872 *Echography, transrectal* (work RVU= .69). This reporting is inadequate since it does not capture the extensive work involved in the planning for a prostate volume study for brachytherapy treatment.

In determining a work relative value for this procedure, the RUC considered a range of values: 1.86 to 2.10. To achieve this range, the RUC combined the work value of CPT code 92018 *Ophthalmological examination and evaluation, under general anesthesia, with or without manipulation of globe for passive range of motion or other manipulation to facilitate diagnostic examination; complete* (work RVU= 1.51) and ½ the work value of CPT code 76872 (work RVU= .69). ( $.69 \times .5 = .35 + 1.51 = 1.86$ ). Next, the RUC combined the work relative value of CPT 55700 *Biopsy, prostate; needle or punch, single or multiple, any approach* (work RVU= 1.57) and ½ the work value of CPT code 76872 (work RVU=.69) ( $.69 \times .5 = .35 + 1.57 = 1.92$ .) Finally, the RUC combined the work value of CPT code 57410 *Pelvic exam under anesthesia* (work RVU = 1.75 and ½ the work value of CPT code 76872 ( $.69 \times .5 = .35 + 1.75 = 2.10$ ).

Using this range, the RUC reached a consensus that the work relative value of CPT code should be 1.92.



### ***Practice Expense Recommendation***

The direct inputs for this code were developed by a consensus panel which estimated clinical staff time, supplies and equipment required to perform this service in both the facility and non facility settings. The only direct inputs in the facility setting is the clinical staff time of 60 minutes for patient education and pre-certification, and arranging to schedule the patient in the facility. When this service is provided in the non-facility setting, the preservice clinical staff time is reduced to 35 minutes, but there is clinical staff time in the intra-service and post-service categories as well as supply and equipment expenses. See attached direct input data.

<b>CPT Code (•New)</b>	<b>Tracking Number</b>	<b>CPT Descriptor</b>	<b>Global Period</b>	<b>Work RVU Recommendation</b>
76872		Echography, transrectal;	XXX	.69 (No Change)
•76873	N1	prostate volume study for brachytherapy treatment planning (separate procedure)	XXX	<b>1.92</b>

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## Physician Work Data

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF RECOMMENDATION

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CPT Code: 7687X Tracking Number: 19 Global Period: xxx Recommended RVW: 2.13

CPT Descriptor: Echography, transrectal; prostate volume study for brachytherapy treatment planning (separate procedure)

---

**CLINICAL DESCRIPTION OF SERVICE:**

**Vignette Used in Survey:** A 68-year old male with PSA of 6.1 and Gleason 5 prostate cancer has elected interstitial brachytherapy (prostate seed implant).

**Description of Pre-Service Work:** The patient is sedated or placed under anesthesia and placed in the lithotomy position.

**Description of Intra-Service Work:** The "stepping unit" is assembled and the transducer is positioned appropriately in the rectum. Multiple 0.5 cm "cuts" are made of the prostate to precisely determine the prostate volume. Multiple images are then made. The radiation physicist then uses these images to plan the treatment (i.e., number and location of seeds).

**Description of Post-Service Work:** Some of the following may apply: (1) all post procedure care on the day of the procedure and if applicable patient stabilization, post-operative orders, communication with the patient and/or family and referring physician (including written and telephone reports), and other non "skin-to-skin" work in the procedure suite; (2) other follow-up care, prescriptions before the patient is discharged, if applicable.

---

**SURVEY DATA:**

Presenter(s): Thomas P. Cooper, MD

Specialty(s): American Urological Association

Sample Size: 66 Response Rate: (%) 55%(36) Median RVW: 2.13

Type of Sample (Circle One): random, panel, convenience. Explanation of sample size: \_\_\_\_\_

25th Percentile RVW: 1.34 75th Percentile RVW: 3.2 Low: .68 High: 4.3

Median Pre-Service Time: 20 Median Intra-Service Time: 30

25th Percentile Intra-Svc Time: 20 75th Percentile Intra-Svc Time: 45 Low: 15 High: 60

Median Post-Service Time:

Total Time

Level of Service by CPT Code

(List # of Visits)

Immediate Post Service Time:

10

Critical Care

Other Hospital Visit:

Discharge Day Mgmt.:

Office Visits:

### KEY REFERENCE SERVICE:

CPT Code

76965

CPT Descriptor

Ultrasonic guidance for interstitial radioelement application

RVW

1.34

### RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. Make certain that you are including the data from the service that you are rating as well as the key reference services.

### TIME ESTIMATES (Median)

	<u>CPT Code</u>	<u>Reference Service 1</u>
Median Pre-Time	20	*
Median Intra-Time	30	70**
Median Post-Time	10	*

\* There is no pre- and post-time recorded as this procedure is done in conjunction with the seed implant.

\*\* The ultrasound machine is in use for the majority of the seed implant procedure.

### INTENSITY/COMPLEXITY MEASURES (Mean)

#### Mental Effort and Judgement (Mean)

The number of possible diagnosis and/or the number of management options that must be considered	3	3
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3	3
Urgency of medical decision making	3	3

Physical effort required	5	3
--------------------------	---	---

#### Psychological Stress (Mean)

The risk of significant complications, morbidity and/or mortality	2	2
---	---	---

Outcome depends on the skill and judgement of physician	5	4
---	---	---

Estimated risk of malpractice suit with poor outcome	3	3
--	---	---

#### INTENSITY/COMPLEXITY MEASURES

#### CPT Code

#### Reference Service 1

#### Time Segments (Mean)

Pre-Service intensity/complexity	4	4
----------------------------------	---	---

Intra-Service intensity/complexity	5	3
------------------------------------	---	---

Post-Service intensity/complexity	1	1
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#### **ADDITIONAL RATIONALE**

Describe the process by which your specialty society reached your final recommendation.

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#### **FREQUENCY INFORMATION**

How was this service previously reported? 76872, Echography and 76965 Ultrasonic guidance for interstitial radioelement application

How often do physicians in your specialty perform this service? Commonly ☒ Sometimes ☐ Rarely

Estimate the number of times this service might be provided nationally in a one-year period? 8,000

Do many physicians perform this service across the United States? ☒ Yes ☐ No

---

## Practice Expense Data

**CPT Code:** \_\_\_\_\_

## AMA/SPECIALTY SOCIETY UPDATE PROCESS SUMMARY OF PRACTICE EXPENSE RECOMMENDATION

**7687X Echography, transrectal; prostate volumn study for brachytherapy treatment planning (separate procedure)**

Tracking Number:     N1    Global Period: XXXReference Code        76872

**OUT-OF-OFFICE.**

[illegible][illegible]

CPT Code: \_\_\_\_\_

PROCEDURE SPECIFIC MEDICAL EQUIPMENT	Mean Minutes of Use per Procedure	Mean Number of Hours per Week in Operation
N/A		
OVERHEAD MEDICAL EQUIPMENT	Mean Minutes of Use per Procedure	Mean Number of Hours per Week in Operation
N/A		



CPT Code: \_\_\_\_\_

**AMA/SPECIALTY SOCIETY UPDATE PROCESS  
SUMMARY OF PRACTICE EXPENSE  
RECOMMENDATION**

**7687X Echography, transrectal; prostate volumn study for  
brachytherapy treatment planning (separate procedure)**

Tracking Number: \_\_N1\_\_

Global Period: \_\_XXX\_\_

Reference Code \_\_ 76872

**IN-OFFICE**

CLINICAL LABOR	Median Pre-Service Time	Median Intra-Service Time	Median Post-Service Time	Mean Number of Office Visits	Mean Total Time of Office Visits
RN	35	30	10		
LPN					
MA					
Other					
MEDICAL SUPPLIES	Quantity of Supplies		Units Used for Purchase		
drape, sheet	1		1		
patient gown, disposable	1		1		
gloves, non-sterile	8		1		
condom	2		1		
Transducer wipe (echo ultrasound)	1		1		
aquasonic gel	10cc		1		
syringe	10cc		1		
biohazard bag	1		1		
Chux	2		1		
denture cup	1		1		
tissue	1		1		
paper towels	1		1		
surgical mask	1		1		
gown, staff	2		1		
surgical cap	2		1		
shoe covers	2 pair		1		
KY Jelly, single use pk, 5gm	6		1		
lidocaine, 30 cc	1		30		
Demerol injection	1		50		
Versed injection	1		5		
Oxygen, 1 ltr	10		1		
saline, normal, 500 cc	1		500		
Romazicon, 5 cc	1		1		
IV ext tube	1		1		
IV infusion set	1		1		
stop clock, 3 way	1		1		
IV starter kit	1		1		
needle, 18 to 24 gauge	2		1		
rubber tourniquet	1		1		
pipe cleaner	1		1		
Cidex	300cc		10		

CPT Code: \_\_\_\_\_

PROCEDURE SPECIFIC MEDICAL EQUIPMENT	Mean Minutes of Use per Procedure	Mean Number of Hours per Week in Operation
ultrasound machine	30	Depends on the number of procedures performed
seed implant stabilizing bar	30	***
transducer mount, bi-plane	30	***
pulse oximeter	30	***
power cysto table	30	***
OVERHEAD MEDICAL EQUIPMENT	Mean Minutes of Use per Procedure	Mean Number of Hours per Week in Operation
crash cart with defibrillator	30	***
power table	30	***
endoscopy stretcher (E11005)	30	***

**AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE**  
**SUMMARY OF RECOMMENDATIONS**  
**May 1999**

**RESECTION/RECONSTRUCTION OF DIAPHRAGM**

***Work Relative Value Recommendations***

Two new CPT codes were created that relate to the resection and reconstruction of the diaphragm. CPT code 39560 *Resection, diaphragm; with simple repair (eg, primary suture)* and 39561 *Resection, diaphragm; with complex repair (eg, prosthetic material, local muscle flap)* were approved for use in CPT 2000. These services are performed in conjunction with treating primary benign and malignant lesions of the diaphragm; lung cancer involving the diaphragm; and hepatic or gastric neoplasms invading the diaphragm. These procedures have been widely used and accepted for over twenty years.

The codes describe the intentional incision and resection of the diaphragm. Previously, there were no codes available to report these services. They also describe the reconstructive procedure which currently is inaccurately described by CPT 39501 *Repair, laceration of diaphragm, any approach* (work RVU = 13.19) and 39540 *Repair, diaphragmatic hernia(other than neonatal), traumatic, acute* (work RVU=13.32). Neither of these two current codes includes utilization of graft material, which is often required. The new codes accurately describe the services and differentiate them from the diaphragmatic repairs and imbrication, which are adequately described in CPT.

With respect to proposed work relative value units for code 39560, RUC participants reviewed survey and time data and considered the survey median of 14.00. However, physicians commented and RUC members decided, that compared to the complex repair with prosthetic material and muscle flap (as identified in CPT 39561), the 25<sup>th</sup> percentile RVW was more appropriate.

The RUC therefore recommends acceptance of 12.00 as a work relative value unit for code 39560.

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With regard to code 39561, RUC members evaluated the physician work for reference codes 43331 *Esophagomyotomy (Heller type); thoracic approach* (work RVU= 16.23) and 32220 *Decortication, pulmonary(separate procedure)*; total (work RVU=19.27). In addition they considered the survey median of 17.50. It was the consensus of the RUC that the survey median accurately reflected the physician work. The RUC therefore recommends acceptance of 17.50 as a final work relative value unit for CPT 39561.

### ***Practice Expense Recommendations***

No practice information was submitted for these codes. As such, the RUC does not have any formal practice expense recommendations at this time.

<b>CPT Code (•New)</b>	<b>Tracking Number</b>	<b>CPT Descriptor</b>	<b>Global Period</b>	<b>Work RVU Recommendation</b>
•39560	Q1	Resection, diaphragm; with simple repair (eg, primary suture)	090	<b>12.00</b>
•39561	Q2	with complex repair ( <u>eg prosthetic material, local muscle flap</u> )	090	<b>17.50</b>

# Physician Work Data

**AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF RECOMMENDATION**

CPT Code: 395X1 Tracking Number: Q1 Global Period: 090 Recommended RVW: 12.00

CPT Descriptor: Resection, diaphragm; with simple repair (e.g., primary suture)

**CLINICAL DESCRIPTION OF SERVICE:**

**Vignette Used in Survey:**

START HERE  
↓  
(Signature)

A 20 year old woman was diagnosed using CT scan with a right hepatic lobe mass. A mass was made. The patient continued to have follow-up CTs and the hepatic mass enlarged. The next time the right hepatic lobe, segment seven, was noted to be adherent to the right mid-lateral diaphragm and could not be dissected away. Therefore, the diaphragmatic mass was taken en bloc with the liver segment. It was repaired primarily with two running 0-Prolene sutures. The hepatic lobe was taken off with an ultrasonic dissector, with the use of a Bovie. Abdominal fascia and skin were reapproximated without complication. The wound dressing was changed daily to contain a purulent whitish discharge.

Description of Pre-Service Work: The surgical contact with the patient starts with a preoperative history and physical and immediate past history within 24 hours of the operation to reassess the patient's condition prior to taking him/her to the operating room. Medical decision-making involves assessing the patient's immediate surgical risk. In patients with abdominal masses involving vital organs, this entails a high level of judgment, intensity and risk on the part of the surgeon.

Description of Intra-Service Work: The patient undergoes a thoracoabdominal incision. A primary tumor invading both the diaphragm and the liver is noted. The right hepatic lobe, segment seven, which was noted to be adherent to the right mid-lateral diaphragm could not be dissected away. Therefore, the diaphragmatic mass must be taken en bloc with the liver segment. It is repaired primarily with two running 0-Prolene sutures. Abdominal fascia and skin are reapproximated after removal of the hepatic tumor.

Description of Post-Service Work: With the surgical team in attendance, the patient is transported to the intensive care unit. Management of bleeding and wound drainage occur. The patient's respiratory status is carefully monitored as are hemodynamics and vital signs. The patient is then transferred to the step-down unit where monitoring of drains and drips is required. The patient is transferred to the floor where he/she receives daily visits to assess the wound, respiratory status, and hemodynamic status. The surgeon and his team then follow the patient in the office, monitoring pain, infection, wound healing, and respiratory status.

**SURVEY DATA:**

Presenter(s) Sidney Levitsky, M.D./TBA

Specialty(s): Society of Thoracic Surgeons/American Association for Thoracic Surgery

Sample Size: 50 Response Rate: (%) 42% (21) Final Median RVW: 14

Type of Sample (Circle One): random, panel, convenience. Explanation of sample size: General thoracic surgeons specializing in this type of procedure

25th Percentile RVW: 12 75th Percentile RVW: 16.50 Low: 8.50 High: 21

Median Pre-Service Time: 15 min Median Intra-Service Time: 90 min

25th Percentile Intra-Svc Time: 60 min 75th Percentile Intra-Svc Time: 150 min ow: 20 min High: 240 min

Median Post-Service Time:	<u>Total Time</u>	<u>Level of Service by CPT Code</u> <u>(List # of Visits)</u>
Day of Procedure:	<u>30 min</u>	<u>1 x 99232</u>
Critical care:	<u>          </u>	<u>          </u>
Other Hospital Visit:	<u>100 min</u>	<u>5x 99231</u>
Discharge Day Mgmt:	<u>          </u>	<u>          </u>
Office:	<u>45 min</u>	<u>3 x 99212</u>

---

**KEY REFERENCE SERVICE:**

<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
32500	Removal of lung, other than total pneumonectomy wedge resection	14.30
39200	Excision of mediastinal cyst	13.62

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. Make certain that you are including the data from the service that you are rating as well as the key reference services.

**TIME ESTIMATES (Median)**

	<u>CPT Code</u> 395X1	<u>Reference Service 1</u> 32500	<u>Reference Service 2</u> 39200
Median Pre-Time (day of procedure)	15 min	15 min	30 min
Median Intra-Time	90 min	90 min	90 min
Median Post-Time (day of procedure)	30 min	30 min	30 min

**INTENSITY/COMPLEXITY MEASURES (Mean)****Mental Effort and Judgement (Mean)**

The number of possible diagnosis and/or the number of management options that must be considered	3.76	4.00	4.00
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.52	4.00	3.67
Urgency of medical decision making	3.14	3.33	2.67

**Technical Skill/Physical Effort (Mean)**

Technical skill required	3.71	3.67	2.67
Physical effort required	3.38	2.67	2.33

**Psychological Stress (Mean)**

The risk of significant complications, morbidity and/or mortality	3.71	3.67	2.33
Outcome depends on the skill and judgement of physician	3.76	3.67	2.67
Estimated risk of malpractice suit with poor outcome	3.29	3.00	2.67



**INTENSITY/COMPLEXITY MEASURES****CPT Code****Reference****Reference****Service 1****Service 2**

395X1

3250039200**Time Segments (Mean)**

Pre-Service intensity/complexity	3.20	3.33	3.33
Intra-Service intensity/complexity	3.85	4.33	2.67
Post-Service intensity/complexity	3.95	3.00	2.33

**ADDITIONAL RATIONALE**

Describe the process by which your specialty society reached your final recommendation. The consensus committee reviewed the data and decided that, compared to the complex repair with prosthetic material and muscle flap, the 25<sup>th</sup> percentile RVW represented the more accurate valuation.

---

**FREQUENCY INFORMATION**

How was this service previously reported? 39599

How often do physicians in your specialty perform this service? Commonly Sometimes Rarely

Estimate the number of times this service might be provided nationally in a one-year period? > 400 cases/year

Do many physicians perform this service across the United States? Yes x No

---

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF RECOMMENDATION

*Revised*

CPT Code: 395X2 Tracking Number: 02 Global Period: 090 Recommended RVW: 17.50

CPT Descriptor: Resection, diaphragm; with complex repair (e.g., prosthetic material, local muscle flap)

CLINICAL DESCRIPTION OF SERVICES:

Vignette Used in Survey:

Typical Patient/Service: A 62-year-old man with a left lower lobe lung cancer is found at thoracotomy to have a malignant focal invasion of the left diaphragm. The diaphragm is incised 2-3 cm away from the cancer and the incision is continued circumferentially around the neoplasm, resecting a patch of involved diaphragm with a free margin. The residual defect is closed with Gore-tex graft material. The lower lobe and attached diaphragm are resected en bloc.

Description of Pre-Service Work: The surgical contact with the patient starts with a preoperative history and physical and immediate past history within 24 hours of the operation to reassess the patient's condition prior to taking him/her to the operating room. Medical decision-making involves assessing the patient's immediate surgical risk. In patients with invasive cancer, this entails a high level of judgment, intensity and risk on the part of the surgeon.

Description of Intra-Service Work: The patient undergoes a left thoracotomy. A primary tumor invading the diaphragm from the left lower lung is noted. In the excision of primary diaphragmatic tumors, the pleural and peritoneal layers are excised en bloc along with that portion of the diaphragmatic leaf containing the tumor. Smaller defects are closed primarily. If the tumor is located in the periphery of the diaphragm, the adjacent portion of the diaphragm and part of the chest wall are removed in continuity. The diaphragm is incised 2-3 cm away from the cancer and the incision is continued circumferentially around the neoplasm, resecting a patch of involved diaphragm with a free margin. In general, the defect is closed with a prosthetic soft tissue patch of Gore-tex or other suitable material such as Dacron-Silastic sheeting, preserved dura mater, or Marlex mesh reinforced with woven Dacron. The prosthetic material is secured to the cut edges of the diaphragm or to the chest wall, as necessary.

Description of Post-Service Work: With the surgical team in attendance, the patient is transported to the intensive care unit. Management of bleeding and wound drainage occur. The patient's respiratory status is carefully monitored as are hemodynamics and vital signs. The patient is then transferred to the step-down unit where monitoring of drains and drips is required. The patient is transferred to the floor where he/she receives daily visits to assess the wound, respiratory status, and hemodynamic status. The surgeon and his team then follow the patient in the office, monitoring pain, infection, wound healing, and respiratory status.

SURVEY DATA:

Presenter(s) Sidney Levitsky, M.D./TBA

Specialty(s): Society of Thoracic Surgeons/American Association for Thoracic Surgery

Sample Size: 50 Response Rate: (%) 44% (22) Final Median RVW: 17.50

Type of Sample (Circle One): random, panel, convenience. Explanation of sample size: General thoracic surgeons specializing in this type of procedure

25th Percentile RVW: 15.00 75th Percentile RVW: 19.19 Low: 12.50 High: 25.00

Median Pre-Service Time: 25 min Median Intra-Service Time: 150 min

25th Percentile Intra-Svc Time: 120 min 75th Percentile Intra-Svc Time: 210 min Low: 60 min High: 300 min

Median Post-Service Time:

Total Time

Level of Service by CPT Code  
(List # of Visits)

Day of Procedure:

30 min

2 x 99232

Critical care:

Other Hospital Visit:

100 min

5 x 99231

Discharge Day Mgmt:

Office:

45 min

3 x 99214

---

**KEY REFERENCE SERVICE:**

<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
43331	Esophagomyotomy (Heller type); thoracic approach	16.23
32220	Decortication, pulmonary; total	19.27

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. Make certain that you are including the data from the service that you are rating as well as the key reference services.

**TIME ESTIMATES (Median)**

	<u>CPT Code</u>	<u>Reference Service 1</u>	<u>Reference Service 2</u>
	395X1	43331	32220
Median Pre-Time (day of procedure)	25 min	40 min	15 min
Median Intra-Time	150 min	120 min	143 min
Median Post-Time (day of procedure)	30 min	40 min	30 min

**INTENSITY/COMPLEXITY MEASURES (Mean)****Mental Effort and Judgement (Mean)**

The number of possible diagnosis and/or the number of management options that must be considered	4.05	3.20	4.00
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.00	3.20	3.75
Urgency of medical decision making	3.45	3.20	3.00

**Technical Skill/Physical Effort (Mean)**

Technical skill required	4.18	4.00	4.25
Physical effort required	3.91	3.80	4.25

**Psychological Stress (Mean)**

The risk of significant complications, morbidity and/or mortality	4.05	4.20	4.00
Outcome depends on the skill and judgement of physician	4.09	4.20	4.00
Estimated risk of malpractice suit with poor outcome	3.36	3.20	2.75

INTENSITY/COMPLEXITY MEASURESCPT Code  
395X!Reference  
Service 1  
43331Reference  
Service 2  
32220Time Segments (Mean)

Pre-Service intensity/complexity	3.67	3.40	3.50
Intra-Service intensity/complexity	4.24	4.00	4.50
Post-Service intensity/complexity	3.62	3.80	3.25

**ADDITIONAL RATIONALE**

Describe the process by which your specialty society reached your final recommendation.. The consensus committee felt the median RVW accurately reflected the work and compared well with the reference codes.

**FREQUENCY INFORMATION**

How was this service previously reported? 39599

How often do physicians in your specialty perform this service? Commonly Sometimes Rarely

Estimate the number of times this service might be provided nationally in a one-year period? >200 cases/year

Do many physicians perform this service across the United States? Yes x No

**AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE**  
**SUMMARY OF RECOMMENDATIONS**  
**May 1999**

**SACROILIAC JOINT/PARAVERTEBRAL FACET JOINT/NERVE INJECTION PROCEDURES**

***Work Relative Value Recommendations***

A comprehensive, multi-issue revision to the spine injection procedures and their radiological counterparts represents code additions, deletions and revisions to certain spinal-related procedures reflecting current clinical practice across multiple specialties. The following codes do not appear in strict numeric order, in order to accurately convey intent and use.

**CPT Code 27096**

CPT Code 27096 *Injection procedure for sacroiliac joint arthrography and/or anesthetic/steroid* was added. This new code identifies injection of contrast for radiological study of this joint for morphological analysis and response to blockade. There previously was no specific code to identify this procedure. This procedure is widely utilized in the differential diagnosis of low back, buttock, pelvis and groin pain. Based on the survey results of 45 radiologists, the RUC supports a RVW of 1.40, which is slightly lower than the median RVU(1.50).

**CPT Code 73542**

CPT Code 73542 *Radiological examination, sacroiliac joint arthrography, radiological supervision and interpretation* was added. This code is the radiological counterpart to code 27096 and describes the radiological supervision and interpretation of sacroiliac joint arthrography. The procedural component of the newly-established radiological guidance and localization code 76005 *Fluoroscopic guidance and localization of needle or catheter tip for spine or paraspinous diagnostic or therapeutic injection procedures (epidural, transforaminal epidural, subarachnoid, paravertebral facet joint, paravertebral facet joint nerve or sacroiliac joint) including neurolytic agent destruction* is inclusive of 73542. Therefore, it would not be appropriate to report

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both 73542 and 76005 for SI joint arthrography. Based upon the intra-service intensity/complexity measures and the intra-service time estimates of the new code 73542 ( 20 minutes intra-service time & 3.5 intra-service intensity/complexity) compared to reference service codes 73525 *Radiologic examination, hip, arthrography, radiological supervision and interpretation* ( 20 minutes, 2.1) and 72265 *Myelography, lumbosacral, radiological supervision and interpretation* (22.5 minutes, 2.7), the RUC supports the median RVU of .64 for CPT code 73542.

### **CPT Codes 64470 and 64472**

This series of spine injection procedures has been updated to reflect and update current clinical practice. Descriptors now include spinal anatomy not previously identified; for example, in the cervical and thoracic regions of the spine. The paravertebral facet joint or facet joint nerve codes are intended to clarify the spinal anatomy, the substances injected, and the spinal level or levels involved. Certain codes (64440-64443) have been deleted to allow sequential numbering of the new paravertebral facet injection codes (64470-64476). Codes 64472 and 64476 represent add-on codes for each additional spinal level injected.

The best procedural comparison for the new CPT Code 64470 *Injection, anesthetic agent and/or steroid, paravertebral facet joint or facet joint nerve; cervical or thoracic, single level* is CPT code 64475 (renumbering of Code 64442) *Injection, anesthetic agent; paravertebral facet joint nerve, lumbar, single level* (work RVU= 1.41). The cervical risks that differ from the lumbar include, but are not limited to: potential seizures from placement of anesthetic in the vertebral artery; to nerve root damage; and quadriplegia from injection into the nerve roots or spinal cord. Based on the survey median and the relationship to CPT Code 64475, the RUC recommends an RVU of 1.85 for code 64470.

The new add-on procedure 64472 *Injection, anesthetic agent and/or steroid, paravertebral facet joint or facet joint nerve; cervical or thoracic, each additional level (List separately in addition to code for primary procedure)* was procedurally compared to CPT Code 64476 (renumbering of 64443) *Injection, anesthetic agent; paravertebral facet joint nerve, lumbar, each additional level*. Based upon the survey results, the new code had a significantly higher intensity/complexity measure, 64472 (3.70) compared to the referenced procedure 64476 (3.03). The RUC supports the recommended RVU of 1.29 which represents 70% of the recommended RVU for the parent code 64470. The same ratio was used for the lumbar code set 64475/64476 (1.41/ 0.98)

### **CPT Codes 64479, 64480, 64483 and 64484**

Four new codes have been added to describe a procedurally more difficult diagnostic and therapeutic nerve root injection that requires entry into the epidural space through the nerve root foramen. Transforaminal epidural spinal injection technique is a technically different approach; and is again identified by the spinal anatomy, the substance injection, and the spinal level or levels involved. Codes 64480 and 64484 represent add-on codes for each additional spinal level injection.

Based on the survey results, the RUC supports the survey median values for the parent codes, CPT 64479 *Injection, anesthetic agent and/or steroid, transforaminal epidural, cervical or thoracic, single level* (work RVU=2.20) and CPT 64483 *Injection, anesthetic agent and/or steroid, transforaminal epidural, lumbar or sacral, single level* (work RVU=1.90). The RUC also agreed that the rationale supporting 64472 should apply to add on procedures 64480 and 64484 in that their relative values should be set at 70% of the parent codes based upon the ratio of the “anchor pair” 64475/64476- 1.41/0.98. Therefore, the RUC supports an RVU of 1.54 for code 64480 and 1.33 for code 64484.

### **CPT Codes 64626 and 64627**

The series of neurolytic “destruction” procedures were revised (64622, 64623) and two new codes established (64626, 64627) to delineate paravertebral facet joint nerve destruction by a neurolytic agent (eg, phenol injection, radio frequency) at the cervical/thoracic, lumbar or sacral regions of the spine to reflect current clinical practice. Because the level of work performed in the cervical/thoracic levels is different, codes 64626 and 64627 were added to distinguish this work compared to the lumbar regions (64622, 64623). Codes 64623 and 64627 represent add-on codes delineating the neurolytic destruction technique performed at each single spinal level involved.

CPT Codes 64626 *Destruction by neurolytic agent, paravertebral facet joint nerve; cervical or thoracic, single level* and 64627 *Destruction by neurolytic agent, paravertebral facet joint nerve; cervical or thoracic, each additional level* were established for the cervical level to distinguish from the existing codes 64622 and 64623 for the lumbar procedures. As illustrated by the survey results, the cervical/thoracic levels are different in that the areas are smaller and the risks are higher, including risks such as seizure, paralysis, and nerve root damage. The intra-service intensity/complexity was 4.45 for the new code compared to the



referenced procedure 64622. Based on the survey results, the relationship to the current lumbar code 64622, the RUC recommends a RVU of 3.28 for code 64626.

The new add-on code 64627 had significantly higher time and intensity/complexity measures compared to the referenced lumbar add-on code 64623. The RUC supports an RVU of 1.16 for code 64627 which is 34% of the recommended value for the new parent code 64626 and less than the survey median for this code. The ratio between the new codes is the same as the ratio for the lumbar code pair 64622/64623 (3.00/0.99).

### **CPT Code 76005**

CPT code 76005 identifies the fluoroscopic “guidance” to assist in accurately localizing specific spinal anatomy for placement of a needle or catheter tip for spine or paraspinal diagnostic or therapeutic injection procedures. This fluoroscopy code is a stand-alone code reported in addition to the appropriate injection procedures (epidural, transforaminal epidural, subarachnoid, paravertebral facet joint, paravertebral facet joint nerve or sacroiliac joint) including neurolytic agent destruction. Code 76005 may be reported in conjunction with codes 62270-62273, 62280-62282, 62310-62311, 62318-62319, when required. Code 76005 should be reported in addition to 64470-64476, 64479-64484. Code 76005 is considered an inclusive component of codes 72240, 72255, 72265, 72270, 73542. The best procedural comparison for CPT code 76005 is the reference service code 76003 *Fluoroscopic localization for needle biopsy or fine needle aspiration* (Work RVU= 0.54). Based on the survey, the time estimates and the intensity/complexity measures of the new code were consistently higher than the key reference procedure. Therefore, the RUC supports the median RVU of .60 for CPT Code 76005.

### ***Practice Expense Recommendations***

#### **CPT Code 27096**

Since this is a new code there is currently no direct input data associated with this code. The specialties chose to crosswalk this code to an existing code which has direct inputs that the specialty feels is representative of the expenses associated with the new code. The

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RUC therefore recommends that the direct inputs associated with code 27093 *Injection procedure for hip arthrography; without anesthesia* be applied to code 27096.

#### **CPT Code 73542**

Since this is a new code there is currently no direct input data associated with this code. The specialties chose to crosswalk this code to an existing code which has direct inputs that the specialty feels is representative of the expenses associated with the new code. The RUC therefore recommends that the direct inputs associated with code 73525 *Radiologic examination, hip, arthrography, radiological supervision and interpretation* be applied to code 73542.

#### **CPT Code 76005**

Since this is a new code there is currently no direct input data associated with this code. The specialties chose to crosswalk this code to an existing code which has direct inputs that the specialty feels is representative of the expenses associated with the new code. The RUC therefore recommends that the direct inputs associated with code 76003 *Fluoroscopic localization for needle biopsy or fine needle aspiration* be applied to code 76005.

#### **CPT Code 64470**

Since this is a new code there is currently no direct input data associated with this code. The specialties chose to crosswalk this code to an existing code which has direct inputs that the specialty feels is representative of the expenses associated with the new code. The RUC therefore recommends that the direct inputs associated with code 64442 *Injection, anesthetic agent;paravertebral facet joint nerve, lumbar, single level* be applied to 64470.

#### **CPT Code 64472**

Since this is a new code there is currently no direct input data associated with this code. The RUC recommends 15 minutes of RN in-office, intra-service time for 64472. This time is consistent with RUC survey physician's intra-service time. Although additional supplies may be necessary for additional levels these details will be reviewed during refinement.

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**CPT Code 64475**

Since this is a new code there is currently no direct input data associated with this code. The specialties chose to crosswalk this code to an existing code which has direct inputs that the specialty feels is representative of the expenses associated with the new code. The RUC therefore recommends that the direct inputs associated with code 64442 *Injection, anesthetic agent;paravertebral facet joint nerve, lumbar, single level* be applied to 64475.

**CPT Code 64476**

Since this is a new code there is currently no direct input data associated with this code. The RUC recommends 15 minutes of RN in-office, intra-service time for 64476. This time is consistent with RUC survey physician's intra-service time. Although additional supplies may be necessary for additional levels these details will be reviewed during refinement.

**CPT Code 64479**

Since this is a new code there is currently no direct input data associated with this code. The specialties chose to crosswalk this code to an existing code which has direct inputs that the specialty feels is representative of the expenses associated with the new code. The RUC therefore recommends that the direct inputs associated with code 64442 *Injection, anesthetic agent;paravertebral facet joint nerve, lumbar, single level* be applied to 64479.

**CPT Code 64480**

Since this is a new code there is currently no direct input data associated with this code. The RUC recommends 20 minutes of RN in-office, intra-service time for 64480. This time is consistent with RUC survey physician's intra-service time. Although additional supplies may be necessary for additional levels these details will be reviewed during refinement.

### **CPT Code 64483**

Since this is a new code there is currently no direct input data associated with this code. The specialties chose to crosswalk this code to an existing code which has direct inputs that the specialty feels is representative of the expenses associated with the new code. The RUC therefore recommends that the direct inputs associated with code 64442 *Injection, anesthetic agent;paravertebral facet joint nerve, lumbar, single level* be applied to 64483.

### **CPT Code 64484**

Since this is a new code there is currently no direct input data associated with this code. The RUC recommends 20 minutes of RN in-office, intra-service time for 64484. This time is consistent with RUC survey physician's intra-service time. Although additional supplies may be necessary for additional levels these details will be reviewed during refinement.

### **CPT Code 64626**

Since this is a new code there is currently no direct input data associated with this code. The specialties chose to crosswalk this code to an existing code which has direct inputs that the specialty feels is representative of the expenses associated with the new code. The RUC therefore recommends that the direct inputs associated with code 64622 *Destruction by neurolytic agent;paravertebral facet joint nerve, lumbar, single level* be applied to code 64626.

### **CPT Code 64627**

Since this is a new code there is currently no direct input data associated with this code. The RUC recommends 30 minutes of RN in-office, intra-service time for 64627. This time is consistent with RUC survey physician's intra-service time. Although additional supplies may be necessary for additional levels these details will be reviewed during refinement.

## CPT Code 76005

Since this is a new code there is currently no direct input data associated with this code. The specialties chose to crosswalk this code to an existing code which has direct inputs that the specialty feels is representative of the expenses associated with the new code. The RUC therefore recommends that the direct inputs associated with code 76003 *Fluoroscopic localization for needle biopsy or fine needle aspiration* be applied to code 76005.

CPT Code (•New)	Track- ing Number	CPT Descriptor	Global Period	Work RVU Recommendation
•27096	M1	Injection procedure for sacroiliac joint arthrography and/or anesthetic/steroid  (For radiological supervision and interpretation, use 73542). If formal arthrography is not performed, recorded, and a report is not issued, use 76005 for fluoroscopic guidance for sacroiliac joint injections)	000	1.40
▲27235		<del>Percutaneous skeletal fixation, or internal fixation, without direct fracture exposure, of femoral fracture, proximal end, neck, undisplaced, mildly displaced or impacted fracture</del>	090	12.16 (No Change)
62290		Injection procedure for diskography, each level; lumbar	000	3.00 (No Change)
▲62291		cervical <u>or thoracic</u>  (For radiological supervision and interpretation, see 72285-72295)	000	2.91 (No Change)
64400		Injection, anesthetic agent; trigeminal nerve, any division or branch	000	1.11 (No Change)

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CPT Code (•New)	Track- ing Number	CPT Descriptor	Global Period	Work RVU Recommendation
64440		—paravertebral nerve (thoracic, lumbar, sacral, <del>co</del> coccygeal), single vertebral level  (64440 has been deleted. To report, see 64479 and 64483)	000	1.34  <b>Deleted Code</b>
64441		—paravertebral nerves, multiple levels (eg, regional — block)  (64441 has been deleted. To report, see 64480 and 64484)	000	1.79  <b>Deleted Code</b>
64442		paravertebral facet joint nerve, lumbar, single level  (64442 has been deleted. To report, use 64475)	000	1.41  <b>Deleted Code</b>
64443		paravertebral facet joint nerve, lumbar, each additional level — (List separately in addition to code for primary procedure) (Use 64443 in conjunction with code 64442)  (64443 has been deleted. To report, use 64476)	ZZZ	0.98  <b>Deleted Code</b>
64450		other peripheral nerve or branch  (For subarachnoid or subdural injection, see 62274, <del>62277</del> 62310-62319)  (For epidural or caudal injection, see 62278, <del>62279</del> , 62311 – 62319)	000	1.27  (No Change)

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CPT Code (•New)	Track- ing Number	CPT Descriptor	Global Period	Work RVU Recommendation
•64470	M3	Injection, anesthetic agent and/or steroid, paravertebral facet joint or facet joint nerve; cervical or thoracic, single level	000	1.85
•64472	M4	cervical or thoracic, each additional level (List separately in addition to code for primary procedure) (Use code 64472 in conjunction with code 64470)	ZZZ	1.29
•64475 Renumbering of Code 64442	M5  Not Surveyed	lumbar or sacral, single level	000	1.41  (No Change)
•64476 Renumbering of Code 64443	M6  Not Surveyed	lumbar or sacral, each additional level (List separately in addition to code for primary procedure) (Use code 64476 in conjunction with code 64475)	ZZZ	0.98  ( No Change)
•64479	M7	Injection, anesthetic agent and/or steroid, transforaminal epidural; cervical or thoracic, single level	000	2.20
•64480	M8	cervical or thoracic, each additional level (List separately in addition to code for primary procedure) (Use code 64480 in conjunction with code 64479)	ZZZ	1.54
•64483	M9	lumbar or sacral, single level	000	1.90

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CPT Code (●New)	Track- ing Number	CPT Descriptor	Global Period	Work RVU Recommendation
●64484	M10	lumbar or sacral, each additional level (List separately in addition to code for primary procedure)  (Use code 64484 in conjunction with code 64483)	ZZZ	1.33
64620		Destruction by neurolytic agent; ,intercostal nerve  (Codes 64622-64627 are unilateral procedures. For bilateral procedures, use modifier – 50)  (For fluoroscopic guidance and localization for needle placement and neurolysis in conjunction with codes 64622-64627, use 76005)	010	2.84  (No Change)
▲64622		<u>Destruction by neurolytic agent, paravertebral facet joint nerve; ,</u> lumbar or sacral, single level	010	3.00  (No Change)
▲64623		<del>— paravertebral facet joint nerve</del> , lumbar or sacral, each additional level (List separately in addition to code for primary procedure)  (Use code 64623 in conjunction with code 64622)	ZZZ	0.99  (No Change)
●64626	M11	cervical or thoracic, single level	010	3.28

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CPT Code (●New)	Track- ing Number	CPT Descriptor	Global Period	Work RVU Recommendation
●64627	M12	cervical or thoracic, each additional level (List separately in addition to code for primary procedure)  (Use code 64627 in conjunction with code 64626)	ZZZ	1.16
▲72285		Diskography, cervical; <u>or thoracic</u> , radiological supervision and interpretation	XXX	0.83 (No Change)
●73542	M2	Radiological examination, sacroiliac joint arthrography, radiological supervision and interpretation  (For procedure, use 27096. If formal arthrography is not performed or filmed, and a report is not issued, use 76005 for fluoroscopic guidance for sacroiliac joint injections)	XXX	0.64

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CPT Code (•New)	Track- ing Number	CPT Descriptor	Global Period	Work RVU Recommendation
•76005	M13	<p>Fluoroscopic guidance and localization of needle or catheter tip for spine or paraspinal diagnostic or therapeutic injection procedures (epidural, transforaminal epidural, subarachnoid, paravertebral facet joint, paravertebral facet joint nerve or sacroiliac joint) including neurolytic agent destruction</p> <p>Injection of contrast during fluoroscopic guidance and localization is an inclusive component of codes 62270-62273, 62280-62282, 62310-62319.</p> <p>(Fluoroscopic guidance for subarachnoid puncture for diagnostic radiographic myelography is included in supervision and interpretation codes 72240, 72255, 72265, 72270)</p> <p>(For epidural or subarachnoid needle or catheter placement and injection, see codes 62270-62273, 62280-62282, 62310-62311, 62318- 62319)</p> <p>(For sacroiliac joint arthrography, see codes 27096, 73542. If formal arthrography is not performed or filmed, and a separate report is not issued, use 76005 for fluoroscopic guidance for sacroiliac joint injections)</p> <p>(For paravertebral facet joint injection, see 64470-64476. For transforaminal epidural needle placement and injection, see 64479-64480 , 64483-64484)</p> <p>(For destruction by neurolytic agent, see 64600-64680)</p>	XXX	0.60

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## Physician Work Data

**AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF RECOMMENDATION**

CPT Code: 2709X Tracking Number: M1 Global Period: 000 Recommended RVW: 1.5

**CPT Descriptor:**

Injection procedure for sacroiliac joint arthrography and/or anesthetic/steroid

(For radiological supervision and interpretation, use 7352X)

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**CLINICAL DESCRIPTION OF SERVICE:**

**Vignette Used in Survey:**

A 42-year-old male with history of prior lumbosacral fusion presents with severe chronic low back, buttock and groin pain. Imaging studies of the spine, pelvis and sacroiliac joints are unremarkable, showing a solid lumbosacral fusion. Patient undergoes the diagnostic and therapeutic sacroiliac arthrogram, both to study intrinsic joint anatomy and to assess, by means of monitoring the joint blockade whether or not the joint is the major source of his clinical pain.

**Description of Pre-Service Work:**

The patients prior pelvic imaging studies (radiographs, CT scans, MRI exams, nuclear bone scans, etc.) are reviewed to familiarize the physician with the patients anatomy, including anatomic variants, and any pathology present. The procedure with its risks, potential benefits, and alternatives are explained to the patient and informed consent obtained, a brief history is obtained, including exclusion of bleeding diathesis.

**Description of Intra-Service Work:**

Initially, the skin is marked over the most caudal aspect of the sacroiliac joint. Fluoroscopic guidance is used (separately codeable and should not be considered in the work or practice expense of this code). Using sterile technique, the skin is then prepped and draped. Thereafter, a sterile 22 gauge spinal needle is passed through the skin into the inferior aspect of the joint. Then, under fluoroscopic observation, a test injection of contrast is made to confirm presence or absence of an intraarticular injection. If contrast is noted to be within the joint, without venous opacification or periarticular leakage, contrast is then injected into the joint to a volume of approximately 0.5-1cc, using preferably nonionic low osmolar contrast which is non-irritating. This amount of contrast generally fills a non-inflamed joint adequately to delineate integrity or lack thereof of articular cartilage, as well as morphologic features of the joint in space and capsule. Films are then obtained in at least two projections (performance and interpretation of these films is a separate procedure and separately codeable and should not be included in your evaluation of work or practice expense for this code). In many cases, thereafter, 1-3 cc's of pure local anesthetic (lidocaine 1 or 2%, novocain 1 or 2%, or marcaine 0.5%) is injected into the joint. Occasionally, a mixture of local anesthetic (any of the preceding) mixed with water-soluble steroid is injected into the joint. These therapeutic injections are to block the joint for either immediate or potentially lasting pain relief.

**Description of Post-Service Work:**

The patient is then carefully monitored for the therapeutic response to the joint blockade. A report is dictated for the medical records. Results are discussed with the referring physician.

**SURVEY DATA:**

Presenter(s): William T. Thorwarth Jr., M.D.  
ACR RUC Advisor

J. Arliss Pollock, M.D.  
ASNR RUC Advisor

Specialty(s): Radiology

Sample Size: 357 Response Rate (%): 45 (13%) Median RVW 1.5

Type of Sample (Circle one): random, panel, convenience. Explanation of sample size: \_\_\_\_\_

25<sup>th</sup> Percentile RVW: 1.3 75<sup>th</sup> Percentile RVW: 1.8 Low: 0.6 High: 5.0

Median Pre-Service Time: 10 Median Intra-Service Time: 25

25<sup>th</sup> Percentile Intra-Svc Time: 15 75<sup>th</sup> Percentile Intra-Svc Time: 30 Low: 0 High: 60

Median Post-Service Time:

	Total Time	Level of Service by CPT Code (List # of Visits)
Immediate Post Service Time:	<u>5</u>	_____
Critical Care:	_____	_____
Other Hospital Visit:	_____	_____
Discharge Day Mgmt:	_____	_____
Office Visits:	_____	_____

**KEY REFERENCE SERVICE:**

	CPT Code	CPT Descriptor	RVW
1.	27093	Injection procedure for hip arthrography, without anesthesia	1.30
2.	62284	Injection procedure for myelography and/or computerized axial tomography, spinal (other than C1-C2 and posterior fossa)	1.54

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. Make certain that you are including the data from the service that you are rating as well as the key reference services.

**TIME ESTIMATES (Median)**

	<b><u>CPT Code</u></b>	<b><u>Reference Service 1</u></b>	<b><u>Reference Service 2</u></b>
Median Pre-Time	10	10	7.5
Median Intra-Time	25	20	25
Median Post-Time	5	5	7.5

**INTENSITY/COMPLEXITY MEASURES (Mean)****Mental Effort and Judgement (Mean)**

The number of possible diagnosis and/or the number of management options that must be considered	3.2	2.9	2.8
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.4	2.8	2.9
Urgency of medical decision making	2.7	2.3	2.8

**Technical Skill/Physical Effort (Mean)**

Technical skill required	4.0	3.2	3.2
Physical effort required	3.7	3.1	3.0

**Psychological Stress (Mean)**

The risk of significant complications, morbidity and/or mortality	3.1	2.6	2.7
Outcome depends on the skill and judgement of physician	3.8	3.2	3.1
Estimated risk of malpractice suit with poor outcome	2.9	2.4	2.6

INTENSITY/COMPLEXITY MEASURESCPT CodeReference  
Service 1Reference  
Service 2Time Segments (Mean)

Pre-Service intensity/complexity	2.4	2.8	2.3
Intra-Service intensity/complexity	3.7	3.1	3.2
Post-Service intensity/complexity	2.0	2.3	1.9

ADDITIONAL RATIONALE

Describe the process by which your specialty society reached your final recommendation.

The committee recommends the median survey value though time and complexity/intensity values exceed both key reference codes.

FREQUENCY INFORMATION

How was this service previously reported?

Scenario #1: In cases where we actually perform and interpret an arthrogram, we use 27093 for injection without anesthesia and 27095 when we use anesthetic and/or steroid. These codes all pertain to the hip.

Scenario #2: When we perform only an intraarticular injection of anesthetic and steroid without contrast, arthrography or filming, we use 20610 for large joint injection.

How often do physicians in your specialty perform this service?      Commonly   X   Sometimes      Rarely

Estimate the number of times this service might be provided nationally in a one-year period?

Estimating the number of times this service might be provided nationally in a one-year period is difficult. We have taken 25 percent of the frequency reported for injection procedure for hip arthrography (27093, without anesthesia and 27095, with anesthesia) reported in HCFA's 1997 Part B Physician/Supplier file (BMAD) data (9,660) to arrive at 2415 times this service may be performed for Medicare patients in a one-year period.

Do many physicians perform this service across the United States?   X   Yes      No

**AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF RECOMMENDATION**

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CPT Code: 7352X    Tracking Number: M2    Global Period: XXX    Recommended RVW: 0.64

**CPT Descriptor:**

Radiological examination, sacroiliac joint arthrography, radiological supervision and interpretation

(For procedure, use 2709X)

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**CLINICAL DESCRIPTION OF SERVICE:**

**Vignette Used in Survey:**

A 42-year-old male with history of prior lumbosacral fusion presents with severe chronic low back, buttock and groin pain. Imaging studies of the spine, pelvis and sacroiliac joints are unremarkable, showing a solid lumbosacral fusion. Patient undergoes the diagnostic and therapeutic sacroiliac arthrogram, both to study intrinsic joint anatomy and to assess, by means of monitoring the joint blockade whether or not the joint is the major source of his clinical pain.

**Description of Pre-Service Work:**

The patient's prior imaging examinations (radiographs, CT scans, MRI exams, etc.) of the pelvis and SI joints are reviewed in order to be familiar with the anatomy, anatomic variants, prior surgery and pathology.

**Description of Intra-Service Work:**

The patient is placed on an x-ray table in the prone or prone oblique position. Preliminary fluoroscopy is performed to identify the appropriate level and approach for the initial needle placement, and the skin entry site is marked. During the needle placement into the joint (needle placement is a separate procedure and separately codeable and should not be considered in your assessment of physician work or practice expense for this code), intermittent fluoroscopy is used to confirm the correct approach and need for needle repositioning or realignment. When the needle position appears correct, a small test dose of radiographic contrast is injected to confirm proper position. If position is not correct, additional fluoroscopy is provided during repositioning until proper position is achieved. Following complete opacification of the SI joint, multiple radiographic images are obtained from different angles. These images are formally interpreted.

**Description of Post-Service Work:**

A report dictated for the medical record. Results are discussed with the referring physician.

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**SURVEY DATA:**

Presenter(s):    William T. Thorwarth Jr., M.D.  
                          ACR RUC Advisor

                          J. Arliss Pollock, M.D.  
                          ASNR RUC Advisor

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Specialty(s): RadiologySample Size: 357 Response Rate (%): 45 (13%) Median RVW 0.64Type of Sample (Circle one): random, ☒ panel, convenience Explanation of sample size: \_\_\_\_\_25<sup>th</sup> Percentile RVW: 0.55 75<sup>th</sup> Percentile RVW: 1.0 Low: 0.5 High: 7.0Median Pre-Service Time: 10 Median Intra-Service Time: 2025th Percentile Intra-Svc Time: 10 75th Percentile Intra-Svc Time: 30 Low: 0 High: 60

Median Post-Service Time:

	Total Time	Level of Service by CPT Code (List # of Visits)
Immediate Post Service Time:	<u>5</u>	
Critical Care:		
Other Hospital Visit:		
Discharge Day Mgmt:		
Office Visits:		

**KEY REFERENCE SERVICE:**

	CPT Code	CPT Descriptor	RVW
1.	<u>73525</u>	<u>Radiologic examination, hip, arthrography (S&amp;I)</u>	<u>0.54</u>
2.	<u>72265</u>	<u>Myelography, lumbosacral (S&amp;I)</u>	<u>0.83</u>

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. Make certain that you are including the data from the service that you are rating as well as the key reference services.

**TIME ESTIMATES (Median)**

	CPT Code	Reference Service 1	Reference Service 2
Median Pre-Time	<u>10</u>	<u>10</u>	<u>5</u>
Median Intra-Time	<u>20</u>	<u>20</u>	<u>22.5</u>
Median Post-Time	<u>5</u>	<u>1</u>	<u>2.5</u>

**INTENSITY/COMPLEXITY MEASURES (Mean)****Mental Effort and Judgement (Mean)**

The number of possible diagnosis and/or the number of management options that must be considered	3.4	2.8	2.7
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.3	2.8	2.5
Urgency of medical decision making	2.5	2.0	2.3

**Technical Skill/Physical Effort (Mean)**

Technical skill required	3.8	3.2	2.7
Physical effort required	3.4	2.9	2.7

**Psychological Stress (Mean)**

The risk of significant complications, morbidity and/or mortality	2.5	2.2	3.0
Outcome depends on the skill and judgement of physician	3.6	3.2	2.7
Estimated risk of malpractice suit with poor outcome	2.6	2.1	2.8

**INTENSITY/COMPLEXITY MEASURES****CPT Code****Reference  
Service 1****Reference  
Service 2****Time Segments (Mean)**

Pre-Service intensity/complexity	2.5	2.0	2.2
Intra-Service intensity/complexity	3.5	2.1	2.7
Post-Service intensity/complexity	2.6	2.5	2.3

## ADDITIONAL RATIONALE

Describe the process by which your specialty society reached your final recommendation.

The committee recommends the median survey value, though the Intensity/Complexity values were consistently higher and it was felt that the anatomic variants of the SI joint make this interpretation more complex than the reference hip arthrogram.

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## FREQUENCY INFORMATION

How was this service previously reported? Scenario #1: In cases where we actually perform and interpret an arthrogram, we use 73525 for supervision and interpretation. This code pertains to the hip.

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How often do physicians in your specialty perform this service? ☐ Commonly ☒ Sometimes ☐ Rarely

Estimate the number of times this service might be provided nationally in a one-year period?

Estimating the number of times this service might be provided nationally in a one-year period is difficult. We have taken 10 percent of the frequency reported for radiologic examination, hip arthrography (S&I) (73525) reported in HCFA's 1997 Part B Physician/Supplier file (BMAD) data (7,995) to arrive at 800 times this service may be performed for Medicare patients in a one-year period.

Do many physicians perform this service across the United States? ☒ Yes ☐ No

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AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF WORK RECOMMENDATION

(April 1999)

**Recommended RVW:** 1.85

**CPT Code/ Tracking:** 6447X1 (M3) **Global Period:** 000

**CPT Descriptor:** Injection, anesthetic agent and/or steroid\* paravertebral facet joint or facet joint nerve; cervical or thoracic, single level

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**Vignette Used in Survey:**

A 67-year-old female presents with a long history of cervical spine pain in her neck and radiating down to her shoulders. She has no pain into her fingertips, no weakness in her arms, and denies any bowel or bladder symptoms. She has failed to obtain relief using various oral medications and physical therapy. A recent X-ray showed cervical spondylosis between C5-6. The patient undergoes cervical facet joint injection with corticosteroid (e.g., Celestone Soluspan) into the cervical facet joint at C5-6.

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**CLINICAL DESCRIPTION OF SERVICE** (This work description was NOT provided on the survey.):

**Description of Pre-Service Work:**

Pre-service work includes review of records and any pertinent imaging studies; communicating with other professionals, patient, and family; and obtaining consent. The pre-service work also includes dressing, scrubbing, and waiting before the procedure, preparing the patient and needed equipment for the procedure, positioning the patient on the x-ray table for appropriate fluoroscopic view, and draping of the injection site.

**Description of Intra-Service Work:**

Under IV anesthetic, the affected joint/joint nerve is identified and the skin is infiltrated with local anesthetic. A needle is directed into the cervical or thoracic facet joint or along the facet joint nerve at the proper vertebral level with x-ray fluoroscopic guidance. Contrast injection is performed to confirm needle tip location. Once this is completed anesthetic agent and/or steroid is injected. The injection needle is removed and dressing applied.

**Description of Post-Service Work:**

After the procedure, the patient is observed for any new and unexpected neurological deficits. The physician reviews the procedure and results with the patient and other professionals (including written and telephone reports and orders).

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**SURVEY DATA**

**Presenter(s):** Michael Ashburn, MD (AAPM)  
 Karl Becker, MD (ASA)  
 Peter Dempsey, MD (AANS)  
 Paul Dreyfuss, MD (AAPM&R)  
 Thomas Faciszewski, MD (NASS)  
 Samuel Hassenbusch, MD (AANS/CNS)

**Specialty(s):** American Academy of Pain Medicine, American Academy of Physical Medicine and Rehabilitation, American Society of Anesthesiologists, American Association of Neurological Surgeons/Congress of Neurological Surgeons, North American Spine Society

**Sample Size:** 235      **Response Rate (No. and %):** 53 (23%)

**Type of Sample:** random and panel

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<b><u>Survey RVW</u></b>	<b>Low:</b> 1.10	<b>25th%:</b> 1.51	<b>Med:</b> 1.85	<b>75th%:</b> 2.10	<b>High:</b> 3.00
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**TIME (min) AND VISITS**

**24 Hr Preceding Service:** **Med:** 23

**Day of Service**

Pre-service time: **Med:** 15

Intra-service time: **Low:** 5      **25th%:** 15      **Med:** 20      **75th%:** 30      **High:** 75

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<b><u>Post Service</u></b>	<b><u>Total Time</u></b>	<b><u>CPT Code / # of visits</u></b>
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Same Day:	15	99238
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**KEY REFERENCE SERVICE(S):****HVD**

<b><u>Tot Min</u></b>	<b><u>99 RVW</u></b>	<b><u>Global</u></b>	<b><u>CPT</u></b>	<b><u>Descriptor</u></b>
34	1.41	000	64442	Injection, anesthetic agent; paravertebral facet joint nerve, lumbar, single level

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Time Estimates (Median)	<i>Mean</i> Intensity/Complexity Measures		
	6447X1 (M3)	64442	N/A *
Survey response rate	50	35	--
PRE-service time	38	30	--
INTRA-service time	20	20	--
POST-service time	15	15	--
<b>Mental Effort and Judgment</b>			
The number of possible diagnosis and/or the number of management options that must be considered	3.45	3.00	--
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	3.43	2.93	--
Urgency of medical decision making	2.12	1.86	--
<b>Technical Skill/physical Effort</b>			
Technical skill required	4.02	3.14	--
Physical effort required	2.95	2.64	--
<b>Psychological Stress</b>			
The risk of significant complications, morbidity and/or mortality	3.71	2.79	--
Outcome depends on skill and judgment of physician	4.00	3.54	--
Estimated risk of malpractice suit with poor outcome	3.54	2.75	--
<b>Time Segments</b>			
PRE-service intensity/complexity	2.78	2.46	--
INTRA-service intensity/complexity	3.75	3.04	--
POST-service intensity/complexity	2.56	2.22	--

\*No other code was reported with a high enough frequency to report a meaningful mean measure of intensity/complexity.

**ADDITIONAL RATIONALE :*****Overview of code family M3-M10 recommendations***

New codes 6447X1 (M3) and 6447X2 (M4) were created for cervical level injections to distinguish from the existing codes 64442 and 64443 for lumbar. Because there is a different level of work required in placing a spinal needle in the cervical facet joint or at the medial branch nerve, as well as a higher risk factor, separate codes were needed. Cervical injections are performed under fluoroscopic guidance (billed separately) for exact localization and can not be properly or safely performed unless under fluoroscopic guidance. The cervical risks that differ from the lumbar, include but are not limited to potential seizures from placement of anesthetic in the vertebral artery to nerve root damage and quadriplegia from injection into the nerve roots or spinal cord.

New code numbers 6447X3 (M5) and 6447X4 (M6) will be crosswalked from to-be-deleted codes 64442 and 64443 as editorial, with no recommended change in RVW.

New codes 6447X5 (M7), 6447X6 (M8), 6447X7 (M9), and 6447X8 (M10) were created to describe the injections of substances through the nerve root foramen into the epidural space and to differentiate between cervical and lumbar levels. In the cervical spine, the patient is in the supine position with risks that include: seizures, if the anesthetic substance is injected in the vertebral artery; nerve root injury; if the nerve root is pierced or the substance is injected into the nerve; quadriplegia, if the spinal cord is damaged by direct trauma or secondarily to bleeding; and temporary quadriplegia, if the anesthetic enters the subarachnoid space. The lumbar injection is different as the patient is in a prone position and other structures may interfere with the injection such as the iliac crest.

Of the four "parent" codes, M7 is the most difficult, followed by M9 and M3 (almost equally), then M5 as the least difficult. The consensus committee reviewing this family of codes recommends the survey median RVW for parent codes: M3, M7, and M9. We recommend that M5 and M6 maintain the current RVWs from the crosswalked codes 64442 and 64443. As for the add-on codes, we recommend that M4, M8, and M10 have values set at 70% of the parent codes. This is the ratio of the "anchor pair" 64442/64443 with current values of 1.41/0.98.

#### ***Discussion of New Code 6447X1 (M3)***

Those physicians who perform M3 (survey median 12 month experience was 40) acknowledged the difference between 6447X1 and 64442 by indicating significantly higher time and intensity/complexity measures between the new cervical code and the existing lumbar code. The survey median RVW of 1.85 for 6447X1 (M3) is recommended based on the increased work as compared with the similar lumbar injection procedure 64442.

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### **FREQUENCY INFORMATION**

#### **How was this service previously reported?**

64999 Unlisted procedure, nervous system

#### **How often do physicians in your specialty perform this service?**

Commonly      Sometimes      Rarely

#### **Estimate the number of times this service might be provided nationally in a one-year period?**

Medicare frequency for new code M3 has been estimated at 8,000 based on 1997 Medicare frequency for similar lumbar injection codes and practice patterns. These procedures are also performed frequently on patients outside the Medicare population who have neck and upper back pain from cervical or thoracic traumatic hyperextension flexion injuries and lift and twisting injuries. Estimates for the non-Medicare population cannot be made.

#### **Is this service performed by many physicians across the United States?**

Yes      No

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF WORK RECOMMENDATION

(April 1999)

**Recommended RVW:** 1.29

**CPT Code/ Tracking:** 6447X2 (M4)

**Global Period:** ZZZ

**CPT Descriptor:** Injection, anesthetic agent and/or steroid; paravertebral facet joint or facet joint nerve; cervical or thoracic, each additional level (List separately in addition to code for primary procedure)

**Vignette Used in Survey:**

A 67-year-old female presents with a long history of cervical spine pain in her neck and radiating down to her shoulders. She has no pain into her fingertips, no weakness in her arms, and denies any bowel or bladder symptoms. She has failed to obtain relief using various oral medications and physical therapy. A recent X-ray showed cervical spondylosis between C5-6 and C6-7. The patient undergoes cervical facet joint injection with corticosteroid (e.g., Celestone Soluspan) into the cervical facet joints at C5-6 and C6-7. [NOTE: For purposes of this survey, please consider ONLY the work related to the "additional" injection at the "additional" level.]

**CLINICAL DESCRIPTION OF SERVICE** (This work description was NOT provided on the survey.):

Description of Pre-Service Work: n/a

**Description of Intra-Service Work:**

Under IV anesthetic, the affected additional joints/joint nerves are identified and the skin is infiltrated with local anesthetic. A needle is directed into the additional cervical or thoracic facet joints or along the facet joint nerves at the proper vertebral level with x-ray fluoroscopic guidance. Contrast injection is performed to confirm needle tip location. Once this is completed anesthetic agent and/or steroid is injected. The injection needle is removed and dressing applied.

Description of Post-Service Work: n/a

**SURVEY DATA**

**Presenter(s):** Michael Ashburn, MD (AAPM); Karl Becker, MD (ASA); Peter Dempsey, MD (AANS); Paul Dreyfuss, MD (AAPM&R); Thomas Faciszewski, MD (NASS); Samuel Hassenbusch, MD (AANS/CNS)

**Specialty(s):** American Academy of Pain Medicine, American Academy of Physical Medicine and Rehabilitation, American Society of Anesthesiologists, American Association of Neurological Surgeons/Congress of Neurological Surgeons, North American Spine Society

**Sample Size:** 274      **Response Rate (No. and %):** 56 (20%)

**Type of Sample:** random and panel

**Survey RVW**      Low: 0.97      25th%: 1.25      Med: 1.41      75th%: 1.60      High: 3.00

**TIME (min) AND VISITS**

**Intra-service time:**      Low: 5      25th%: 10      Med: 15      75th%: 25      High: 60



**KEY REFERENCE SERVICE(S):****HVD**

<b><u>Tot Min</u></b>	<b><u>99 RVW</u></b>	<b><u>Global</u></b>	<b><u>CPT</u></b>	<b><u>Descriptor</u></b>
n/a*	0.98	ZZZ	64443	Injection, anesthetic agent; paravertebral facet joint nerve, lumbar, each additional level (List separately in addition to code for primary procedure)

\*Total and intra time data for this code from the Harvard study is not valid because this code was surveyed as having a 10- day global for "multiple levels" and not as an add-on code for a single level. After the study, and before the Medicare fee schedule was published, Harvard/HCF, through modeling, transformed the work data into a value for a code with a ZZZ-global. New time data was not obtained or published.

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Time Estimates (Median)	<i>Mean</i> Intensity/Complexity Measures		
	6447X2 (M4)	64443	N/A*
Survey response rate	53	43	--
PRE-service time	0	0	--
INTRA-service time	15	15	--
POST-service time	0	0	--
<b>Mental Effort and Judgment</b>			
The number of possible diagnosis and/or the number of management options that must be considered	3.20	3.14	--
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	3.16	2.97	--
Urgency of medical decision making	1.98	1.89	--
<b>Technical Skill/physical Effort</b>			
Technical skill required	4.05	3.60	--
Physical effort required	3.18	3.03	--
<b>Psychological Stress</b>			
The risk of significant complications, morbidity and/or mortality	3.64	3.03	--
Outcome depends on skill and judgment of physician	4.11	3.74	--
Estimated risk of malpractice suit with poor outcome	3.55	2.91	--
<b>Time Segments</b>			
PRE-service intensity/complexity	--	--	--
INTRA-service intensity/complexity	3.70	3.03	--
POST-service intensity/complexity	--	--	--

\*No other code was reported with a high enough frequency to report a meaningful mean measure of intensity/complexity.

**ADDITIONAL RATIONALE:*****Overview of code family M3-M10 recommendations***

Please refer to Summary of Work Recommendation Form for new code 6447X1 (M3)

***Discussion of New Code 6447X2 (M4)***

Those physicians who perform this add-on procedure (survey median 12 month experience was 23) acknowledged the difference between 6447X2 and 64443 by indicating higher intensity/complexity measures between the new cervical add-on code and the referenced lumbar add-on code. However, the committee reviewing this survey data considered the survey median RVW too high relative to the parent code 6447X1. The committee recommends an RVW of 1.29 for new code 6447X2, which is 70% of the recommended value for the new parent code 6447X1 and less than the survey median for this code. This ratio is the same as the ratio of the lumbar code pair 64442/64443 (1.41/0.98).

**FREQUENCY INFORMATION****How was this service previously reported?**

64999 Unlisted procedure, nervous system

**How often do physicians in your specialty perform this service?**Commonly      Sometimes      Rarely**Estimate the number of times this service might be provided nationally in a one-year period?**

Medicare frequency for new code M4 has been estimated at 12,000 based on 1997 Medicare frequency for similar lumbar injection codes and practice patterns. These procedures are also performed frequently on patients outside the Medicare population who have neck and upper back pain from cervical or thoracic traumatic hyperextension flexion injuries and lift and twisting injuries. Estimates for the non-Medicare population cannot be made.

**Is this service performed by many physicians across the United States?**Yes      No

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF WORK RECOMMENDATION

(April 1999)

**Recommended RVW:** 2.20

**CPT Code/ Tracking:** 6447X5 (M7)      **Global Period:** 000

**CPT Descriptor:** Injection, anesthetic agent and/or steroid, transforaminal epidural, cervical or thoracic, single level

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**Vignette Used in Survey:**

A 55-year-old male with coronary artery disease and moderate heart failure presents with constant moderately severe right arm pain that limits all activity. The patient's history includes a previous laminectomy at C5-6; an MRI with gadolinium, showing a small bony spur at the right C5-6 foramen compressing the C6 nerve root; and neurodiagnostic studies compatible with an acute C6 radiculopathy. He has failed to obtain relief using various oral medications, physical therapy, and traction. He undergoes a transforaminal epidural injection of an anesthetic agent and/or steroid at the C5-6 level.

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**CLINICAL DESCRIPTION OF SERVICE** (This work description was NOT provided on the survey.):

**Description of Pre-Service Work:**

Pre-service work includes review of records and any pertinent imaging studies; communicating with other professionals, patient, and family; and obtaining consent. The pre-service work also includes dressing, scrubbing, and waiting before the procedure, preparing the patient and needed equipment for the procedure, positioning the patient on the x-ray table for appropriate fluoroscopic view, and draping of the injection site.

**Description of Intra-Service Work:**

Under IV anesthetic, the affected foramen is identified and the skin is infiltrated with local anesthetic. A needle is directed lateral to midline under fluoroscopic guidance into the foramen. Both AP and oblique views are needed to get depth as well as anterior and posterior position. Contrast injection is performed to confirm needle tip location. Once this is completed anesthetic agent and/or steroid is injected. The injection needle is removed and dressing applied.

**Description of Post-Service Work:**

After the procedure, the patient is observed for any new and unexpected neurological deficits. The physician reviews the procedure and results with the patient and other professionals (including written and telephone reports and orders).

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**SURVEY DATA**

**Presenter(s):** Michael Ashburn, MD (AAPM)  
 Karl Becker, MD (ASA)  
 Peter Dempsey, MD (AANS)  
 Paul Dreyfuss, MD (AAPM&R)  
 Thomas Faciszewski, MD (NASS)  
 Samuel Hassenbusch, MD (AANS/CNS)

**Specialty(s):** American Academy of Pain Medicine, American Academy of Physical Medicine and Rehabilitation, American Society of Anesthesiologists, American Association of Neurological Surgeons/Congress of Neurological Surgeons, North American Spine Society

**Sample Size:** 241      **Response Rate (No. and %):** 46 (19%)

**Type of Sample:** random and panel

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<b><u>Survey RVW</u></b>	Low: 1.40	25th%: 2.00	<b>Med: 2.20</b>	75th%: 2.80	High: 6.00
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**TIME (min) AND VISITS**

**24 Hr Preceding Service:**      **Med: 20**

**Day of Service**

Pre-service time:      **Med: 15**

Intra-service time:      Low: 5      25th%: 20      **Med: 30**      75th%: 43      High: 75

<b><u>Post Service</u></b>	<b><u>Total Time</u></b>	<b><u>CPT Code / # of visits</u></b>
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Same Day:	20	99238
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**KEY REFERENCE SERVICE(S):****HVD**

<b><u>Tot Min</u></b>	<b><u>99 RVW</u></b>	<b><u>Global</u></b>	<b><u>CPT</u></b>	<b><u>Descriptor</u></b>
n/a*	2.20	000	62298	Injection of substance other than anesthetic, contrast, or neurolytic solutions, epidural, cervical or thoracic (separate procedure)
56	1.34	000	64440	Injection, anesthetic agent; paravertebral nerve (thoracic, lumbar, sacral, coccygeal), single vertebral level

\*There is no data available in the Harvard data files for these codes. We do not know how these codes were originally valued.

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

	<i>Mean</i> Intensity/Complexity Measures		
	6447X5 (M7)	62298	64440
<b>Time Estimates (Median)</b>			
Survey response rate	43	21	11
PRE-service time	35	33	30
INTRA-service time	30	20	20
POST-service time	20	20	20
<b>Mental Effort and Judgment</b>			
The number of possible diagnosis and/or the number of management options that must be considered	3.57	3.72	3.33
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	3.60	3.78	3.22
Urgency of medical decision making	2.29	2.33	1.89
<b>Technical Skill/physical Effort</b>			
Technical skill required	4.40	4.11	3.33
Physical effort required	3.31	3.17	2.89
<b>Psychological Stress</b>			
The risk of significant complications, morbidity and/or mortality	4.31	4.11	3.11
Outcome depends on skill and judgment of physician	4.34	4.06	3.44
Estimated risk of malpractice suit with poor outcome	4.20	3.89	3.33
<b>Time Segments</b>			
PRE-service intensity/complexity	3.20	3.33	2.78
INTRA-service intensity/complexity	4.14	3.78	3.11
POST-service intensity/complexity	2.80	2.83	2.67

**ADDITIONAL RATIONALE:***Overview of code family M3-M10 recommendations*

Please refer to Summary of Work Recommendation Form for new code 6447X1 (M3)

*Discussion of New Code 6447X5 (M7)*

Those physicians who perform M7 (survey median 12 month experience was 20) cited 62298 most often as a reference service. The survey times for the new code were higher than for 62298 and the intensity/complexity measures were almost all higher due to the added risk of possible nerve root injuries. When comparing M7 to referenced code 64440, the survey respondents reported higher times and significantly greater intensity/complexity measures. The survey median RVW of 2.20 for 6447X5 (M7) is recommended based these comparisons. This RVW also positions M7 as the most difficult procedure in the family M3-M10.

**FREQUENCY INFORMATION****How was this service previously reported?**

64999 Unlisted procedure, nervous system

64440 Injection, anesthetic agent; paravertebral nerve (thoracic, lumbar, sacral, coccygeal), single vertebral level

**How often do physicians in your specialty perform this service?**

~~Commonly~~

Sometimes

~~Rarely~~

**Estimate the number of times this service might be provided nationally in a one-year period?**

Medicare frequency for new code M7 has been estimated at 3,500 based on 1997 Medicare frequency for similar lumbar injection codes and practice patterns. These procedures are also performed frequently on patients outside the Medicare population who have neck and upper back pain from cervical or thoracic traumatic hyperextension flexion injuries and lift and twisting injuries. These codes are also used for patients requiring diagnostic and therapeutic nerve root injections to treat spinal stenosis and disc herniations. Estimates for the non-Medicare population cannot be made.

**Is this service performed by many physicians across the United States?**

Yes

~~No~~

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF WORK RECOMMENDATION

(April 1999)

**Recommended RVW:** 1.54

**CPT Code/ Tracking:** 6447X6 (M8) **Global Period:** ZZZ

**CPT Descriptor:** Injection, anesthetic agent and/or steroid,\* transforaminal epidural, cervical or thoracic, each additional level (List separately in addition to code for primary procedure)

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**Vignette Used in Survey:**

A 55-year-old male with coronary artery disease and moderate heart failure presents with constant moderately severe right arm pain that limits all activity. The patient's history includes a previous laminectomies at C5-6 and C6-7; an MRI with gadolinium, showing small bony spurs at the right C5-6 and C6-7 foramen compressing the C6 nerve root; and neurodiagnostic studies compatible with an acute C6 radiculopathy. He has failed to obtain relief using various oral medications, physical therapy, and traction. He undergoes a transforaminal epidural injection of an anesthetic agent and/or steroid at the C5-6 and C6-7 levels. [NOTE: For purposes of this survey, please consider ONLY the work related to the "additional" injection at the "additional" level.]

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**CLINICAL DESCRIPTION OF SERVICE** (This work description was NOT provided on the survey.):

Description of Pre-Service Work: n/a

**Description of Intra-Service Work:**

Under IV anesthetic, the affected additional foramen is identified and the skin is infiltrated with local anesthetic. A needle is directed lateral to midline under fluoroscopic guidance into the foramen. Additional AP and oblique views are needed to get depth as well as anterior and posterior position. Contrast injection is performed to confirm needle tip location. Once this is completed anesthetic agent and/or steroid is injected. The injection needle is removed and dressing applied.

Description of Post-Service Work: n/a

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**SURVEY DATA**

**Presenter(s):** Michael Ashburn, MD (AAPM); Karl Becker, MD (ASA); Peter Dempsey, MD (AANS); Paul Dreyfuss, MD (AAPM&R); Thomas Faciszewski, MD (NASS); Samuel Hassenbusch, MD (AANS/CNS)

**Specialty(s):** American Academy of Pain Medicine, American Academy of Physical Medicine and Rehabilitation, American Society of Anesthesiologists, American Association of Neurological Surgeons/Congress of Neurological Surgeons, North American Spine Society

**Sample Size:** 199 **Response Rate (No. and %):** 44 (22%)

**Type of Sample:** random and panel

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<b>Survey RVW</b>	Low: 0.98	25th%: 1.50	Med: 1.90	75th%: 2.20	High: 2.80
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**TIME (min) AND VISITS**

Intra-service time:	Low: 5	25th%: 15	Med: 20	75th%: 30	High: 60
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**KEY REFERENCE SERVICE(S):****HVD**

<b><u>Tot Min</u></b>	<b><u>99 RVW</u></b>	<b><u>Global</u></b>	<b><u>CPT</u></b>	<b><u>Descriptor</u></b>
n/a*	2.20	000	62298	Injection of substance other than anesthetic, contrast, or neurolytic solutions, epidural, cervical or thoracic (separate procedure)

\*There is no data available in the Harvard data files for these codes. We do not know how these codes were originally valued.

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

	<i>Mean</i> Intensity/Complexity Measures		
	6447X6 (M8)	62298	N/A*
Time Estimates (Median)			
Survey response rate	41	20	--
PRE-service time	0	28	--
INTRA-service time	20	20	--
POST-service time	0	20	--
Mental Effort and Judgment			
The number of possible diagnosis and/or the number of management options that must be considered	3.39	3.25	--
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	3.33	3.50	--
Urgency of medical decision making	2.18	2.31	--
Technical Skill/physical Effort			
Technical skill required	4.30	3.94	--
Physical effort required	3.36	3.31	--
Psychological Stress			
The risk of significant complications, morbidity and/or mortality	4.12	3.69	--
Outcome depends on skill and judgment of physician	4.24	4.00	--
Estimated risk of malpractice suit with poor outcome	4.12	3.69	--
Time Segments			
PRE-service intensity/complexity	--	2.81	--
INTRA-service intensity/complexity	4.13	3.75	--
POST-service intensity/complexity	--	2.81	--

\*No other code was reported with a high enough frequency to report a meaningful mean measure of intensity/complexity.

**ADDITIONAL RATIONALE:*****Overview of code family M3-M10 recommendations***

Please refer to Summary of Work Recommendation Form for new code 6447X1 (M3)

***Discussion of New Code 6447X6 (M8)***

Those physicians who perform this add-on procedure (survey median 12 month experience was 10) cited 62298 most often as a reference service. The survey times for the new code were comparable and the intensity/complexity measures were almost all higher than 62298. However, the committee reviewing this survey data considered the survey median RVW too high relative to the parent code 6447X5. The committee recommends an RVW of 1.54 for new code 6447X6, which is 70% of the recommended value for the new parent code 6447X5 and less than the survey median for this code. This ratio is the same as the ratio of the lumbar code pair 64442/64443 (1.41/0.98).



**FREQUENCY INFORMATION****How was this service previously reported?**

64999 Unlisted procedure, nervous system

64441 Injection, anesthetic agent; paravertebral nerves, multiple levels (eg, regional block)

**How often do physicians in your specialty perform this service?**~~Commonly~~Sometimes~~Rarely~~**Estimate the number of times this service might be provided nationally in a one-year period?**

Medicare frequency for new code M8 has been estimated at 200 based on 1997 Medicare frequency for similar lumbar injection codes and practice patterns. These procedures are also performed frequently on patients outside the Medicare population who have neck and upper back pain from cervical or thoracic traumatic hyperextension flexion injuries and lift and twisting injuries. These codes are also used for patients requiring diagnostic and therapeutic nerve root injections to treat spinal stenosis and disc herniations. Estimates for the non-Medicare population cannot be made.

**Is this service performed by many physicians across the United States?**Yes~~No~~

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF WORK RECOMMENDATION

(April 1999)

**Recommended RVW:** 1.90

**CPT Code/ Tracking:** 6447X7 (M9) **Global Period:** 000

**CPT Descriptor:** Injection, anesthetic agent and/or steroid\*, transforaminal epidural, lumbar or sacral, single level

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**Vignette Used in Survey:**

A 71-year-old male with coronary artery disease and moderate heart failure presents with recurrent right leg pain, the ability to stand for only ten minutes and walk less than one block, and minimal problems sitting. The patient's history includes a previous laminectomy at L4-5; an MRI with gadolinium, showing a small recurrent herniation between L4-5 with scar tissue; and neurodiagnostic studies compatible with an acute L5 radiculopathy. He has failed to obtain relief using various oral medications, physical therapy, and traction. He undergoes a transforaminal epidural injection of an anesthetic agent and/or steroid at the L5-S1 level.

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**CLINICAL DESCRIPTION OF SERVICE** (This work description was NOT provided on the survey.):

**Description of Pre-Service Work:**

Pre-service work includes review of records and any pertinent imaging studies; communicating with other professionals, patient, and family; and obtaining consent. The pre-service work also includes dressing, scrubbing, and waiting before the procedure, preparing the patient and needed equipment for the procedure, positioning the patient on the x-ray table for appropriate fluoroscopic view, and draping of the injection site.

**Description of Intra-Service Work:**

Under IV anesthetic, the affected foramen is identified and the skin is infiltrated with local anesthetic. A needle is directed lateral to midline under fluoroscopic guidance into the foramen. Both AP and oblique or lateral views are needed to get depth as well as anterior and posterior position. Contrast injection is performed to confirm needle tip location. Once this is completed anesthetic agent and/or steroid is injected. The injection needle is removed and dressing applied.

**Description of Post-Service Work:**

After the procedure, the patient is observed for any new and unexpected neurological deficits. The physician reviews the procedure and results with the patient and other professionals (including written and telephone reports and orders).

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**SURVEY DATA**

**Presenter(s):** Michael Ashburn, MD (AAPM)  
 Karl Becker, MD (ASA)  
 Peter Dempsey, MD (AANS)  
 Paul Dreyfuss, MD (AAPM&R)  
 Thomas Faciszewski, MD (NASS)  
 Samuel Hassenbusch, MD (AANS/CNS)

**Specialty(s):** American Academy of Pain Medicine, American Academy of Physical Medicine and Rehabilitation, American Society of Anesthesiologists, American Association of Neurological Surgeons/Congress of Neurological Surgeons, North American Spine Society

**Sample Size:** 196      **Response Rate (No. and %):** 42 (21%)

**Type of Sample:** random and panel

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<b><u>Survey RVW</u></b>	Low: 1.30	25th%: 1.58	<b>Med: 1.90</b>	75th%: 2.25	High: 4.00
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**TIME (min) AND VISITS**

**24 Hr Preceding Service:**      **Med: 20**

**Day of Service**

Pre-service time:      **Med: 15**

Intra-service time:      Low: 5      25th%: 16      Med: 28      75th%: 30      High: 60

<b><u>Post Service</u></b>	<b><u>Total Time</u></b>	<b><u>CPT Code / # of visits</u></b>
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Same Day:	20	99238
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**KEY REFERENCE SERVICE(S):****HVD**

<b><u>Tot Min</u></b>	<b><u>99 RVW</u></b>	<b><u>Global</u></b>	<b><u>CPT</u></b>	<b><u>Descriptor</u></b>
50	1.64	000	62289	Injection of substance other than anesthetic, antispasmodic, contrast, or neurolytic solutions; lumbar or caudal epidural (separate procedure)
56	1.34	000	64440	Injection, anesthetic agent; paravertebral nerve (thoracic, lumbar, sacral, coccygeal), single vertebral level

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

	<i>Mean</i> Intensity/Complexity Measures		
	6447X7 (M9)	62289	64440
<b>Time Estimates (Median)</b>			
Survey response rate	39	10	15
PRE-service time	35	28	30
INTRA-service time	28	23	20
POST-service time	20	18	20
<b>Mental Effort and Judgment</b>			
The number of possible diagnosis and/or the number of management options that must be considered	3.39	3.00	3.33
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	3.45	3.10	3.42
Urgency of medical decision making	2.26	2.10	2.25
<b>Technical Skill/physical Effort</b>			
Technical skill required	3.97	3.20	3.50
Physical effort required	3.26	2.60	3.25
<b>Psychological Stress</b>			
The risk of significant complications, morbidity and/or mortality	3.55	2.80	3.33
Outcome depends on skill and judgment of physician	3.90	3.30	3.42
Estimated risk of malpractice suit with poor outcome	3.32	2.60	3.00
<b>Time Segments</b>			
PRE-service intensity/complexity	2.97	2.50	2.83
INTRA-service intensity/complexity	3.77	3.10	3.25
POST-service intensity/complexity	2.81	2.60	2.67

**ADDITIONAL RATIONALE:***Overview of code family M3-M10 recommendations*

Please refer to Summary of Work Recommendation Form for new code 6447X1 (M3)

*Discussion of New Code 6447X7 (M9)*

Those physicians who perform M9 (survey median 12 month experience was 50) cited 64440 most often as a reference service. The survey times for the new code were higher than for 64440 and the intensity/complexity measures were also all higher. When comparing M9 to referenced code 62289, the survey respondents reported higher times and significantly greater intensity/complexity measures. The survey median RVW of 1.90 for 6447X7 (M9) is recommended based these comparisons. This RVW also appropriately positions M9 less than M7 the most difficult procedure and greater than M5 within the family M3-M10.

**FREQUENCY INFORMATION****How was this service previously reported?**

64999 Unlisted procedure, nervous system

64440 Injection, anesthetic agent; paravertebral nerve (thoracic, lumbar, sacral, coccygeal), single vertebral level

**How often do physicians in your specialty perform this service?**

~~Commonly~~      Sometimes      ~~Rarely~~

**Estimate the number of times this service might be provided nationally in a one-year period?**

Medicare frequency for new code M9 has been estimated at 40,000 based on 1997 Medicare frequency for comparable lumbar injection codes and practice patterns. These procedures are also performed frequently on patients outside the Medicare population who have spinal stenosis, postoperative back and leg pain, and herniated disks. Estimates for the non-Medicare population cannot be made.

**Is this service performed by many physicians across the United States?**

Yes      ~~No~~

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF WORK RECOMMENDATION

(April 1999)

**Recommended RVW:** 1.33

**CPT Code/ Tracking:** 6447X8 (M10) **Global Period:** ZZZ

**CPT Descriptor:** Injection, anesthetic agent and/or steroid; transforaminal epidural, lumbar or sacral, each additional level (List separately in addition to code for primary procedure)

**Vignette Used in Survey:**

A 71-year-old male with coronary artery disease and moderate heart failure presents with recurrent right leg pain, the ability to stand for only ten minutes and walk less than one block, and minimal problems sitting. The patient's history includes previous laminectomies at L3-4 and L4-5; an MRI with gadolinium, showing a small recurrent herniation between L4-5 with scar tissue; and neurodiagnostic studies compatible with an acute L4 and L5 radiculopathy. He has failed to obtain relief using various oral medications, physical therapy, and traction. He undergoes a transforaminal epidural injection of an anesthetic agent and/or steroid at the L4-L and L5-S1 levels. [NOTE: For purposes of this survey, please consider ONLY the work related to the "additional" injection at the "additional" level.]

**CLINICAL DESCRIPTION OF SERVICE** (This work description was NOT provided on the survey.):

Description of Pre-Service Work: n/a

**Description of Intra-Service Work:**

Under IV anesthetic, the affected additional foramen is identified and the skin is infiltrated with local anesthetic. A needle is directed lateral to midline under fluoroscopic guidance into the foramen. Additional AP and oblique or lateral views are needed to get depth as well as anterior and posterior position. Contrast injection is performed to confirm needle tip location. Once this is completed anesthetic agent and/or steroid is injected. The injection needle is removed and dressing applied.

Description of Post-Service Work: n/a

**SURVEY DATA**

**Presenter(s):** Michael Ashburn, MD (AAPM); Karl Becker, MD (ASA); Peter Dempsey, MD (AANS); Paul Dreyfuss, MD (AAPM&R); Thomas Faciszewski, MD (NASS); Samuel Hassenbusch, MD (AANS/CNS)

**Specialty(s):** American Academy of Pain Medicine, American Academy of Physical Medicine and Rehabilitation, American Society of Anesthesiologists, American Association of Neurological Surgeons/Congress of Neurological Surgeons, North American Spine Society

**Sample Size:** 196 **Response Rate (No. and %):** 43 (22%)

**Type of Sample:** random and panel

**Survey RVW** Low: 0.50 25th%: 1.20 Med: 1.60 75th%: 1.90 High: 2.46

**TIME (min) AND VISITS**

**Intra-service time:** Low: 5 25th%: 15 Med: 20 75th%: 30 High: 60

**KEY REFERENCE SERVICE(S):****HVD**

<b>Tot Min</b>	<b>99 RVW</b>	<b>Global</b>	<b>CPT</b>	<b>Descriptor</b>
50	1.64	000	62289	Injection of substance other than anesthetic, antispasmodic, contrast, or neurolytic solutions; lumbar or caudal epidural (separate procedure)
n/a*	0.98	ZZZ	64443	Injection, anesthetic agent; paravertebral facet joint nerve, lumbar, each additional level (List separately in addition to code for primary procedure)

\*Total and intra time data for this code from the Harvard study is not valid because this code was surveyed as having a 10- day global for "multiple levels" and not as an add-on code for a single level. After the study, and before the Medicare fee schedule was published, Harvard/HCF, through modeling, transformed the work data into a value for a code with a ZZZ-global. New time data was not obtained or published.

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

	<i>Mean</i> Intensity/Complexity Measures		
	6447X8 (M10)	62289	64443
<b>Time Estimates (Median)</b>			
Survey response rate	40	9	12
PRE-service time	0	28	0
INTRA-service time	20	23	15
POST-service time	0	18	0
<b>Mental Effort and Judgment</b>			
The number of possible diagnosis and/or the number of management options that must be considered	3.41	2.78	2.89
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	3.53	3.11	2.89
Urgency of medical decision making	2.31	1.89	1.78
<b>Technical Skill/physical Effort</b>			
Technical skill required	3.97	3.00	3.11
Physical effort required	3.34	2.44	2.67
<b>Psychological Stress</b>			
The risk of significant complications, morbidity and/or mortality	3.56	2.78	3.11
Outcome depends on skill and judgment of physician	3.91	2.89	3.22
Estimated risk of malpractice suit with poor outcome	3.50	2.78	2.78
<b>Time Segments</b>			
PRE-service intensity/complexity	--	2.56	--
INTRA-service intensity/complexity	3.75	2.78	2.67
POST-service intensity/complexity	--	2.44	--

**ADDITIONAL RATIONALE:****Overview of code family M3-M10 recommendations**

Please refer to Summary of Work Recommendation Form for new code 6447X1 (M3)

**Discussion of New Code 6447X8 (M10)**

Those physicians who perform this add-on procedure (survey median 12 month experience was 40) cited 64443 most often as a reference service. The survey times and the intensity/complexity measures for M10 were all higher than 64443, acknowledging the greater work of the cervical add-on procedure compared with the lumbar add-on code. However, the committee reviewing this survey data considered the survey median RVW too high relative to the parent code 6447X7. The committee recommends an RVW of 1.33 for new code 6447X8, which is 70% of the recommended value for the new parent code 6447X7 and less than the survey median for this code. This ratio is the same as the ratio of the lumbar code pair 64442/64443 (1.41/0.98).

**FREQUENCY INFORMATION****How was this service previously reported?**

64999 Unlisted procedure, nervous system

64441 Injection, anesthetic agent; paravertebral nerves, multiple levels (eg, regional block)

**How often do physicians in your specialty perform this service?**~~Commonly~~Sometimes~~Rarely~~**Estimate the number of times this service might be provided nationally in a one-year period?**

Medicare frequency for new code M10 has been estimated at 12,000 based on 1997 Medicare frequency for comparable lumbar injection codes and practice patterns. These procedures are also performed frequently on patients outside the Medicare population who have spinal stenosis, postoperative back and leg pain, and herniated disks. Estimates for the non-Medicare population cannot be made.

**Is this service performed by many physicians across the United States?**Yes~~No~~



**Recommended RVW:** 3.50

**CPT Code/ Tracking:** 6462X1 (M11) **Global Period:** 010

**CPT Descriptor:** Destruction by neurolytic agent, paravertebral facet joint nerve; cervical or thoracic, single level

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**Vignette Used in Survey:**

A 65-year-old female involved in a flexion extension injury from an automobile accident present with constant neck pain. The patient's history includes imaging studies that found minimal degenerative disc disease at C4-5 with no facet arthropathy and no relief with physical therapy, NSAIDs, or trigger point injections. Previously two trials of cervical medial branch block gave her two hours of 100% relief of her neck pain. She undergoes radiofrequency rhizotomy of the right C4 medial branch nerves.

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**CLINICAL DESCRIPTION OF SERVICE** (This work description was NOT provided on the survey.):

**Description of Pre-Service Work:**

Pre-service work includes review of records and any pertinent imaging studies; communicating with other professionals, patient, and family; and obtaining consent. The pre-service work also includes dressing, scrubbing, and waiting before the procedure, preparing the patient and needed equipment for the procedure, positioning the patient on the x-ray table for appropriate fluoroscopic view, and draping of the injection site.

**Description of Intra-Service Work:**

Under IV anesthetic, the affected nerve is identified and the skin is infiltrated with local anesthetic. The injection needle is directed at the affected medial branch nerve under x-ray fluoroscopy. The patient is then stimulated with an appropriate frequency for sensory stimulation and for motor stimulation to verify that the needle is in the correct place and not placed by the spinal nerve. Marcaine is injected. The patient will receive three to five burns of 80°-90° centigrade at the site, as needed. After each burn, the needle is slowly repositioned under fluoroscopy to trace the track of the nerve. The injection needle is removed and dressing applied.

**Description of Post-Service Work:**

After the procedure, the patient is observed for any new and unexpected neurological deficits. The physician reviews the procedure and results with the patient and other professionals (including written and telephone reports and orders). One post-discharge office visit within the 10 day global to monitor for complications (neurologic deficit, increased pain) is included in post-service work.

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**SURVEY DATA**

**Presenter(s):** Michael Ashburn, MD (AAPM)  
 Karl Becker, MD (ASA)  
 Peter Dempsey, MD (AANS)  
 Paul Dreyfuss, MD (AAPM&R)  
 Thomas Faciszewski, MD (NASS)  
 Samuel Hassenbusch, MD (AANS/CNS)

**Specialty(s):** American Academy of Pain Medicine, American Academy of Physical Medicine and Rehabilitation, American Society of Anesthesiologists, American Association of Neurological Surgeons/Congress of Neurological Surgeons, North American Spine Society

**Sample Size:** 196      **Response Rate (No. and %):** 45 (23%)

**Type of Sample:** random and panel

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<b><u>Survey RVW</u></b>	Low: 2.00	25th%: 3.28	<b>Med: 3.50</b>	75th%: 4.00	High: 5.00
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**TIME (min) AND VISITS**

**24 Hr Preceding Service:**      **Med: 30**

**Day of Service**

Pre-service time:      **Med: 15**

Intra-service time:      Low: 5      25th%: 25      **Med: 30**      75th%: 50      High: 90

<b><u>Post Service</u></b>	<b><u>Total Time</u></b>	<b><u>CPT Code / # of visits</u></b>
Same Day:	25	99238
After Same Day:		
Critical Care	0	
Other Hospital	0	
Discharge Mgmt	see above	
Office	30	99213 x 2

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**KEY REFERENCE SERVICE(S):****HVD**

<b><u>Tot Min</u></b>	<b><u>99 RVW</u></b>	<b><u>Global</u></b>	<b><u>CPT</u></b>	<b><u>Descriptor</u></b>
61	3.00	010	64622	Destruction by neurolytic agent; paravertebral facet joint nerve, lumbar, single level

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Time Estimates (Median)	<i>Mean</i> Intensity/Complexity Measures		
	6462X1 (M11)	64622	N/A*
Survey response rate	42	39	--
PRE-service time	45	40	--
INTRA-service time	30	30	--
POST-service time	55	35	--
<b>Mental Effort and Judgment</b>			
The number of possible diagnosis and/or the number of management options that must be considered	3.74	3.66	--
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	3.88	3.66	--
Urgency of medical decision making	2.38	2.31	--
<b>Technical Skill/physical Effort</b>			
Technical skill required	4.58	4.17	--
Physical effort required	3.76	3.45	--
<b>Psychological Stress</b>			
The risk of significant complications, morbidity and/or mortality	4.44	3.93	--
Outcome depends on skill and judgment of physician	4.53	4.14	--
Estimated risk of malpractice suit with poor outcome	4.41	3.90	--
<b>Time Segments</b>			
PRE-service intensity/complexity	3.39	3.14	--
INTRA-service intensity/complexity	4.45	3.75	--
POST-service intensity/complexity	3.25	2.93	--

\*No other code was reported with a high enough frequency to report a meaningful mean measure of intensity/complexity.

**ADDITIONAL RATIONALE:**

New codes 6462X1 (M11) and 6462X2 (M12) were created for the cervical level to distinguish from the existing codes 64622 and 64623 for the lumbar procedure. The cervical/thoracic levels are different in that the areas are smaller and the risks are higher, including risks such as seizure, paralysis, and nerve root damage. The thoracic spine risk includes pneumothorax.

Those physicians who perform M11 (survey median 12 month experience was 10) acknowledged the difference between 6462X1 and 64622 by indicating higher total time and intensity/complexity measures (especially the intra-service intensity/complexity) between the new cervical code and the existing lumbar code. The survey median RVW of 3.50 for 6462X1 (M11) is recommended based on the increased work as compared with the similar lumbar procedure 64622.

**FREQUENCY INFORMATION****How was this service previously reported?**

64999 Unlisted procedure, nervous system

**How often do physicians in your specialty perform this service?**Commonly      Sometimes      Rarely**Estimate the number of times this service might be provided nationally in a one-year period?**

Medicare frequency for new code M11 has been estimated at 750 based on 1997 Medicare frequency for comparable lumbar injection codes and practice patterns. These procedures are also performed frequently on patients outside the Medicare population who have neck and upper back pain from cervical or thoracic traumatic hyperextension flexion injuries and lift and twisting injuries. Estimates for the non-Medicare population cannot be made.

**Is this service performed by many physicians across the United States?**Yes      No

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF WORK RECOMMENDATION

(April 1999)

**Recommended RVW:** 1.16

**CPT Code/ Tracking:** 6462X2 (M12) **Global Period:** ZZZ

**CPT Descriptor:** Destruction by neurolytic agent, paravertebral facet joint nerve; cervical or thoracic, each additional level (List separately in addition to code for primary procedure)

**Vignette Used in Survey:**

A 65-year-old female involved in a flexion extension injury from an automobile accident present with constant neck pain. The patient's history includes imaging studies that found minimal degenerative disc disease at C4-5 and C5-6 with no facet arthropathy and no relief with physical therapy, NSAIDs, or trigger point injections. Previously two trials of cervical medial branch blocks gave her two hours of 100% relief of her neck pain. She undergoes radiofrequency rhizotomy of the right C4 and C5 medial branch nerves. [NOTE: For purposes of this survey, please consider ONLY the work related to the "additional" level.]

**CLINICAL DESCRIPTION OF SERVICE** (This work description was NOT provided on the survey.):

Description of Pre-Service Work: n/a

**Description of Intra-Service Work:**

Under IV anesthetic, the affected additional nerves are identified and the skin is infiltrated with local anesthetic. The injection needle is directed at the additional affected medial branch nerves under x-ray fluoroscopy. The patient is then stimulated with an appropriate frequency for sensory stimulation and for motor stimulation to verify that the needle is in the correct place and not placed by the spinal nerve. Marcaine is injected. The patient will receive three to five burns of 80°-90° centigrade at the site, as needed. After each burn, the needle is slowly repositioned under fluoroscopy to trace the track of the nerve. The injection needle is removed and dressing applied.

Description of Post-Service Work: n/a

**SURVEY DATA**

**Presenter(s):** Michael Ashburn, MD (AAPM); Karl Becker, MD (ASA); Peter Dempsey, MD (AANS); Paul Dreyfuss, MD (AAPM&R); Thomas Faciszewski, MD (NASS); Samuel Hassenbusch, MD (AANS/CNS)

**Specialty(s):** American Academy of Pain Medicine, American Academy of Physical Medicine and Rehabilitation, American Society of Anesthesiologists, American Association of Neurological Surgeons/Congress of Neurological Surgeons, North American Spine Society

**Sample Size:** 196 **Response Rate (No. and %):** 45 (23%)

**Type of Sample:** random and panel

<b><u>Survey RVW</u></b>	Low: 0.98	25th%: 1.50	Med: 1.71	75th%: 2.00	High: 3.00
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**TIME (min) AND VISITS**

Intra-service time:	Low: 5	25th%: 15	Med: 30	75th%: 33	High: 60
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**KEY REFERENCE SERVICE(S):****HVD**

<b><u>Tot Min</u></b>	<b><u>99 RVW</u></b>	<b><u>Global</u></b>	<b><u>CPT</u></b>	<b><u>Descriptor</u></b>
n/a*	0.99	ZZZ	64623	Destruction by neurolytic agent, paravertebral facet joint; lumbar or sacral, each additional level (List separately in addition to code for primary procedure)

\*There is no data available in the Harvard data files for these codes. We do not know how these codes were originally valued.

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Time Estimates (Median)	<i>Mean</i> Intensity/Complexity Measures		
	6462X2 (M12)	64623	N/A*
Survey response rate	42	28	--
PRE-service time	--	--	--
INTRA-service time	30	20	--
POST-service time	--	--	--
Mental Effort and Judgment			
The number of possible diagnosis and/or the number of management options that must be considered	3.66	3.40	--
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	3.72	3.40	--
Urgency of medical decision making	2.38	2.25	--
Technical Skill/physical Effort			
Technical skill required	4.53	3.95	--
Physical effort required	3.88	3.55	--
Psychological Stress			
The risk of significant complications, morbidity and/or mortality	4.44	3.75	--
Outcome depends on skill and judgment of physician	4.56	4.05	--
Estimated risk of malpractice suit with poor outcome	4.28	3.69	--
Time Segments			
PRE-service intensity/complexity	--	--	--
INTRA-service intensity/complexity	4.28	3.25	--
POST-service intensity/complexity	--	--	--

\*No other code was reported with a high enough frequency to report a meaningful mean measure of intensity/complexity.

**ADDITIONAL RATIONALE :**

New codes 6462X1 (M11) and 6462X2 (M12) were created for the cervical level to distinguish from the existing codes 64622 and 64623 for the lumbar procedure. The cervical/thoracic levels are different in that the areas are smaller and the risks are higher, including risks such as seizure, paralysis, and nerve root damage. The thoracic spine risk includes pneumothorax.

Those physicians who perform this add-on procedure (survey median 12 month experience was 10) acknowledged the difference between 6462X2 and 64623 by indicating higher time and intensity/complexity measures (especially intra-service intensity/complexity) between the new cervical add-on code and the referenced lumbar add-on code. However, the committee reviewing this survey data considered the survey median RVW too high relative to the parent code 6462X1. The committee recommends an RVW of 1.16, which is 34% of the recommended value for the new parent code 6462X1 and less than the survey median for this code. This ratio is the same as the ratio of the lumbar code pair 64622/64623 (3.00/0.99).

**FREQUENCY INFORMATION****How was this service previously reported?**

64999 Unlisted procedure, nervous system

**How often do physicians in your specialty perform this service?**~~Commonly~~      Sometimes      ~~Rarely~~**Estimate the number of times this service might be provided nationally in a one-year period?**

Medicare frequency for new code M12 has been estimated at 1,800 based on 1997 Medicare frequency for comparable lumbar injection codes and practice patterns. These procedures are also performed frequently on patients outside the Medicare population who have neck and upper back pain from cervical or thoracic traumatic hyperextension flexion injuries and lift and twisting injuries. Estimates for the non-Medicare population cannot be made.

**Is this service performed by many physicians across the United States?**Yes      ~~No~~

**AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF RECOMMENDATION**

CPT Code: 7600X    Tracking Number: M13    Global Period: XXX    Recommended RVW: 0.6

**CPT Descriptor:**

Fluoroscopic guidance and localization of needle or catheter tip for spine or paraspinal diagnostic or therapeutic injection procedures (epidural, transforaminal epidural, subarachnoid, paravertebral facet joint) including neurolytic agent destruction, paravertebral facet joint nerve or sacroiliac joint.

(Fluoroscopic guidance for subarachnoid puncture for diagnostic radiographic myelography is included in the respective supervision and interpretation codes 72240, 72255, 72265, 72270)

(For epidural, or subarachnoid needle or catheter placement and injection, see codes 62270-62273, 62280-62282, 62X03-62X04)

(For sacroiliac joint arthrography, see codes 2709Z, 7354X)

(For paravertebral facet joint injection, see 6447X1-6447X4. For transforaminal epidural needle placement and injection, see 6447X5-6447X6, 6447X7-6447X8)

(For destruction by neurolytic agent, see 64600-64680)

**CLINICAL DESCRIPTION OF SERVICE:****Vignette Used in Survey:****Typical Patient/Service:**

A 45 year old male has severe pain (rated at 8 on a scale of 0-10, where 10 is the worst pain imaginable) involving both legs and the lower back after multiple back operations over a 10 year period. Various systemic medications (oral narcotic and non-narcotic), and physical therapy have all failed to provide significant long-term pain relief. There are no further operations on his spine that are felt likely to provide further relief.

The physician provides fluoroscopic guidance during the performance of any one of a series of possible needle/catheter procedures described below to confirm the proper position of the needle/catheter. (Note the physician work of the needle/catheter placement is not included in code 7600X, but rather is included in the respective injection codes. These are described below so that the survey respondent may estimate the time and complexity of the fluoroscopic service).

<sup>62310</sup>  
For code 62X01: This patient is a good candidate for a subarachnoid narcotic injection because of the severity of the pain and the lack of other treatment options. A test subarachnoid injection of morphine is recommended to determine if a long-term infusion (using an external or implanted infusion pump) could provide significant pain relief for this patient.

<sup>62310 62318</sup>  
For codes 62X01 and 62X03: This patient is a good candidate for an epidural narcotic injection because of the severity of the pain and the lack of other treatment options. A test epidural injection of morphine is recommended to determine if a long-term infusion (using an external or implanted infusion pump) could provide significant pain relief for this patient. The code 62X01



would be appropriate for a cervical or thoracic epidural injection if the patient's pain were in the neck, arms, chest, or high back area. The code 62X03 would be appropriate for a lumbar or caudal injection if the pain were in the legs and /or lower back-buttock area.

For codes <sup>62311</sup>62X02 and <sup>62319</sup>62X04: This patient is a good candidate for an epidural narcotic infusion or series of intermittent bolus injections. A continuous infusion of narcotic and local anesthetic could be used for several days during aggressive physical therapy to try and break a cycle of sympathetic dysfunction (e.g., from reflex sympathetic dysfunction or, by its new term "complex regional pain syndrome"). Many physicians feel that a continuous infusion of narcotic (as compared to a single injection) is a better predictor of long-term pain relief. The catheter could also be used for a series of single injections over several hours or 1-2 days to test for narcotic pain relief versus pain relief from saline injections. The code 62X01 would be appropriate for a cervical or thoracic epidural injection if the patient's pain were in the neck, arms, chest, or high back area. The code 62X03 would be appropriate for a lumbar or caudal injection if the pain were in the legs and /or lower back-buttock area.

For code <sup>62314</sup>62X04: This patient is a good candidate for a subarachnoid narcotic infusion or series of intermittent bolus injections. A continuous infusion could be used for several days during aggressive physical therapy to try and break a cycle of sympathetic dysfunction (e.g., from reflex sympathetic dysfunction or, by its new term "complex regional pain syndrome"). The continuous infusion of narcotic also is used by physicians as a better test for pain relief than a single injection. The catheter could also be used for a series of single injections over several hours or 1-2 days to test for narcotic pain relief versus pain relief from alternating, blinded saline injections.

#### Description of Pre-Service Work:

The physician reviews the patients prior imaging studies (radiographs, CT scans, MRI exams) to be familiar with the patients spine anatomy (numbering of levels, anatomic variants, prior surgery, pathology, etc.)

#### Description of Intra-Service Work:

The patient is placed on an x-ray table in the prone, decubitus or prone oblique position, depending on the type of injection to be performed. Preliminary fluoroscopy is performed to identify the appropriate level and approach for initial needle placement, and the skin entry site marked. During the needle/catheter placement, intermittent fluoroscopy is used to confirm the correct approach and need for needle repositioning or realignment. When the needle position appears correct, radiographic contrast may be injected to confirm proper position. If position is not correct, additional fluoroscopy is provided during repositioning until proper position is achieved. If a catheter is to be placed, additional fluoroscopic guidance is provided during and after the catheter positioning to confirm proper positioning, and additional contrast injection may be performed.

If a different physician is performing the needle/catheter placement, there is continuous consultation with that physician regarding the placement and positioning.

#### Description of Post-Service Work:

A report describing the guidance procedure, including the final position of the needle/catheter is dictated, proofread and submitted for the patient record.

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**SURVEY DATA:**

Presenter(s): William T. Thorwarth Jr., M.D.  
ACR RUC Advisor

J. Arliss Pollock, M.D.  
ASNR RUC Advisor

Specialty(s): Radiology

Sample Size: 390 Response Rate (%): 43 (11%) Median RVW 0.6

Type of Sample (Circle one): random, ☒ panel, convenience Explanation of sample size: \_\_\_\_\_

25<sup>th</sup> Percentile RVW: 0.54 75<sup>th</sup> Percentile RVW: 1.2 Low: 0.15 High: 10

Median Pre-Service Time: 10 Median Intra-Service Time: 20

25th Percentile Intra-Svc Time: 10 75th Percentile Intra-Svc Time: 30 Low: 0 High: 60

Median Post-Service Time: \_\_\_\_\_

	Total Time	Level of Service by CPT Code (List # of Visits)
Immediate Post Service Time:	<u>5</u>	_____
Critical Care:	_____	_____
Other Hospital Visit:	_____	_____
Discharge Day Mgmt:	_____	_____
Office Visits:	_____	_____

---

**KEY REFERENCE SERVICE:**

CPT Code	CPT Descriptor	RVW
76003	Fluoroscope localization for needle biopsy or fine needle aspiration	0.54

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. Make certain that you are including the data from the service that you are rating as well as the key reference services.

**TIME ESTIMATES (Median)**

	<u>CPT Code</u>	<u>Reference Service 1</u>	<u>Reference Service 2</u>
Median Pre-Time	10	5	
Median Intra-Time	20	20	
Median Post-Time	5	0	

**INTENSITY/COMPLEXITY MEASURES (Mean)****Mental Effort and Judgement (Mean)**

The number of possible diagnosis and/or the number of management options that must be considered	3.2	2.8	
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.4	3.1	
Urgency of medical decision making	2.7	2.6	

**Technical Skill/Physical Effort (Mean)**

Technical skill required	3.6	3.1	
Physical effort required	3.3	2.9	

**Psychological Stress (Mean)**

The risk of significant complications, morbidity and/or mortality	3.0	2.5	
Outcome depends on the skill and judgment of physician	3.6	3.3	
Estimated risk of malpractice suit with poor outcome	3.0	2.5	

**INTENSITY/COMPLEXITY MEASURES****CPT Code****Reference  
Service 1****Reference  
Service 2****Time Segments (Mean)**

Pre-Service intensity/complexity	2.5	1.7	
Intra-Service intensity/complexity	3.3	3.0	
Post-Service intensity/complexity	2.4	2.0	

**ADDITIONAL RATIONALE**

Describe the process by which your specialty society reached your final recommendation.

Committee recommends the median survey value, though the time and intensity/complexity values were consistently higher than the key reference (76003) with the same value.

**FREQUENCY INFORMATION**

How was this service previously reported? 76000, 76001, 76003

How often do physicians in your specialty perform this service? ☒ Commonly ☐ Sometimes ☐ Rarely

Estimate the number of times this service might be provided nationally in a one-year period?

Estimating the number of times this service might be provided nationally in a one-year period is difficult. We are working with the societies presenting the spine injection surveys to arrive at a number. We will provide an estimate at the time of the RUC presentations.

Do many physicians perform this service across the United States? ☒ Yes ☐ No

## Practice Expense Data



April 8, 1999

James G. Hoehn, M.D.  
Chairman of RVS Update Committee  
American Medical Association  
Relative Value Systems  
515 North State St.  
Chicago, IL 60610

Dear Dr. Hoehn:

Enclosed please find the completed Summary of Recommendation forms for work relative values and practice expense data for the four new codes for epidurography, sacroiliac joint arthrography, and fluoroscopic guidance and localization for diagnostic and therapeutic injections. The American College of Radiology (ACR) did coordinate with the American Spine Association (ASA) and North American Spine Society (NASS) on the arthrography injection code (2709X) and will continue to coordinate with all the societies involved in the spine injection proposal for the presentation at the April RVS Update Committee (RUC) meeting.

The ACR's RVS workgroup reviewed practice expense data for the four new CPT codes being surveyed and would like to make the following recommendations in addition submission of the enclosed practice expense data:

The ACR believes that the practice expense values for code 2709X (Injection procedure for sacroiliac joint arthrography and/or anesthetic/steroid) and code 7352X (Radiological examination, sacroiliac joint arthrography, radiological supervision and interpretation) are comparable to the practice expense values for the injection and imaging procedure codes for hip arthrography. The ACR also believes that the practice expense values for code 7227X (Epidurography, radiological supervision and interpretation) are comparable to those that would be reported for myelography. In addition, the practice expense values for code 7600X (Fluoroscopic guidance and localization of needle or catheter tip for spine or paraspinal diagnostic or therapeutic injection procedures) are comparable to those that would be reported for fluoroscopic guidance for needle biopsy or fine needle aspiration.

The ACR will continue to work on the expansive revision of spine injection family of codes and will make further comments at the time of the RUC representation. If you have any questions, please give me a call.

Sincerely,

William T. Thorwarth, Jr., M.D.  
ACR Representative to the RUC

Cc: Sherry Smith  
Patrick Gallagher  
Jill Zanutto  
Pam Kassing  
Trisha Crishock

CPT Code: 7600X

AMA/SPECIALTY SOCIETY UPDATE PROCESS  
SUMMARY OF RECOMMENDATION

Tracking number: M13

Global Period: XXX

Sample Size:

Response Rate: (%):

Reference Code 1 76003

Reference Code 2 76000

IN OFFICE

Clinical Labor	Pre-Service Time	Post-Service Time	Total Post-Service Time	Number of Office Visits	Total Time of Office Visits
RN					
LPN					
MA					
Radiological Technologist	30	45	30		105
Other					
Other					

\*Including visit time

MEDICAL SUPPLIES	Quantity of Supplies
14 X 17 X-Ray films	2
Film filling jacket	1
Film filling insert	1
Film mailing envelope	1
Film date stickers	1
Processor chemicals	1

PROCEDURE SPECIFIC MEDICAL EQUIPMENT	Minutes of Use per Procedure	Number of Hours per Week in Operation
C-Arm Fluoroscope		
Tilting Fluoro Table		
Radiation Shields		
Film processor/Laser film printer		

OVERHEAD MEDICAL EQUIPMENT	Minutes of Use per Procedure	Number of Hours per Week in Operation
Stretcher		
Crash cart (without defibrillator)		
Wheelchair		
File cabinet		
Film alternator (view box)		
Dictation equipment		

CPT Code: 2709X

AMA SPECIALTY SOCIETY UPDATE PROCESS  
SUMMARY OF RECOMMENDATION

Tracking number: M1

Global Period: 000

Sample Size:

Response Rate: (%)

Reference Code 1 27093

Reference Code 2 27095

IN OFFICE

Clinical Labor	Pre-Service Time	Service Time	Post-Service Time	Number of Office Visits	Total Time in Office
RN					
LPN					
MA					
Radiological Technologist	90	25	30		85 minutes
Other					
Other					

\*Including visit time

MEDICAL SUPPLIES	Quantity of Supplies
Custom sterile myelogram tray	
Includes:	
swabs	2
sterile trays	2
gauze	4
sterile drape	1
Omnipaque 240 non-ionic contrast material	3cc
Maracaine .5% or Lidocaine 2%	2cc
Celestone Soluspan	1cc
Betadone sterilizing solution	20cc
99% Isopropyl alcohol	180cc
20' extension tubing	1
22 gauge 3 1/2 spinal needle	1
5 cc Luer lock syringe with needle	1
5 cc Luer lock syringe	1
Band aid	1
Sterile gloves	1
Exam gloves	1
Washable gown	1
Washable robe	1
Washable pants	1
Washable pillowcases	2
Washable linen sheet	1
Paper exam towel	1



CPT Code: 2709X

PROCEDURE SPECIFIC MEDICAL EQUIPMENT	Minutes of Use per Procedure	Number of Hours per Week in Operation

OVERHEAD MEDICAL EQUIPMENT	Minutes of Use per Procedure	Number of Hours per Week in Operation
Crash cart (without defibrillator)		
Stretcher		
Wheelchair		
Dictation equipment		

CPT Code: 7352X

AMA/SPECIALTY SOCIETY UPDATE PROCESS  
SUMMARY OF RECOMMENDATION

Tracking number: M2

Global Period: XXX

Sample Size:

Response Rate: (%):

Reference Code 1 73525

Reference Code 2

IN OFFICE

Clinical Labor	Pos. Service Time	Intra-Service Time	Total net Service time	Number of Office Visits	Total Time of Office Visits
RN					
LPN					
MA					
Radiological Technologist	30	20	30		80
Other					
Other					

\*Including visit time

MEDICAL SUPPLIES	Quantity of Supplies
14 X 17 laser x-ray film	2
Film filling jacket	1
Film filling insert	1
Film mailing envelope	1
film date stickers	1
Processor chemicals	1

PROCEDURE SPECIFIC MEDICAL EQUIPMENT	Minutes of Use per Procedure	Number of Hours per Week in Operation
C-Arm Fluoroscope		
Tilting Fluoro Table		
Radiation Shields		
Film Processor/Laser film printer		

OVERHEAD MEDICAL EQUIPMENT	Minutes of Use per Procedure	Number of Hours per Week in Operation
Crash cart (without defibrillator)		
File cabinets		
Film alternator (view box)		
Wheel chair		
Stretcher		
Dictation equipment		

Date: April 26, 1999

To: James Hoehn, MD (Chair, AMA/RUC)

From: Michael Ashburn, MD (American Academy of Pain Medicine)  
Karl Becker, MD (American Society of Anesthesiologists)  
Peter Dempsey, MD (American Association of Neurological Surgeons)  
Paul Dreyfuss, MD (American Academy of Physical Medicine and Rehabilitation)  
Thomas Faciszewski, MD (North American Spine Society)  
Samuel Hassenbusch, MD (American Association of Neurological Surgeons)

Re: Practice Expense Recommendations  
M3-M12  
K1-K4  
J1-J2

---

We recommend that the existing CPEP inputs for selected CPT codes be used as interim crosswalk references to develop practice expense RVUs for new/revised codes for *CPT 2000* (see attached tables).

Time constraints due to the short turn around from CPT Editorial approval to RUC review did not allow for surveying of both work estimates and practice expense recommendations. Additionally, we note that neither the RUC nor HCFA have developed guidelines for practice expense data collection and acceptance. Specifically, pre-, intra-, and post-service time components and staff activities have not been well defined to the satisfaction of HCFA and the current definitions are at odds with RUC time definitions for physician work. We also note that no "minimum" number of practice expense survey responses has been set (eg, 30 responses for work RVU recommendations) and expert panel recommendations have been accepted and rejected inconsistently.

Our approach to use crosswalks as an interim measure is consistent with previous HCFA practice expense development for new and revised codes. In the June 5, 1998 Federal Register, HCFA discusses development of practice expense RVUs for codes that will be new in 1999 and beyond:

There will be new codes included in CPT 1999 for which we will not have practice expense data in time for publication in the 1998 final rule. We plan to develop interim practice expense RVUs for these codes by preparing a crosswalk of CPEP data from existing codes. The crosswalk we use will be available with the final rule, and the practice expense values for the codes will be subject to comment. However, the interim values will serve as the basis of payment during 1999.

We do not believe that preparing a crosswalk of new codes is the most appropriate method of developing practice expense RVUs for new codes. However, for 1999, time constraints do not permit any other approach. Beyond 1999, we would like to develop a process whereby we receive recommended practice expense RVUs or recommended inputs for clinical staff types and times, quantity and cost of medical supplies, and quantity and cost of medical equipment.

For practice expense RVUs, we believe there are two principal options. First, we could continue to crosswalk new codes to existing codes, publish the results of that crosswalk as interim practice expense RVUs in the final rule, and review comments we receive with the assistance of our multiple specialty panels. Second, we could

request the RUC or a RUC-like organization to provide recommended practice expense RVUs or recommended inputs before publication of the proposed rule as we do with work RVUs. This approach would allow us to publish interim RVUs based on the advice of practicing physicians. As with the work RVUs, any comments we received on the interim RVUs could then be reviewed with the assistance of HCFA multiple specialty panels. We invite comments on these options and would welcome any other recommendations.

Although HCFA requested comments regarding crosswalked codes, as noted above, they did not to implement any changes for the final rule, as stated in the November 2, 1998 Federal Register:

*Comment:* ...We also received comments from several organizations with recommendations for revised crosswalks for those codes not valued by the CPEPs, as well as recommended in-office inputs for some codes that are now being done in the office, but were only given practice expense RVUs for the facility setting.

*Response:* We had intended to make the CPEP revisions requested by a given specialty as part of the final rule if the recommendations appeared reasonable and if there would be no significant impact on any other specialty. However, given the huge volume of recommended revisions -- over a third of the codes in the fee schedule would be affected -- acceptance of the recommended changes across the board would almost certainly have a spill-over impact on many subspecialties and between sites-of-service. ... All the code-specific comments referred to above will be considered at the start of the refinement period. (See Section II.A.4, Refinement of Practice Expense RVUs).

We recommend that the CPT codes listed in the attached table be advanced to HCFA as our recommended interim proxies for practice expense details for new/revised codes for *CPT 2000*. In general, the crosswalk codes chosen are consistent with deletion and crosswalking information to be provided in *CPT 2000*. We understand that HCFA has a methodology in place to crosswalk time, supply, and equipment inputs using physician time and office visit information from work RVU summary recommendations. We anticipate reviewing the crosswalked interim practice expense details for these codes during the refinement period after data collection methodology and guidelines are developed.

### M3-M12 Practice Expense Crosswalk Recommendations

New code / Descriptor	CPT crosswalk code/information for practice expense
6447X1 (M3) Injection, anesthetic agent and/or steroid, paravertebral facet joint or facet joint nerve; cervical or thoracic, single level global 000	64442 Injection, anesthetic agent; paravertebral facet joint nerve, lumbar, single level global 000 <i>[to be deleted in CPT 2000]</i>
6447X2 (M4) Injection, anesthetic agent and/or steroid, paravertebral facet joint or facet joint nerve; cervical or thoracic, each additional level (List separately in addition to code for primary procedure) global ZZZ	15 minutes of RN clinical stafftype for in-office intra-service time only. This is consistent with RUC survey physician's intra-service time. Although additional supplies may be necessary for additional levels, these details will be reviewed during refinement.
6447X3 (M5) Injection, anesthetic agent and/or steroid, paravertebral facet joint or facet joint nerve; lumbar or sacral, single level global 000	64442 Injection, anesthetic agent; paravertebral facet joint nerve, lumbar, single level global 000 <i>[to be deleted in CPT 2000]</i>
6447X2 (M4) Injection, anesthetic agent and/or steroid, paravertebral facet joint or facet joint nerve; lumbar or sacral, each additional level (List separately in addition to code for primary procedure) global ZZZ	64443 Injection, anesthetic agent; paravertebral facet joint nerve, lumbar, each additional level (List separately in addition to code for primary procedure) global ZZZ <i>[to be deleted in CPT 2000]</i>
6447X5 (M7) Injection, anesthetic agent and/or steroid, transforaminal epidural, cervical or thoracic, single level global 000	64442 Injection, anesthetic agent; paravertebral facet joint nerve, lumbar, single level global 000 <i>[to be deleted in CPT 2000]</i>
6447X6 (M8) Injection, anesthetic agent and/or steroid, transforaminal epidural, cervical or thoracic, each additional level (List separately in addition to code for primary procedure) global ZZZ	20 minutes of RN clinical stafftype for in-office intra-service time only. This is consistent with RUC survey physician's intra-service time. Although additional supplies may be necessary for additional levels, these details will be reviewed during refinement.
6447X7 (M9) Injection, anesthetic agent and/or steroid, transforaminal epidural, lumbar or sacral, single level global 000	64440 Injection, anesthetic agent; paravertebral nerve (thoracic, lumbar, sacral, coccygeal), single vertebral level global 000 <i>[to be deleted in CPT 2000]</i>
6447X8 (M10) Injection, anesthetic agent and/or steroid, transforaminal epidural, lumbar or sacral, each additional level (List separately in addition to code for primary procedure) global ZZZ	20 minutes of RN clinical stafftype for in-office intra-service time only. This is consistent with RUC survey physician's intra-service time. Although additional supplies may be necessary for additional levels, these details will be reviewed during refinement.
6462X1 (M11) Destruction by neurolytic agent, paravertebral facet joint nerve; cervical or thoracic, single level global 010	64622 Destruction by neurolytic agent; paravertebral facet joint nerve, lumbar, single level global 010

6462X2 (M12) Destruction by neurolytic agent, paravertebral facet joint nerve; cervical or thoracic, each additional level (List separately in addition to code for primary procedure)  
global ZZZ

30 minutes of RN clinical stafftype for in-office intra-service time only. This is consistent with RUC survey physician's intra-service time. Although additional supplies may be necessary for additional levels, these details will be reviewed during refinement.

**AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE  
SUMMARY OF RECOMMENDATIONS  
May 1999**

**SPINE SURGERY**

***Work Relative Value Recommendations***

New CPT codes were added to describe a method for anterior instrumentation and stabilization of odontoid fracture/dislocation. Since the odontoid process is an extension of the axis, rather than an interspace or two adjacent vertebral segments, the current arthrodesis code 22548 *Arthrodesis, anterior transoral or extraoral technique, clivus-C1-C2 (atlas-axis), with or without excision of odontoid process* (work RVU= 25.82) does not accurately describe the reduction and internal fixation across a fracture within a single vertebral.

**CPT Code 22318**

The RUC recommends that CPT Code 22318 *Open treatment and/or reduction of odontoid fracture(s) and or dislocation(s) (including os odontoideum), anterior approach, including placement of internal fixation; without grafting* be assigned a work value of 21.50. The value of 21.50 was the survey median. This value was based on a survey of 43 neurological and orthopaedic surgeons. CPT Code 22318 utilizes the same initial surgical approach as 63075 *Discectomy, anterior, with decompression of spinal cord and/or nerve root(s), including osteophylectomy; cervical, single interspace* (work RVU= 19.41). The remainder of 63075 describes discectomy and microdissection with a microscope or direct visualization. In contrast, 22318 describes the sequential placement of guidewires and screws without direct visualization using fluoroscopic guidance. The greater time required for positioning the patient and preparing equipment for CPT Code 22318 (120 minutes pre-service), compared to 63075 (76 minutes pre-service), further justifies the recommended RVU of 21.50 for 22318.

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### **CPT Code 22319**

The RUC supports a work RVU of 24.00 for CPT Code 22319 *Open treatment and/or reduction of odontoid fracture (s) and or dislocation(s) (including os odontoideum), anterior approach, including placement of internal fixation; with grafting*. The difference between 22318 and 22319 is the placement of the graft. The additional rostral exposure of the anterior surface of the odontoid process and decortification of fracture surfaces entails additional time and risk. Also, securing the placement of the graft requires more time, making code 22319 more complex. Therefore, the RUC recommends that 22319 be assigned a work RVU of 24.00. This value is also the survey median.

### ***Practice Expense Recommendations***

#### **CPT Code 22318**

Since this is a new code, there is currently no direct input data associated with the code. The specialties chose to crosswalk this code to an existing code, which has direct inputs that the specialty believes is representative of the expenses associated with the new code. The RUC therefore recommends that the direct inputs associated with code 63075 *Discectomy, anterior, with decompression of spinal cord and/or nerve root(s), including osteophylectomy; cervical, single interspace* should be applied to code 22318.

#### **CPT Code 22319**

Since this is new code, there is currently no direct input data associated with the code. The specialties chose to crosswalk this code to an existing code, which has direct inputs that the specialty believes is representative of the expenses associated with the new code. The RUC therefore recommends that the direct inputs associated with 22548 *Arthrodesis, anterior transoral or extraoral technique, clivus-C1-C2 (atlas-axis), with or without excision of odontoid process* should be applied to code 22319.



CPT Code (•New)	Track- ing Number	CPT Descriptor	Global Period	Work RVU Recommendation
•22318	J1	Open treatment and/or reduction of odontoid fracture(s) and or dislocation(s) (including os odontoideum), anterior approach, including placement of internal fixation; without grafting	090	21.50
•22319	J2	with grafting	090	24.00
▲22630		Arthrodesis, posterior interbody technique, <u>including laminectomy and/or disectomy to prepare interspace (other than for decompression)</u> , single interspace; lumbar	090	20.84 (No Change)
▲22840		Posterior non-segmental instrumentation (eg, single Harrington rod technique), <u>pedicle fixation across one interspace, atlantoaxial transarticular screw fixation, sublaminar wiring at C1, lumbar facet screw fixation</u>	ZZZ	12.54 (No Change)
▲22851		Application of <u>intervertebral biomechanical prosthetic device</u> (eg, <del>metal synthetic</del> cages, <u>threaded bone dowel</u> , methylmethacrylate) to vertebral defect or interspace, <u>each device</u>	ZZZ	6.71 (No Change)
▲62287		Aspiration <u>or decompression</u> procedure, percutaneous, of nucleus pulposus of intervertebral disk, any method, single or multiple levels, lumbar (eg, <u>manual or automated percutaneous disectomy, percutaneous laser disectomy</u> )  (For fluoroscopic guidance, use 76003)	090	8.08 (No Change)
63020		Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy, and/or excision of herniated intervertebral disk; one interspace, cervical	090	14.81 (No Change)

CPT five-digit codes, two-digit modifiers, and descriptions only are copyright by the American Medical Association.

CPT Code (•New)	Track- ing Number	CPT Descriptor	Global Period	Work RVU Recommendation
▲ 63030		one interspace, lumbar ( <u>including open or endoscopically-assisted approach</u> )	090	12.00 (No Change)
63035		each additional interspace, cervical or lumbar (List separately in addition to code for primary procedure)	ZZZ	3.15 (No Change)
63055		Transpedicular approach with decompression of spinal cord, cauda equina, and/or nerve root(s) (eg, herniated intervertebral disk), single segment; thoracic	090	21.99 (No Change)
▲ 63056		lumbar ( <u>including transfacet, or lateral extraforaminal approach</u> ) (eg, far lateral herniated intervertebral disk)	090	20.36 (No Change)
63057		each additional segment, thoracic or lumbar (List separately in addition to code for primary procedure)	ZZZ	5.26 (No Change)

*CPT five-digit codes, two-digit modifiers, and descriptions only are copyright by the American Medical Association.*

## Physician Work Data

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF WORK RECOMMENDATION

(April 1999)

**Recommended RVW:** 21.50

**CPT Code/ Tracking:** 2231X1 (J1)

**Global Period:** 090

**CPT Descriptor:** Open treatment and/or reduction of odontoid fracture(s) and/or dislocation(s) (including os odontoideum), anterior approach, including placement of internal fixation; without grafting

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**Vignette Used in Survey:**

A 35-year-old man sustained a traumatic posteriorly displaced odontoid fracture. The displaced fragment is reduced with axial skeletal traction and/or closed manipulation and the odontoid fracture is repaired using an odontoid screw fixation technique, without grafting.

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**CLINICAL DESCRIPTION OF SERVICE** (This work description was NOT provided on the survey.):

**Description of Pre-Service Work:**

Prior to surgery and after emergent evaluation and work-up, the surgeon reviews lab reports and radiographs. The patient's clinical condition is evaluated, including the success or failure of any closed traction procedure that may have been performed to achieve initial realignment of the fractured fragment. Pre-service work also includes communicating with other professionals, patient, and family; obtaining consent; dressing, scrubbing, and waiting before the procedure; and preparing the needed equipment for the procedure. The surgeon assists with moving the patient with external immobilization or axial skeletal traction onto the OR table and positions the patient's head in extension under lateral fluoroscopy to confirm that the trajectory required for screw placement can be achieved. The surgeon ensures placement of compression boots.

**Description of Intra-Service Work:**

Under general anesthesia, the patient's head is secured in a device to prevent movement. The oropharynx is packed with a radioluscent sponge to allow AP fluoroscopic visualization. The fluoroscopy is tested for visualization/anatomic alignment of the axis and odontoid. After prepping and draping the patient and fluoroscope, the mid-neck is incised after local anesthetic cutaneous infiltration as necessary. The anterior cervical spine is approached by dissecting a plane between the tracheoesophageal tissues medially and the carotid sheath laterally. Bridging vessels are controlled with ligation or retraction, as appropriate. The prevertebral space is dissected rostrally to expose the C2-3 disk space. The longus colli muscles are dissected laterally to facilitate placement of a retractor system. The C2-3 annulus is incised. The surgeon drills down the anterior superior margin of the C3 vertebral body to expose an entry point. Based on visualization of structures and/or fluoroscopic appearance, a midline (one screw) or paramedian (two screw) entry point is chosen. A pilot hole is drilled through the C2 vertebral body, across the fracture line, into the odontoid fragment, alternately using AP and lateral fluoroscopy to ensure the appropriate trajectory. The odontoid process is manipulated internally, or the head and neck externally, as needed, to maintain anatomic reduction of the odontoid fragment with the axis. The depth from entry to the rostral tip of the odontoid fragment is measured and the hole is enlarged, as appropriate, with a larger drill bit or wire using fluoroscopic guidance. The hole is tapped and a screw is placed along the pilot hole trajectory using fluoroscopic guidance. Drilling and screw placement is repeated on the other side, if a second screw is used. The patient's head and neck are manipulated under lateral fluoroscopy to confirm secure purchase of the screw and stability in flexion and extension. The wound is irrigated, the retractor system removed, and the wound closed in layers with a subcutaneous drain, as appropriate.

**Description of Post-Service Work:**

Post-service work includes placement of sterile dressings and an external immobilization device, as necessary. The surgeon supervises transfer of the patient from the operating table to the Gurney and subsequently to the recovery room bed. Upon completion of general anesthesia, the surgeon examines the patient's neurological condition as often as necessary, to determine postoperative stability of neurological condition. Postoperative work also includes

communicating with the family and other health care professionals (including written and oral reports and orders); ordering and reviewing postoperative radiographs to ensure maintenance of alignment and fixation; monitoring for wound infection; monitoring, care, and removal of drain, if placed; and antibiotic and pain medication management. Discharge day management includes the surgeon's final examination of the patient; review with the patient and family of post-discharge continuing care; and preparation of discharge records. Additionally, all post-discharge office visits for this procedure for 90 days after the day of the operation are considered part of the postoperative work for this procedure; including removal of sutures; monitoring wound healing; examining the patient in the office at appropriate postoperative intervals to ensure adequate healing of the fracture, preservation of alignment, and maintenance of fixation; reviewing sequential static postoperative radiographs at necessary postoperative intervals; determining the time to discontinue immobilization, if this was used; and reviewing dynamic flexion and extension radiographs after healing to confirm stability.

### SURVEY DATA

**Presenter(s):** Gregory Przybylski, MD (AANS/CNS)  
 Thomas Faciszewski, MD (NASS)  
 Peter Dempsey, MD (AANS)

**Specialty(s):** American Association of Neurological Surgeons/Congress of Neurological Surgeons, North American Spine Society

**Sample Size:** 43      **Response Rate (No. and %):** 25 (58%)

**Type of Sample:** Panel

<b>Survey RVW</b>	Low: 12.00	25th%: 19.06	Med: 21.50	75th%: 24.00	High: 36.00
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### TIME (min) AND VISITS

**24 Hr Preceding Service:** Med: 60

#### Day of Service

Pre-service time: Med: 60

Intra-service time: Low: 60      25th%: 120      Med: 140      75th%: 180      High: 240

<u>Post Service</u>	<u>Total Time</u>	<u>CPT Code / # of visits</u>
Same Day:	28	99231 x 1
After Same Day:		
Critical Care	0	
Other Hospital	18	99231 x 1
Discharge Mgmt	20	99238
Office	55	99213 x 3 and 99212 x 1

**KEY REFERENCE SERVICE(S):**

<b>99 RVW</b>	<b>Global</b>	<b>CPT</b>	<b>Descriptor</b>
25.82	090	22548	Arthrodesis, anterior transoral or extraoral technique, clivus-C1-C2 (atlas-axis), with or without excision of odontoid process
19.41	090	63075	Discectomy, anterior, with decompression of spinal cord and/ or nerve root(s), including osteophylectomy; cervical, single interspace

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Time Estimates (Median)	<i>Mean</i> Intensity/Complexity Measures		
	2231X1 (J1)	22548	63075
PRE-service time	120	113	76
INTRA-service time	140	180	130
POST-service time	121	160	116
<b>Mental Effort and Judgment</b>			
The number of possible diagnosis and/or the number of management options that must be considered	4.00	3.86	3.50
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	3.75	3.86	4.00
Urgency of medical decision making	4.25	3.29	2.50
<b>Technical Skill/physical Effort</b>			
Technical skill required	4.63	4.57	3.50
Physical effort required	3.81	3.86	3.00
<b>Psychological Stress</b>			
The risk of significant complications, morbidity and/or mortality	4.56	4.43	4.50
Outcome depends on skill and judgment of physician	4.50	4.29	3.50
Estimated risk of malpractice suit with poor outcome	4.63	4.57	5.00
<b>Time Segments</b>			
PRE-service intensity/complexity	3.69	3.57	1.50
INTRA-service intensity complexity	4.44	4.71	3.50
POST-service intensity complexity	3.60	3.83	3.00

**ADDITIONAL RATIONALE:**

2231X1 (J1) and 2231X2 (J2) are new codes to describe a method for anterior instrumentation and stabilization of odontoid fracture/dislocation. Since the odontoid process is an extension of the axis rather than an interspace or two adjacent vertebral segments, the current arthrodesis code (22548) does not accurately describe the reduction and internal fixation across a fracture within a single vertebral segment.

New code 2231X1 (J1) utilizes the same initial surgical approach as 63075, (anterior cervical discectomy/ foraminotomy). The remainder of 63075 describes discectomy and microdissection with a microscope or direct visualization. In contrast, 2231X1 describes the sequential placement of guidewires and screws without direct visualization using fluoroscopic guidance. Greater time is required for positioning the patient and preparing equipment for 2231X1 and 2231X2. Intraoperative work is more tedious with risk of spinal cord and brain injury if the guidewires migrate improperly. The angle and direction of wire and screw placement required also makes this procedure more arduous. However, 2231X1 is less complex than the transoral/extraoral approach to the axis 22548, which describes arthrodesis with possible odontoid resection. This latter technique requires a more complex surgical exposure and is more time consuming than 2231X1.

The survey median RVW of 21.50 is recommended for 2231X1 (J1), based on the discussion above which compares the work of J1 to referenced codes 63075 and 22548. The survey median RVW appropriately sets J1 between the two reference codes.

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**FREQUENCY INFORMATION****How was this service previously reported?**

22548 Arthrodesis, anterior transoral or extraoral technique, clivus-C1-C2 (atlas-axis),  
with or without excision of odontoid process

22899 Unlisted procedure, spine

64999 Unlisted procedure, nervous system

**How often do physicians in your specialty perform this service?**

Commonly

Sometimes

Rarely

**Estimate the number of times this service might be provided nationally in a one-year period?**

The incidence of spinal column trauma in the U.S. is approximately 5 per 100,000 population. Cervical fractures represent more than half of these, whereas odontoid fractures represent approximately 10% of cervical fractures. Several thousand new odontoid fractures are treated annually in the U.S. At least half of these may satisfy the indications of anterior arthrodesis with odontoid screw fixation. Since the unlisted procedure codes 22899 and 64999 are used for a variety of procedures which can not be tracked, the frequency of use of these codes applied to 2231X1 and 2231X2 is unknown. The frequency of application of the anterior arthrodesis code 22548 to odontoid screw fixation similarly represents a very small percentage of the transoral and extraoral clival-atlas-axis arthrodesis procedures performed.

**Is this service performed by many physicians across the United States?**

~~Yes~~

No

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF WORK RECOMMENDATION

(April 1999)

**Recommended RVW:** 24.00

**CPT Code/ Tracking:** 2231X2 (J2)

**Global Period:** 090

**CPT Descriptor:** Open treatment and/or reduction of odontoid fracture(s) and/or dislocation(s) (including os odontoideum), anterior approach, including placement of internal fixation; with grafting

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**Vignette Used in Survey:**

A 65-year-old woman sustained a traumatic posteriorly displaced odontoid fracture. The displaced fragment is reduced with axial skeletal traction and/or closed manipulation and the odontoid fracture is repaired using an odontoid screw fixation technique, with grafting.

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**CLINICAL DESCRIPTION OF SERVICE** (This work description was NOT provided on the survey.):

**Description of Pre-Service Work:**

Prior to surgery and after emergent evaluation and work-up, the surgeon reviews lab reports and radiographs. The patient's clinical condition is evaluated, including the success or failure of any closed traction procedure that may have been performed to achieve initial realignment of the fractured fragment. Pre-service work also includes communicating with other professionals, patient, and family; obtaining consent; dressing, scrubbing, and waiting before the procedure; and preparing the needed equipment for the procedure. The surgeon assists with transfer the patient with external immobilization or axial skeletal traction onto the OR table and positions the patient's head in extension under lateral fluoroscopy to confirm that the trajectory required for screw placement can be achieved. The surgeon ensures placement of compression boots.

**Description of Intra-Service Work:**

Under general anesthesia, the patient's head is secured in a device to prevent movement. The oropharynx is packed with a radioluscent sponge to allow AP fluoroscopic visualization. The fluoroscopy is tested for visualization/anatomic alignment of the axis and odontoid. After prepping and draping the patient and fluoroscope, the mid-neck is incised after local anesthetic cutaneous infiltration as necessary. The anterior cervical spine is approached by dissecting a plane between the tracheoesophageal tissues medially and the carotid sheath laterally. Bridging vessels are controlled with ligation or retraction, as appropriate. The prevertebral space is dissected rostrally to expose the C2-3 disk space. The longus colli muscles are dissected laterally to facilitate placement of a retractor system. The C2-3 annulus is incised. The surgeon drills down the anterior superior margin of the C3 vertebral body to expose an entry point and decorticates the adjacent axis and odontoid process surfaces with curettes to facilitate arthrodesis. Based on visualization of structures and/or fluoroscopic appearance, a midline (one screw) or paramedian (two screw) entry point is chosen. A pilot hole is drilled through the C2 vertebral body, across the fracture line, into the odontoid fragment, alternately using AP and lateral fluoroscopy to ensure the appropriate trajectory. The odontoid process is manipulated internally, or the head and neck externally, as needed, to maintain anatomic reduction of the odontoid fragment with the axis. The depth from entry to the rostral tip of the odontoid fragment is measured and the hole is enlarged, as appropriate, with a larger drill bit or wire using fluoroscopic guidance. The hole is tapped and a screw is placed along the pilot hole trajectory using fluoroscopic guidance. Drilling and screw placement is repeated on the other side, if a second screw is used. A bone graft (allograft or autograft) is fashioned to fit the axis and odontoid process surfaces. Exposure of axis and odontoid surfaces are adjusted to allow full access to the decorticated areas. The bone graft is placed on these surfaces and secured to the underlying bone to minimize later movement or gross displacement of the graft. The patient's head and neck are manipulated under lateral fluoroscopy to confirm secure purchase of the screw and stability and no movement of graft in flexion and extension. The wound is irrigated, the retractor system removed, and the wound closed in layers with a subcutaneous drain, as appropriate.



**Description of Post-Service Work:**

Post-service work includes placement of sterile dressings and an external immobilization device, as necessary. The surgeon supervises transfer of the patient from the operating table to the Gurney and subsequently to the recovery room. Upon completion of general anesthesia, the surgeon examines the patient's neurological condition as often as necessary, to determine postoperative stability of neurological condition. Postoperative work also includes communicating with the family and other health care professionals (including written and oral reports and orders); ordering and reviewing postoperative radiographs to ensure maintenance of alignment and fixation; monitoring for wound infection; monitoring, care, and removal of drain, if placed; and antibiotic and pain medication management. Discharge day management includes the surgeon's final examination of the patient; review with the patient and family of post-discharge continuing care; and preparation of discharge records. Additionally, all post-discharge office visits for this procedure for 90 days after the day of the operation are considered part of the postoperative work for this procedure; including removal of sutures; monitoring wound healing; examining the patient in the office at appropriate postoperative intervals to ensure adequate healing of the fracture, preservation of alignment, and maintenance of fixation; reviewing sequential static postoperative radiographs at necessary postoperative intervals; determining the time to discontinue immobilization, if this was used; and reviewing dynamic flexion and extension radiographs after healing to confirm stability.

**SURVEY DATA**

**Presenter(s):** Gregory Przybylski, MD (AANS/CNS)  
 Thomas Faciszewski, MD (NASS)  
 Peter Dempsey, MD (AANS)

**Specialty(s):** American Association of Neurological Surgeons/Congress of Neurological Surgeons, North American Spine Society

**Sample Size:** 43      **Response Rate (No. and %):** 25 (58%)

**Type of Sample:** Panel

<b><u>Survey RVW</u></b>	Low: 12.50	25th%: 19.50	Med: 24.00	75th%: 26.00	High: 35.00
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**TIME (min) AND VISITS**

**24 Hr Preceding Service:** Med: 60

**Day of Service**

Pre-service time:		Med: 60		
Intra-service time:	Low: 60	25th%: 101	Med: 150	75th%: 180    High: 280

<b><u>Post Service</u></b>	<b><u>Total Time</u></b>	<b><u>CPT Code / # of visits</u></b>
Same Day:	30	99231 x 1
After Same Day:		
Critical Care	0	
Other Hospital	40	99231 x 2
Discharge Mgmt	30	99238
Office	55	99213 x 3 and 99212 x 1

**KEY REFERENCE SERVICE(S):**

<b>99 RVW</b>	<b>Global</b>	<b>CPT</b>	<b>Descriptor</b>
25.82	090	22548	Arthrodesis, anterior transoral or extraoral technique, clivus-C1-C2 (atlas-axis), with or without excision of odontoid process
19.41	090	63075	Diskectomy, anterior, with decompression of spinal cord and/ or nerve root(s), including osteophylectomy; cervical, single interspace

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Time Estimates (Median)	<i>Mean</i> Intensity/Complexity Measures		
	2231X2 (J2)	22548	63075
PRE-service time	120	113	76
INTRA-service time	150	180	130
POST-service time	155	160	116
<b>Mental Effort and Judgment</b>			
The number of possible diagnosis and/or the number of management options that must be considered	4.00	3.86	3.50
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	3.87	3.86	4.00
Urgency of medical decision making	4.27	3.29	2.50
<b>Technical Skill/physical Effort</b>			
Technical skill required	4.80	4.57	3.50
Physical effort required	4.20	3.86	3.00
<b>Psychological Stress</b>			
The risk of significant complications, morbidity and/or mortality	4.67	4.43	4.50
Outcome depends on skill and judgment of physician	4.60	4.29	3.50
Estimated risk of malpractice suit with poor outcome	4.67	4.57	5.00
<b>Time Segments</b>			
PRE-service intensity/complexity	3.36	3.57	1.50
INTRA-service intensity complexity	4.71	4.71	3.50
POST-service intensity complexity	3.46	3.83	3.00

**ADDITIONAL RATIONALE (describe the process by which your specialty society reached your final recommendation):**

2231X1 and 2231X2 are new codes to describe a method for anterior instrumentation and stabilization of odontoid fracture/dislocation. Since the odontoid process is an extension of the axis rather than an interspace or two adjacent vertebral segments, the current arthrodesis code (22548) does not accurately describe the reduction and internal fixation across a fracture within a single vertebral segment.

The difference between 2231X1 and 2231X2 is the placement of a graft. The additional rostral exposure of the anterior surface of the odontoid process and decortication of fracture surfaces entails additional time and risk. In addition, securing placement of the graft requires more time, making 2231X2 more complex. Comparison of the base procedure (2231X1) to 63075 and 22548 is presented on the summary form for 2231X1 and applies for this code.

The survey median RVW of 24.00 is recommended for 2231X2 (J2), based on the discussion above which compares the work of J2 to J1 and to the referenced codes 63075 and 22548. The survey median RVW appropriately sets J2 between the two reference codes and above J1.

**FREQUENCY INFORMATION****How was this service previously reported?**

22548 Arthrodesis, anterior transoral or extraoral technique, clivus-C1-C2 (atlas-axis),  
with or without excision of odontoid process

22899 Unlisted procedure, spine

64999 Unlisted procedure, nervous system

**How often do physicians in your specialty perform this service?**

~~Commonly~~ Sometimes Rarely

**Estimate the number of times this service might be provided nationally in a one-year period?**

The incidence of spinal column trauma in the U.S. is approximately 5 per 100,000 population. Cervical fractures represent more than half of these, whereas odontoid fractures represent approximately 10% of cervical fractures. Several thousand new odontoid fractures are treated annually in the U.S. At least half of these may satisfy the indications of anterior arthrodesis with odontoid screw fixation. Since the unlisted procedure codes 22899 and 64999 are used for a variety of procedures which can not be tracked, the frequency of use of these codes applied to 2231X1 and 2231X2 is unknown. The frequency of application of the anterior arthrodesis code 22548 to odontoid screw fixation similarly represents a very small percentage of the transoral and extraoral clival-atlas-axis arthrodesis procedures performed.

**Is this service performed by many physicians across the United States?**

~~Yes~~ No

## Practice Expense Data

Date: April 26, 1999

To: James Hoehn, MD (Chair, AMA/RUC)

From: Michael Ashburn, MD (American Academy of Pain Medicine)  
Karl Becker, MD (American Society of Anesthesiologists)  
Peter Dempsey, MD (American Association of Neurological Surgeons)  
Paul Dreyfuss, MD (American Academy of Physical Medicine and Rehabilitation)  
Thomas Faciszewski, MD (North American Spine Society)  
Samuel Hassenbusch, MD (American Association of Neurological Surgeons)

Re: Practice Expense Recommendations  
M3-M12  
K1-K4  
J1-J2

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We recommend that the existing CPEP inputs for selected CPT codes be used as interim crosswalk references to develop practice expense RVUs for new/revised codes for *CPT 2000* (see attached tables).

Time constraints due to the short turn around from CPT Editorial approval to RUC review did not allow for surveying of both work estimates and practice expense recommendations. Additionally, we note that neither the RUC nor HCFA have developed guidelines for practice expense data collection and acceptance. Specifically, pre-, intra-, and post-service time components and staff activities have not been well defined to the satisfaction of HCFA and the current definitions are at odds with RUC time definitions for physician work. We also note that no "minimum" number of practice expense survey responses has been set (eg, 30 responses for work RVU recommendations) and expert panel recommendations have been accepted and rejected inconsistently.

Our approach to use crosswalks as an interim measure is consistent with previous HCFA practice expense development for new and revised codes. In the June 5, 1998 Federal Register, HCFA discusses development of practice expense RVUs for codes that will be new in 1999 and beyond:

There will be new codes included in CPT 1999 for which we will not have practice expense data in time for publication in the 1998 final rule. We plan to develop interim practice expense RVUs for these codes by preparing a crosswalk of CPEP data from existing codes. The crosswalk we use will be available with the final rule, and the practice expense values for the codes will be subject to comment. However, the interim values will serve as the basis of payment during 1999.

We do not believe that preparing a crosswalk of new codes is the most appropriate method of developing practice expense RVUs for new codes. However, for 1999, time constraints do not permit any other approach. Beyond 1999, we would like to develop a process whereby we receive recommended practice expense RVUs or recommended inputs for clinical staff types and times, quantity and cost of medical supplies, and quantity and cost of medical equipment.

For practice expense RVUs, we believe there are two principal options. First, we could continue to crosswalk new codes to existing codes, publish the results of that crosswalk as interim practice expense RVUs in the final rule, and review comments we receive with the assistance of our multiple specialty panels. Second, we could

request the RUC or a RUC-like organization to provide recommended practice expense RVUs or recommended inputs before publication of the proposed rule as we do with work RVUs. This approach would allow us to publish interim RVUs based on the advice of practicing physicians. As with the work RVUs, any comments we received on the interim RVUs could then be reviewed with the assistance of HCFA multiple specialty panels. We invite comments on these options and would welcome any other recommendations.

Although HCFA requested comments regarding crosswalked codes, as noted above, they did not to implement any changes for the final rule, as stated in the November 2, 1998 Federal Register:

Comment: ...We also received comments from several organizations with recommendations for revised crosswalks for those codes not valued by the CPEPs, as well as recommended in-office inputs for some codes that are now being done in the office, but were only given practice expense RVUs for the facility setting.

Response: We had intended to make the CPEP revisions requested by a given specialty as part of the final rule if the recommendations appeared reasonable and if there would be no significant impact on any other specialty. However, given the huge volume of recommended revisions -- over a third of the codes in the fee schedule would be affected -- acceptance of the recommended changes across the board would almost certainly have a spill-over impact on many subspecialties and between sites-of-service. ... All the code-specific comments referred to above will be considered at the start of the refinement period. (See Section II.A.4, Refinement of Practice Expense RVUs).

We recommend that the CPT codes listed in the attached table be advanced to HCFA as our recommended interim proxies for practice expense details for new/revised codes for *CPT 2000*. In general, the crosswalk codes chosen are consistent with deletion and crosswalking information to be provided in *CPT 2000*. We understand that HCFA has a methodology in place to crosswalk time, supply, and equipment inputs using physician time and office visit information from work RVU summary recommendations. We anticipate reviewing the crosswalked interim practice expense details for these codes during the refinement period after data collection methodology and guidelines are developed.

# J1-J2 Practice Expense Crosswalk Recommendations

New code / Descriptor	CPT crosswalk code/information for practice expense
2231X1 (J1) Open treatment and/or reduction of odontoid fracture(s) and/or dislocation(s) (including os odontoideum), anterior approach, including placement of internal fixation; without grafting global 090	63075 Discectomy, anterior, with decompression of spinal cord and/ or nerve root(s), including osteophylectomy; cervical, single interspace global 090
2231X2 (J2) Open treatment and/or reduction of odontoid fracture(s) and/or dislocation(s) (including os odontoideum), anterior approach, including placement of internal fixation; with grafting global 090	22548 Arthrodesis, anterior transoral or extraoral technique, clivus-C1-C2 (atlas-axis), with or without excision of odontoid process global 090

**AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE**  
**SUMMARY OF RECOMMENDATIONS**  
**May 1999**

**TRANSMYOCARDIAL REVASCULARIZATION**

***Work Relative Value Recommendation***

A new CPT Code 33140, *Transmyocardial laser revascularization, by thoracotomy (separate procedure)* has been established to describe a new type of myocardial revascularization procedure that is becoming recognized by the cardiothoracic surgical community as a useful alternative or adjunct to coronary artery bypass grafting. In absence of a specific code, this procedure is being reported as one of the following: CPT 33999 *Unlisted procedure, cardiac surgery* (work RVU= Carrier Priced); CPT 33020 *Pericardiotomy for removal of clot or foreign body (primary procedure)* (work RVU=12.61); and CPT 32100 *Thoracotomy, major; with exploration and biopsy* (work RVU=11.84).

- These codes are inadequate to describe the new type of revascularization process as they are either too vague, describe only a portion of the service, or do not clearly describe the work. The work involved in 33140 is similar to CPT 33512 *Coronary artery bypass, vein only; three coronary venous grafts* (work RVU= 29.67). Because the intra-service time of the reference service was 32% greater than 33140, the committee supports a work RVU of 20.00. This value is also the 25<sup>th</sup> percentile of the survey data.

***Practice Expense Recommendation***

The specialty suggested a crosswalk of practice expense during their presentation to the RUC. However, the RUC agreed not to review any practice expense crosswalks that were not submitted in writing prior to the meeting. Therefore, the RUC is not making a practice recommendation for this code.



<b>CPT Code (•New)</b>	<b>Track- ing Number</b>	<b>CPT Descriptor</b>	<b>Global Period</b>	<b>Work RVU Recommendation</b>
•33140	R1	Transmyocardial laser revascularization, by thoracotomy (separate procedure)	090	20.00

*CPT five-digit codes, two-digit modifiers, and descriptions only are copyright by the American Medical Association.*

## Physician Work Data

**AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF RECOMMENDATION**

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CPT Code: 3314X Tracking Number: R1 Global Period: 090 Recommended RVW: 20.00

CPT Descriptor: Transmyocardial laser revascularization, by thoracotomy (separate procedure)

**CLINICAL DESCRIPTION OF SERVICES**

**Vignette Used in Survey:**

Typical Patient/Service: A 51 year-old-man has a history of coronary artery disease, with previous coronary artery bypass grafting in 1982 and again in 1991. Over the past two years, the patient has developed significant recurrent angina. Cardiac catheterization performed in 1996 reveals left internal mammary artery graft to the left anterior descending coronary artery to be patent. However, grafts to the circumflex and right coronary arteries were occluded and both of these vessels were small and diffusely diseased. It was felt that they were not surgically regraftable.

The patient was prepped and draped for operation and a left anterolateral thoracotomy incision was made. The left pleural space was entered through the fourth intercostal space. The pericardium was incised and the adhesions present were taken down using sharp dissection in order to free up the lateral, posterior, and inferior walls of the left ventricle. Pericardial retraction sutures were then applied. The transmyocardial revascularization procedure was performed using the laser, beginning on the posterolateral wall in the distribution of the obtuse marginal branch of the circumflex and extending laterally and toward the apex. The procedure was then performed on the inferior wall in the distribution of the posterior descending branch of the right coronary artery. There were a total of 30 laser sinusoids made. Bleeding from the sites was controlled with a local hemostatic agent. The patient tolerated the procedure well and remained hemodynamically stable. The area was then irrigated with antibiotic solution, and a 30 French chest tube was inserted into the left pleural space. The intercostal muscles, deep and subcutaneous tissues, and skin were closed. The patient was taken to the intensive care unit in stable condition.

Description of Pre-Service Work:

The surgical contact with the patient starts with a preoperative history and physical and immediate past history within 24 hours of the operation to reassess the patient's condition prior to taking him/her to the operating room. Medical decision-making involves assessing the patient's immediate surgical risk. In patients with end-stage coronary artery disease, this entails a high level of judgment, intensity and risk on the part of the surgeon.

Description of Intra-Service Work: The patient is prepped and draped for operation and a left anterolateral thoracotomy incision was made. The left pleural space is entered through the fourth intercostal space. The pericardium is incised and the adhesions present are taken down using sharp dissection in order to free up the lateral, posterior, and inferior walls of the left ventricle. Pericardial retraction sutures are then applied. The transmyocardial revascularization procedure is performed using the laser, beginning on the posterolateral wall in the distribution of the obtuse marginal branch of the circumflex and extending laterally and toward the apex. The procedure is then performed on the inferior wall in the distribution of the posterior descending branch of the right coronary artery. There are a total of 30 laser sinusoids made. Bleeding from the sites is controlled with a local hemostatic agent. The area is then irrigated with antibiotic solution, and a #30 French chest tube is inserted into the left pleural space. The intercostal muscles, deep and subcutaneous tissues, and skin are closed.

Description of Post-Service Work: . The patient is taken to the intensive care unit when in stable condition with the surgical team in attendance. Management of hemodynamics, bleeding and wound drainage occur. The patient's respiratory status is carefully monitored as are hemodynamics and vital signs. The patient is then transferred to the step-down unit where monitoring of drains and drips is required. The patient is transferred to the floor in the next 24-48 hours where he/she receives daily visits to assess the wound, cardiorespiratory status, and hemodynamic status. The surgeon and his team then follow the patient in the office, monitoring pain, infection, wound healing, and respiratory status.

**KEY REFERENCE SERVICE:**

<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
33512	Coronary artery bypass, vein only; three coronary venous grafts	29.67
32220	Decortication, pulmonary; total	19.27

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. Make certain that you are including the data from the service that you are rating as well as the key reference services.

**TIME ESTIMATES (Median)**

	<u>CPT Code</u> 3314X	<u>Reference Service 1</u> 33512	<u>Reference Service 2</u> 32220
Median Pre-Time (day of procedure)	30 min	20 min	53 min
Median Intra-Time	120 min	158 min	195 min
Median Post-Time (day of procedure)	45 min	30 min	45 min

**INTENSITY/COMPLEXITY MEASURES (Mean)****Mental Effort and Judgement (Mean)**

The number of possible diagnosis and/or the number of management options that must be considered	4.17	3.40	3.50
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.39	3.40	3.50
Urgency of medical decision making	3.11	3.40	4.00

**Technical Skill/Physical Effort (Mean)**

Technical skill required	3.39	3.60	3.50
Physical effort required	3.28	3.40	3.00

**Psychological Stress (Mean)**

The risk of significant complications, morbidity and/or mortality	4.17	3.40	4.00
Outcome depends on the skill and judgement of physician	3.78	3.60	3.00
Estimated risk of malpractice suit with poor outcome	3.11	2.60	3.50

## SURVEY DATA:

Presenter(s) Sidney Levitsky, M.D./TBA

Specialty(s): Society of Thoracic Surgeons/American Association for Thoracic Surgery

Sample Size: 50 Response Rate: (%): 40% (20) Final Median RVW: 23.00

Type of Sample (Circle One): random, panel, convenience. Explanation of sample size: General thoracic surgeons specializing in this type of procedure

25th Percentile RVW: 20.00 75th Percentile RVW: 30.00 Low: 9.50 High: 30.50

Median Pre-Service Time: 30 min Median Intra-Service Time: 120 min

25th Percentile Intra-Svc Time: 100 min 75th Percentile Intra-Svc Time: 180 min Low: 40 min High: 240 min

Median Post-Service Time:	<u>Total Time</u>	<u>Level of Service by CPT Code</u> <u>(List # of Visits)</u>
Day of Procedure:	<u>45 min</u>	<u>2 x 99291</u>
Critical care:	<u></u>	<u>(see above)</u>
Other Hospital Visit:	<u>115 min</u>	<u>6.5 x 99231</u>
Discharge Day Mgmt:	<u></u>	<u></u>
Office:	<u>45 min</u>	<u>3 x 99212</u>

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**INTENSITY/COMPLEXITY MEASURES****CPT Code****Reference****Reference****Service 1****Service 2**

3314X

33512

32220**Time Segments (Mean)**

Pre-Service intensity/complexity	3.65	3.20	3.00
Intra-Service intensity/complexity	3.71	3.60	4.00
Post-Service intensity/complexity	3.41	3.00	3.00

**ADDITIONAL RATIONALE**

Describe the process by which your specialty society reached your final recommendation. The consensus committee believed that the 25<sup>th</sup> percentile more accurately portrayed the amount of work in this new procedure.

---

**FREQUENCY INFORMATION**

How was this service previously reported? 33999

How often do physicians in your specialty perform this service? Commonly Sometimes Rarely

Estimate the number of times this service might be provided nationally in a one-year period? > 1000 cases/year

Do many physicians perform this service across the United States? Yes x No

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**AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE**  
**SUMMARY OF RECOMMENDATIONS**  
**May 1999**

**VASCULAR ACCESS DEVICE PROCEDURES**

***Work Relative Value Recommendations***

CPT Code 36550 *Declotting by thrombolytic agent of implanted reservoir vascular access device or catheter* was created to describe ongoing, intermittent and/or maintenance therapy to cancer patients through a reservoir vascular access device.

Survey information regarding this code was presented at the May 1999 RUC meeting. Committee members noted inconsistencies with the survey instrument, data, and vignette. Committee members were not able to reach a consensus regarding an appropriate work relative value, and unanimously referred the issue back to the specialty society for reexamination. It is expected that specialty society will resurvey, and will present revised information to the RUC for consideration at a later date.

Based on the recent activity, the RUC is unable to make a final recommendation regarding physician work at this time.

***Practice Expense Recommendations***

As previously stated, the RUC is unable to make a final recommendation regarding practice expense at this time.

CPT Code (•New)	Track- ing Number	CPT Descriptor	Global Period	Work RVU Recommendation
•36550	T1	Declotting by thrombolytic agent of implanted reservoir vascular access device or catheter	XXX	No Recommendation

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**AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE  
SUMMARY OF RECOMMENDATIONS  
May 1999**

**VISION SCREENING**

***Work Relative Value Recommendations***

A new CPT code 99173 *Screening test of visual acuity, quantitative, bilateral (The screening test used must employ graduated visual acuity stimuli that allow a quantitative estimate of visual acuity (e.g. Snellen Chart). Other identifiable services unrelated to this screening test provided at the same time may be reported separately (eg, preventive medicine services). When acuity is measured as part of a general ophthalmological service or of an E/M service of the eye, it is a diagnostic examination and not a screening test)* was established to document a vision test which previously had been included as part of an evaluation and management service. The RUC concluded that assigning work RVUs to this code would represent an unbundling of evaluation and management services and the code should be used for reporting purposes only. The RUC agreed that this important service should be distinct so it can be used as a quality measure for reporting purposes, but the RUC concluded there is no separate physician work involved in this code. The RUC is therefore not submitting a work recommendation for this code.

***Practice Expense Recommendations***

The RUC examined the practice expense involved in providing this service and agreed that there are clinical labor, supplies and procedure specific equipment expenses. The RUC recommends that the attached list of direct inputs accurately describes the clinical staff time involved in providing the service as well as the supplies and equipment utilized in this service.



CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
•99173	O1	<p>Screening test of visual acuity, quantitative, bilateral</p> <p><u>(The screening test used must employ graduated visual acuity stimuli that allow a quantitative estimate of visual acuity (e.g. Snellen Chart). Other identifiable services unrelated to this screening test provided at the same time may be reported separately (eg, preventive medicine services). When acuity is measured as part of a general ophthalmological service or of an E/M service of the eye, it is a diagnostic examination and not a screening test.)</u></p>	XXX	<b>No Recommendation</b>

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## Practice Expense Data

**AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS SUMMARY OF RECOMMENDATION**

**Direct Practice Expense Inputs**

(April 1999)

**CPT Code:** 9917X (O1)

**Global Period:** XXX

**CPT Descriptor:** Screening test of visual acuity, quantitative, bilateral  
 [The screening test used must employ graduated visual acuity stimuli that allow a quantitative estimate of visual acuity (eg, Snellen chart). Other identifiable services unrelated to this screening test provided at the same time may be reported separately (eg, preventive medicine services). When acuity is measured as part of a general ophthalmological service or of an E/M service of the eye, it is a diagnostic examination and not a screening test.]

**Reference Code 1:** 92002

**Reference Code 2:** 92081

**Specialty(s):** American Academy of Pediatrics

**CLINICAL LABOR (IN MINUTES)**

Clinical Staff	Staff Code	Pre-IN Office	TOTAL IN Office	Post-IN Office	Pre OUT Office	Intra OUT Office	Post OUT Office
RN/LPN/MA	10130	—	12	—	n/a	n/a	n/a

**MEDICAL SUPPLIES**

HCFA Supply Code	Supply Description	Unit	Quantity used IN-OFFICE for procedure AND pre- & post-op visits	QUANTITY used OUT-OF-OFFICE for pre- & post-op visits ONLY
11515	occluder	item	1	n/a

**PROCEDURE SPECIFIC MEDICAL EQUIPMENT**

HCFA Equip Code	Procedure-specific Description	Quantity used IN-OFFICE for procedure AND pre- & post-op visits	QUANTITY used OUT-OF-OFFICE for pre- & post-op visits ONLY
NEW	Titmus vision screen machine	1	n/a

**AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE**  
**SUMMARY OF RECOMMENDATIONS**  
**May 1999**

**WEEKLY RADIATION TREATMENT MANAGEMENT**

***Work Relative Value Recommendations***

A new code was developed, CPT 77427, to report *Radiation treatment management, five treatments*. Radiation oncology has been practiced for over seventy years and is primarily used in the treatment of benign and malignant lesions.

The new treatment management code was created to describe in a single definition scenario, a significant variety of cancer and patient problems. Four treatment management codes, CPT 77419, *Weekly radiation therapy management; conformal* (work RVU = 3.60); CPT 77420, *Weekly radiation therapy management; simple* (work RVU = 1.61); CPT 77425, *Weekly radiation therapy management; intermediate* (work RVU = 2.44); and CPT 77430 *Weekly radiation therapy management; complex* (work RVU = 3.60) were collapsed into a single code.

The modifications to the treatment codes were implemented for several reasons. The current CPT descriptions for treatment management no longer reflect the practice of radiation oncology. The origin of the current descriptors originated in the 1970s. At that time, the term “treatment management” was used to describe both the supervision of technical factors of treatment and the clinical/medical care of the patient. It generally was believed that the complexity of the technical factors of treatment (eg number and type of treatment devices, type of beams(s) used) were directly related to the seriousness of the medical condition of the patient and the clinical work of the radiation oncologist. Since the time the descriptors were originally created, there have been significant changes in the practice of radiation oncology.

Again, when the codes were created over 20 years ago, technical factors were used as the proxy for physician work. However, this analogy is less appropriate today. Furthermore, during the Five-Year Review of the RBRVS, the AMA’s RVS Update Committee (RUC) noted that the codes’ descriptors did not represent the physician work involved in the treatment management. The intent of

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the recent code changes was to make treatment management codes dependent on clinical factors and physician work, rather than technical factors. Weekly management currently consists of four factors: 1) Review of port films; 2) Review of dosimetry and chart prescription; 3) Review of patient treatment set-up; and, 4) Examination of patient for medical evaluation and management.

In its evaluation of a proposed work relative value unit, the RUC observed the values for CPT codes currently used in reporting as well as survey data provided by physicians who performed these services. It was the consensus of the RUC that a work value of 3.31 appropriately valued the physician work involved in performing these procedures.

The RUC recommends a work relative value unit of 3.31 for CPT code 77427.

### ***Practice Expense Recommendations***

The RUC also supports the specialty society's recommendation that the CPEP 6 direct inputs for CPT code 77430 should be assigned to the new CPT code 77427.

<b>CPT Code (•New)</b>	<b>Tracking Number</b>	<b>CPT Descriptor</b>	<b>Global Period</b>	<b>Work RVU Recommendation</b>
77419		<del>Weekly radiation therapy management; conformal</del>  (This code may be reported once per every five sessions of treatment management. This code exclude the use of 77420, 77425, 77430 and 77431.)	XXX	Deleted Code
77420		77420 — simple	XXX	Deleted Code
77425		77425 — intermediate	XXX	Deleted Code

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77430		77430—complex (77419, 77420, 77425 and 77430 have been deleted. To report radiation management, see 77427.)	XXX	Deleted Code
•77427	C1	Radiation treatment management, five treatments	XXX	3.31

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## Physician Work Data



## AMERICAN SOCIETY FOR THERAPEUTIC RADIOLOGY AND ONCOLOGY

1891 Preston White Drive, Reston, Virginia 20191-4397 (800) 962-7876 (703) 295-6760

Fax (703) 476-8167

January 13, 1999

James G. Hoehn, M.D.  
Chairman of RVS Update Committee  
American Medical Association  
Relative Value Systems  
515 North State St.  
Chicago, IL 60610

Dear Dr. Hoehn:

Enclosed please find the completed Summary of Recommendation forms for Work Relative Values and Practice Expense data for the new code for radiation treatment management; five fractions (CPT code 7742X).

The new treatment management code is a hybrid code meant to describe in a single definition scenario, a significant variety of cancer sites and patient problems. For this reason, ASTRO chose to survey for the new treatment management code using three different treatment vignettes. Each vignette describes the typical patient representing the four treatment management codes which are collapsed into a single code. The three different treatment scenarios are:

- Vignette 1 – Small Cell Lung Cancer with Brain Metastases
- Vignette 2 – Adenocarcinoma of the Rectum
- Vignette 3 – Squamous Cell Carcinoma of the Esophagus

I would like to comment that the survey instrument to determine the work relative values does not lend itself to the accurate recording of the continuum of services provided to and for patients who receive radiation treatment management over a full week of service. Attached to the Summary of Recommendation forms is a reference to other services included in radiation treatment management that are not represented in the survey data (see Attachment I). I would like to specifically point out that although the current and future radiation treatment management codes have a XXX global period, they are treated as if they have a 90 day global period by the Health Care Financing Administration under the Medicare Part-B fee schedule. This precludes radiation oncologists from billing for any follow-up visits within 90 days after the last day of the radiation treatment course. This type of information was very difficult to collect with the current survey instrument, since it is representative of the follow-up of a five or six week course but is very much a part of the service that radiation oncologists provide for their patients. The survey form also does not allow for the representation of the variance in the time, intensity, and level of risk involved with the patients at different periods within a course of treatment depending on their reaction to the radiation treatments.

ASTRO is also sending in completed forms and data on the practice expense data that was collected for each vignette as well an average of the entire sample. ASTRO is concerned that this is the first time that these forms were used and that they were not pilot tested. ASTRO feels that the two month period it was given to review and customize the forms, collect data, analyze data, and present the results in writing is not nearly enough time for the type of information requested.



You can see from the variance of the answers in the data and supplies lists that practice expense direct cost information is difficult to collect with a standardized form by mail or fax. Also, radiation oncology practices and their business managers were not given ample time to evaluate the costs that might be included in the single treatment management code since the format of the questions was not consistent with the cost accounting procedures within radiation oncology practices. Moreover, the radiation treatment management code is a professional component only code, and much of the information requested does not apply. ASTRO will elect to defer the use of this data to another method of calculation and will not support the use of this practice expense data for the new single radiation treatment management code. ASTRO will be happy to follow-up with more detailed comments and input to help Research Subcommittee to redesign this portion of the survey if it is concluded that the use of a survey is the appropriate methodology for determining input of practice expense.

If you have further questions, you would like to discuss prior to the February RUC meeting, please give me a call.

Sincerely,

A handwritten signature in dark ink, appearing to read "Paul E. Wallner D.O.", with a stylized flourish at the end.

Paul E. Wallner, D.O.

ASTRO Representative to the RUC

Cc: Jill Zanutto  
Sherry Smith  
Frank Malouff

CPT Code: 7742X    Tracking Number: C-1    Global Period: XXX    Recommended RVW: 3.75

**CLINICAL DESCRIPTION OF SERVICE:**

**Description of Post-Service Work:**

- 1) Follow up exam (see below)
- 2) Order further studies
- 3) Consultation with family
- 4) Coordination of care with other providers (MDs, home health, etc.)

Tot-

- 5) Consultation and/or report to referring physician and other health care providers

**SURVEY DATA:**

Presenter(s): Paul E. Wallner, DO, FACR, ASTRO Advisor to the RUC  
Michael L. Steinberg, MD, ACRO Advisor to the RUC  
Theodore J. Brickner, Jr., MD, ACR Representative

Specialty(s): Radiation Oncology

Sample Size: 300 Response Rate: (%) 30 (30%) Final Median RVW: 3.75

Type of Sample (Circle One): random panel, convenience. Explanation of sample size: anticipating anticipating approximately 30% response, 100 surveys of each vignette were sent

25th Percentile RVW: 3.23 75th Percentile RVW: 5.12 Low: 1.3 High: 12.9

Median Pre-Service Time: 20 Median Intra-Service Time: 40

25th Percentile Intra-Svc Time: 25 75th Percentile Intra-Svc Time: 60 Low: 10 High: 300

\*\*\*Median Post-Service Time:

	<u>Total Time</u>	<u>Level of Service by CPT Code</u> <u>(List # of Visits)</u>
Day of Procedure:	<u>20</u>	
Hospital Visit:	<u>25</u>	<u>99231</u>
Critical Care:		
Disch. Day mgmt.:	<u>23</u>	<u>99238</u>
Office Visits:	<u>20</u>	<u>99213</u>
Average # of visits = 3.69		

\*\*\*Following completion of treatment patients are seen for follow-up evaluations on their response to treatment on two or three occasions in the first 90 days. For those who may have more severe side effects from radiation, the visits may be more often. Radiation Oncologists are precluded by HCFA payment policy from charging any of the 52 codes included in the attached list which includes all E and M codes. This total time and number of visits need to be divided by total weeks of treatment (5 or 6) to represent post-procedure time for a week (5 fractions) of radiation treatment management.

**KEY REFERENCE SERVICE:**

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
Reference: 1	99244	Office consultation for a new or established patient, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of	2.58

-Tot

moderate complexity. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patients and/or family's needs. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 60 minutes face-to-face with the patient and/or family.

Reference: 2 77290

Therapeutic radiology simulation-aided field setting; complex

1.56

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including the data from the service that you are rating as well as the key reference services.**

**TIME ESTIMATES (Median)**

	<b><u>CPT Code</u></b> <b>7742X</b>	<b><u>Reference</u></b> <b><u>Service 1</u></b> <b>99244</b>	<b><u>Reference</u></b> <b><u>Service 2</u></b> <b>77290</b>
Median Pre-Time	20	24.5	26.67
Median Intra-Time	40	56.2	45.00
Median Post-Time	20		

**INTENSITY/COMPLEXITY MEASURES (Mean)****Mental Effort and Judgement (Mean)**

The number of possible diagnosis and/or the number of management options that must be considered	3.93	4.08	2.92
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.23	4.36	3.92
Urgency of medical decision making	3.78	3.68	3.15

**Technical Skill/Physical Effort (Mean)**

Technical skill required	4.28	3.52	3.85
Physical effort required	3.01	2.8	3.00

**Psychological Stress (Mean)**

The risk of significant complications, morbidity and/or mortality	4.33	3.76	3.54
Outcome depends on the skill and judgement of physician	4.23	3.92	3.77
Estimated risk of malpractice suit with poor outcome	3.45	3.24	3.00

### Reference Service 2

**\*Source: 1996 Part-B Medicare Annual Data**

**AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS**  
**SUMMARY OF RECOMMENDATION**

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CPT Code: 7742X    Tracking Number: C-1    Global Period: XXX    Recommended RVW: 3.75

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CPT Descriptor:    Radiation treatment management, five treatments

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**CLINICAL DESCRIPTION OF SERVICE:**

Vignette Used in Survey:

Vignette- Small Cell Lung Cancer with Brain Metastases

63 year-old widower with small cell carcinoma, of "limited" stage at diagnosis with 6cm LUL mass, 3cm left paratracheal and subcarinal adenopathy, admitted 2 weeks after 4<sup>th</sup> course of Carboplatin/Taxol chemotherapy with fever, cough, dyspnea, and major motor seizure. Exam shows obtundation, absent breath sounds left chest, mild right hemiparesis, mild aphasia. KPS was 30%.

Workup includes brain CT (3 enhancing 1 to 3 cm lesions with edema, in both cerebral hemispheres), chest CT (left lung atelectasis, mediastinal adenopathy), CBC (Hct 27, Hgb 8.8, WBC 1700, platelets 79,000), and normal serum chemistries. Neupogen, Decadron, anticonvulsants, and IV fluids are given.

External beam whole brain radiotherapy by bilateral opposed ports with custom blocking of orbits and skull base was begun to a prescribed dose of 3000cGy in 10 treatments with 6mv photons. One additional seizure occurred in the linear accelerator room on the second day of radiotherapy. Fever persisted despite broad spectrum antibiotics. One week after admission, WBC was 6300 and chest radiotherapy commenced, using focused blocks with anterior-posterior opposed ports covering mediastinum, left hilum, and original LUL tumor volume, planning 3500 cGy midplane dose in 14 treatments with 15mv photons.

Outpatient radiotherapy continued after his 9 day admission. Bilateral lower extremity weakness developed, and after normal spine MRI, steroid myopathy was diagnosed. Steroid taper was begun, walker was ordered. Dysphagia due to radiation esophagitis was problematic in the last week of radiotherapy, requiring nutritional counselling, home health coordination, and initiation of Diflucan. He lost an additional 7 pounds. Zoloft was prescribed for depression.

After treatment, he was seen at two week intervals x2. Diflucan was stopped, alimentation improved, steroid taper continued, blood sugars remained satisfactory and respiratory status improved. Chest X-ray 1 month after radiotherapy showed good partial re-aeration of left lung. Steroids were stopped. On his 3<sup>rd</sup> return two months after radiotherapy, brain CT showed total regression of the two smaller metastases; the 3cm metastasis now measured 1cm. KPS was 80%.

Description of Pre-Service Work:

- 1) Port film review
- 2) Patient setup inspection
- 3) Dosimetry review
- 4) Review patient status with radiation oncology nurse and/or radiation oncology therapist

Description of Intra-Service Work:

- 1) Interval history
- 2) Physical examination
- 3) Laboratory report
- 4) Imaging study review
- 5) Management decision making  
[including radiation aspects (e.g. modify dose) and general medical (drugs, blood sugars, nutrition, etc.) aspects]
- 6) Ordering further imaging or laboratory studies
- 7) Coordination of care with other members of the treatment team (therapists, physicists, dosimetrists, etc.)

Description of Post-Service Work: 1) Follow up exam (see below)  
 2) Order further studies  
 3) Consultation with family  
 4) Coordination of care with other providers (MDs, home health, etc.)  
 5) Consultation and/or report to referring physician and other health care providers

**SURVEY DATA:**

Presenter(s): Paul E. Wallner, DO, FACR, ASTRO Advisor to the RUC  
Michael L. Steinberg, MD, ACRO Advisor to the RUC  
Theodore J. Brickner, Jr., MD, ACR Representative

Specialty(s): Radiation Oncology

Sample Size: 100 Response Rate: (%) 29 (29%) Final Median RVW: 3.73

Type of Sample (Circle One): random panel, convenience. Explanation of sample size: anticipating approximately 30% response, 100 surveys of each vignette were sent

25th Percentile RVW: 3.2 75<sup>th</sup> Percentile RVW: 5.16 Low: 1.3 High: 6.85

Median Pre-Service Time: 20 Median Intra-Service Time: 45

25th Percentile Intra-Svc Time: 35 75th Percentile Intra-Svc Time: 82.5 Low: 13 High: 300

\*\*\*Median Post-Service Time:

	<u>Total Time</u>	<u>Level of Service by CPT Code</u> <u>(List # of Visits)</u>
Day of Procedure:	<u>17.5</u>	
Hospital Visit:	<u>25</u>	<u>99231</u>
Critical Care:		
Disch. Day mgmt.:	<u>12.5</u>	<u>99238</u>
Office Visits:	<u>21.5</u>	<u>99213</u>
Average # of visits = 3.18		

\*\*\*Following completion of treatment patients are seen for follow-up evaluations on their response to treatment on two or three occasions in the first 90 days. For those who may have more severe side effects from radiation, the visits may be more often. Radiation Oncologists are precluded by HCFA payment policy from charging any of the 52 codes included in the attached list which includes all E and M codes. This total time and number of visits need to be divided by total weeks of treatment (5 or 6) to represent post-procedure time for a week (5 fractions) of radiation treatment management.

**KEY REFERENCE SERVICE:**

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
Reference 1	99244	Office consultation for a new or established patient, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of moderate complexity. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patients and/or family's needs. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 60 minutes face-to-face with the patient and/or family.	2.58
Reference 2	77290	Therapeutic radiology simulation-aided field setting; complex	1.56

**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including the data from the service that you are rating as well as the key reference services.**

<u>TIME ESTIMATES (Median)</u>	<u>CPT Code</u> 7742X	<u>Reference</u> <u>Service 1</u>	<u>Reference</u> <u>Service 2</u>
Median Pre-Time	20	20	35
Median Intra-Time	45	60	45
Median Post-Time	21.5	20	20

**INTENSITY/COMPLEXITY MEASURES (Mean)****Mental Effort and Judgement (Mean)**

The number of possible diagnosis and/or the number of management options that must be considered	4.10	4.00	4.00
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.32	4.5	4.25
Urgency of medical decision making	3.97	3.5	3.5

**Technical Skill/Physical Effort (Mean)**

Technical skill required	4.10	3.38	3.75
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	V1 -		
Physical effort required	2.90	2.5	3.5

**Psychological Stress (Mean)**

The risk of significant complications, morbidity and/or mortality	4.31	3.75	3.75
Outcome depends on the skill and judgement of physician	3.97	3.63	3.75
Estimated risk of malpractice suit with poor outcome	3.03	2.88	3.50

**INTENSITY/COMPLEXITY MEASURES****CPT Code**  
**7742X****Reference**  
**Service 1****Reference**  
**Service 2****Time Segments (Mean)**

Pre-Service intensity/complexity	3.84	3.88	3.00
Intra-Service intensity/complexity	4.19	4.14	4.00
Post-Service intensity/complexity	3.76	3.71	3.33

**ADDITIONAL RATIONALE**

Describe the process by which your specialty society reached your final recommendation.

The final recommendation is the median of the full sample of respondents from all three vignettes.

**FREQUENCY INFORMATION**

How was this service previously reported?      77419 (Weekly radiation therapy management; conformal)  
    77420 (Weekly radiation therapy management; simple)  
    77425 (Weekly radiation therapy management; intermediate)  
    77430 (Weekly radiation therapy management; complex)

How often do physicians in your specialty perform this service?   x Commonly      Sometimes      RarelyEstimate the number of times this service might be provided nationally in a one-year period?   \*2,524,271Do many physicians perform this service across the United States?   x Yes      No

**AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS  
SUMMARY OF RECOMMENDATION**

CPT Code: 7742X    Tracking Number: C-1    Global Period: XXX    Recommended RVW: 3.75

CPT Descriptor:    Radiation treatment management, five treatments

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**CLINICAL DESCRIPTION OF SERVICE:**

**Vignette Used in Survey:**

61 year female found to have a 4 cm near-circumferential moderately differentiated adenocarcinoma of rectum (8 to 12 cm above anal verge) on evaluation of 3 months rectal bleeding, 4 weeks of dyspareunia, and 2 weeks of dull lower pelvic pain. Workup findings included anemia (Hct 33, Hgb 10.9), CEA 7.3, no evidence of adenopathy or distant metastasis on CTs of pelvis and abdomen and chest x-ray. KPS was 80%. She did well after low anterior resection, with pathologic findings of tumor into perirectal fat, 3 of 8 nodes involved (T<sub>3</sub>N<sub>1</sub>, M<sub>0</sub> Stage III). Recommendations for adjuvant chemotherapy and radiotherapy were accepted.

Four weeks later after mediport placement and simulation, treatment began with continuous 24 hr infusion (for 4 weeks) 5 FU, and concurrent 3 field pelvic radiotherapy to an intended total dose of 4500 cGy in 25 daily treatments over 5 weeks, with a planned boost thereafter to the posterior pelvis of 540 cGy in 3 daily treatments, all with 10 mv photons.

Treatment in the prone position ("Belly board" technique) was in the first week awkward and uncomfortable for her, due to the infusion pump, incisional pain, and hip osteoarthritis. Analgesic drugs and dosing were modified.

Mild nausea in 2<sup>nd</sup> week was controlled with a phenothiazine antiemetic pm. Nutrition was appropriate.

Nausea increased during the 3<sup>rd</sup> week, and intermittent semi-watery diarrhea developed. Mild neutropenia appeared. Weight dropped 2 pounds. Post-op oral iron therapy was stopped. Strict adherence to a low residue diet, frequent smaller feedings, and nutritional supplements were advised. Lomotil was prescribed in the 4<sup>th</sup> week. She was symptomatically stable. Mild neutropenia persisted. Radio-dermatitis in gluteal cleft was topically managed.

In week 5, watery diarrhea, urinary frequency, dysuria, and mild stomatitis developed. WBC was 2500, platelets 100,000. Stool for C. difficile was negative, urinalysis/culture confirmed UTI, antibiotic was prescribed, inflamed hemorrhoids were topically treated. Treatment was not given Thursday - Friday to give irradiated bowel a 4-day rest from therapy. Chemotherapy infusion was completed.

Patients GI status was improved in 5<sup>th</sup> week; stools semi-formed, 1x to 3x/day with some tenesmus. Moist desquamation in gluteal cleft was treated with Bactroban. WBC was 2800. Stomatitis and cystitis resolved.

Posterior pelvic boost completed her treatment in week 6. GI function was unchanged from week 5. At end of radiotherapy, net weight loss was 5 pounds, KPS was 80%.

She was seen two and four weeks post radiotherapy, with progressive recovery.

Chemotherapy resumed 4 weeks after radiotherapy. When seen again two months after radiotherapy, skin was healed, GI symptoms were mild and controlled by minor diet adjustments. Sexual counseling was given. Return visit in six months was scheduled.

Description of Pre-Service Work:

- 1) Port film review
- 2) Patient setup inspection
- 3) Dosimetry review
- 4) Review patient status with radiation oncology nurse and/or radiation oncology therapist

Description of Intra-Service Work:

- 1) Interval history
- 2) Physical examination
- 3) Laboratory report
- 4) Imaging study review
- 5) Management decision making  
[including radiation aspects (e.g. modify dose) and  
general medical (drugs, blood sugars, nutrition, etc.) aspects]
- 6) Ordering further imaging or laboratory studies
- 7) Coordination of care with other members of the treatment team  
(therapists, physicists, dosimetrists, etc.)

Description of Post-Service Work:

- 1) Follow up exam (see below)
- 2) Order further studies
- 3) Consultation with family
- 4) Coordination of care with other providers (MDs, home health, etc.)
- 5) Consultation and/or report to referring physician and other  
health care providers

**SURVEY DATA:**

Presenter(s): Paul E. Wallner, DO, FACR, ASTRO Advisor to the RUC  
Michael L. Steinberg, MD, ACRO Advisor to the RUC  
Theodore J. Brickner, Jr., MD, ACR Representative

Specialty(s): Radiation Oncology

Sample Size: 100 Response Rate: (%): 27 (27%) Final Median RVW: 3.70

Type of Sample (Circle One): random panel, convenience. Explanation of sample size: anticipating approximately 30% response, 100 surveys of each vignette were sent

25th Percentile RVW: 3.2 75th Percentile RVW: 3.93 Low: 2.00 High: 12.00

Median Pre-Service Time: 20 Median Intra-Service Time: 30

25th Percentile Intra-Svc Time: 22 75th Percentile Intra-Svc Time: 42.5 Low: 10 High: 180

***Median Post-Service Time:	<u>Total Time</u>	<u>Level of Service by CPT Code</u> <u>(List # of Visits)</u>
Day of Procedure:	<u>15</u>	<u>                    </u>
Hospital Visit:	<u>                    </u>	<u>                    </u>
Critical Care:	<u>                    </u>	<u>                    </u>
Disch. Day mgmt.:	<u>60</u>	<u>                    </u>
Office Visits:	<u>15</u>	<u>99213</u>
Average # of visits = 3.0		

\*\*\*Following completion of treatment patients are seen for follow-up evaluations on their response to treatment on two or three occasions in the first 90 days. For those who may have more severe side effects from radiation, the visits may be more often. Radiation Oncologists are precluded by HCFA payment policy

from charging any of the 52 codes included in the attached list which includes all E and M codes. This total time and number of visits need to be divided by total weeks of treatment (5 or 6) to represent post-procedure time for a week (5 fractions) of radiation treatment management.

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**KEY REFERENCE SERVICE:**

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
Reference: 1	77290	Therapeutic radiology simulation-aided field setting; complex	1.56
Reference: 2	99244	Office consultation for a new or established patient, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of moderate complexity. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patients and/or family's needs. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 60 minutes face-to-face with the patient and/or family.	2.58

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**RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):**

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including the data from the service that you are rating as well as the key reference services.**

<u>TIME ESTIMATES (Median)</u>	<u>CPT Code</u> <u>7742X</u>	<u>Reference</u> <u>Service 1</u>	<u>Reference</u> <u>Service 2</u>
Median Pre-Time	20	12.5	20
Median Intra-Time	30	30	60
Median Post-Time	15	25	15

**INTENSITY/COMPLEXITY MEASURES (Mean)**
**Mental Effort and Judgement (Mean)**

The number of possible diagnosis and/or the number of management options that must be considered	3.63	2.33	3.8
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.89	3.83	4.00
Urgency of medical decision making	3.44	3.17	3.4

**Technical Skill/Physical Effort (Mean)**

Technical skill required	4.26	4.17	3.80
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V2

Physical effort required	2.93	3.17	2.6
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**Psychological Stress (Mean)**

The risk of significant complications, morbidity and/or mortality	4.19	3.67	3.80
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Outcome depends on the skill and judgement of physician	4.33	4.17	4.20
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Estimated risk of malpractice suit with poor outcome	3.74	3.17	3.20
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### INTENSITY/COMPLEXITY MEASURES

CPT Code  
7742X

### Reference Service 1

### Reference Service 2

### Time Segments (Mean)

Pre-Service intensity/complexity	3.59	3.67	2.80
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Intra-Service intensity/complexity	4.30	4.17	4.40
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Post-Service intensity/complexity	3.41	2.80	2.60
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### ADDITIONAL RATIONALE

Describe the process by which your specialty society reached your final recommendation.

The final recommendation is the median of the full sample of respondents from all three vignettes.

## FREQUENCY INFORMATION

How was this service previously reported?

77419 (Weekly radiation therapy management; conformal)  
 77420 (Weekly radiation therapy management; simple)  
 77425 (Weekly radiation therapy management; intermediate)  
 77430 (Weekly radiation therapy management; complex)

How often do physicians in your specialty perform this service? x Commonly        Sometimes        Rarely

Estimate the number of times this service might be provided nationally in a one-year period? \*2,524,271

Do many physicians perform this service across the United States?   x   Yes        No

**\*Source: 1996 Part-B Medicare Annual Data**

## AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS

CPT Code: 7742X    Tracking Number: C-1    Global Period: XXX    Recommended RVW: 3.75

**CPT Descriptor:** Radiation treatment management, five treatments

**CLINICAL DESCRIPTION OF SERVICE:**

**Vignette Used in Survey:**

58 year old male with a social history of 2 packs of cigarettes per day smoking x 20+ years, and 6 beers per day x 20 years. Some clinical/radiographic evidence of chronic obstructive pulmonary disease. Normal body weight of 190 pounds and at the time of initial medical evaluation, his weight was 176 pounds. Presents with a 6-8 week history of dysphagia, progressively increasing, now including all solids. Some limited difficulty with thick liquids. Barium esophageal study and endoscopy confirm the presence of a 12 cm upper/mid third lesion with significant narrowing, but not complete obstruction. No evidence of fistula formation. CT of abdomen and chest negative, except for thickening of the esophageal wall in the area of the lesion, and several 1.5 cm lymph nodes in the tracheobronchial region. The patient was staged clinically as T3-N1-M0. Endoscopic biopsy was positive for invasive squamous cell carcinoma.

In anticipation of combined chemoradiation, a PEG tube was placed, and the patient received 2 complete cycles of cisplatin and 5 fluorouracil. He tolerated chemotherapy fairly well, with some neutropenia, and slight improvement in his dysphagia.

Radiation was begun using anterior-posterior parallel opposed fields including the supraclavicular nodes, with cerrobend alloy shaping. Treatment was carried out at 180/day, 5 days per week, to 3060 cGy. At that level, using CT simulation, the patient was switched to a three field technique consisting of a single anterior, and two posterior oblique fields with cerrobend shaping to protect the spinal cord. The supraclavicular nodes were continued with electron fields anteriorly. Total dose to the primary lesion was 6660 cGy, and to the supraclavicular nodes, 4500 cGy.

During therapy, the patient ceased oral intake, requiring significant oversight of his nutritional status. A monilial infection during the third week of therapy required antifungal management, and significant cutaneous reaction in the supraclavicular fields required topical steroids. Pain management required systemic narcotic analgesics. The patient lost an additional 12 pounds during therapy. He remained neutropenic during radiation, and required twice weekly CBCs during the final three weeks of radiation.

Following radiation, the patient was seen weekly for one month to manage his nutritional and pain status, and to monitor his blood counts. Toward the end of that period, his narcotic analgesics were slowly tapered, and he resumed some oral intake. During the second and third post-treatment months, he was seen twice, his analgesics were discontinued, his blood counts returned to normal levels, and he began to eat solids. His weight stabilized, then began to increase. During the third month post-treatment, new esophageal radiographs were obtained and reviewed, his PEG tube feedings were discontinued, and arrangements made for PEG tube removal.

**Description of Pre-Service Work:**

- 1) Port film review
- 2) Patient setup inspection
- 3) Dosimetry review
- 4) Review patient status with radiation oncology nurse and/or radiation oncology therapist

**Description of Intra-Service Work:**

- 1) Interval history
- 2) Physical examination
- 3) Laboratory report
- 4) Imaging study review

- 5) Management decision making  
[including radiation aspects (e.g. modify dose) and  
general medical (drugs, blood sugars, nutrition, etc.) aspects]
- 6) Ordering further imaging or laboratory studies
- 7) Coordination of care with other members of the treatment team  
(therapists, physicists, dosimetrists, etc.)

Description of Post-Service Work: 

- 1) Follow up exam (see below)
- 2) Order further studies
- 3) Consultation with family
- 4) Coordination of care with other providers (MDs, home health, etc.)
- 5) Consultation and/or report to referring physician and other health care providers

**SURVEY DATA:**

Presenter(s): Paul E. Wallner, DO, FACR, ASTRO Advisor to the RUC  
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Theodore J. Brickner, Jr., MD, ACR Representative

Specialty(s): Radiation Oncology

Sample Size: 100 Response Rate: (%): 34 (34%) Final Median RVW: 3.80

Type of Sample (Circle One): random panel, convenience. Explanation of sample size: anticipating  
approximately 30% response, 100 surveys of each vignette were sent

25th Percentile RVW: 3.52 75th Percentile RVW: 6.06 Low: 1.4 High: 12.9

Median Pre-Service Time: 30 Median Intra-Service Time: 45

25th Percentile Intra-Svc Time: 20 75th Percentile Intra-Svc Time: 60 Low: 12 High: 150

\*\*\*Median Post-Service Time:

	<u>Total Time</u>	<u>Level of Service by CPT Code</u> <u>(List # of Visits)</u>
Day of Procedure:	<u>25.5</u>	
Hospital Visit:	<u>33.75</u>	<u>99231</u>
Critical Care:		
Disch. Day mgmt.:	<u>31</u>	<u>99238</u>
Office Visits:	<u>20</u>	<u>99213</u>
Average # of visits = 4.64		

\*\*\*Following completion of treatment patients are seen for follow-up evaluations on their response to treatment on two or three occasions in the first 90 days. For those who may have more severe side effects from radiation, the visits may be more often. Radiation Oncologists are precluded by HCFA payment policy from charging any of the 52 codes included in the attached list which includes all E and M codes. This total time and number of visits need to be divided by total weeks of treatment (5 or 6) to represent post-procedure time for a week (5 fractions) of radiation treatment management.

### KEY REFERENCE SERVICE:

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
Reference: 1	99244	Office consultation for a new or established patient, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of moderate complexity. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patients and/or family's needs. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 60 minutes face-to-face with the patient and/or family.	2.58
Reference: 2	77761	Intracavitary radioelement application; simple	3.81

### RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S):

Compare the pre-, intra-, and post-service time (by the median) and the intensity factors (by the mean) of the service you are rating to the key reference services listed above. **Make certain that you are including the data from the service that you are rating as well as the key reference services.**

<u>TIME ESTIMATES (Median)</u>	<u>CPT Code</u> <u>7742X</u>	<u>Reference</u> <u>Service 1</u>	<u>Reference</u> <u>Service 2</u>
Median Pre-Time	30	20	15
Median Intra-Time	45	50	50
Median Post-Time	20	20	15

### INTENSITY/COMPLEXITY MEASURES (Mean)

#### Mental Effort and Judgement (Mean)

The number of possible diagnosis and/or the number of management options that must be considered	4.03	4.25	3.40
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.42	4.42	4.20
Urgency of medical decision making	3.88	3.92	3.00

#### Technical Skill/Physical Effort (Mean)

Technical skill required	4.45	3.50	3.80
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V3-

Physical effort required	3.18	3.08	3.60
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**Psychological Stress (Mean)**

The risk of significant complications, morbidity and/or mortality	4.47	3.75	3.60
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Outcome depends on the skill and judgement of physician	4.38	4.00	4.00
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Estimated risk of malpractice suit with poor outcome	3.59	3.50	3.40
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**INTENSITY/COMPLEXITY MEASURES****CPT Code**  
**7742X****Reference**  
**Service 1****Reference**  
**Service 2****Time Segments (Mean)**

Pre-Service intensity/complexity	4.06	3.45	3.00
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Intra-Service intensity/complexity	4.35	3.92	4.20
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Post-Service intensity/complexity	3.59	2.82	3.00
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**ADDITIONAL RATIONALE**

Describe the process by which your specialty society reached your final recommendation.

The final recommendation is the median of the full sample of respondents from all three vignettes.

**FREQUENCY INFORMATION**

How was this service previously reported? 77419 (Weekly radiation therapy management; conformal)  
 77420 (Weekly radiation therapy management; simple)  
 77425 (Weekly radiation therapy management; intermediate)  
 77430 (Weekly radiation therapy management; complex)

How often do physicians in your specialty perform this service? ☒ Commonly ☐ Sometimes ☐ RarelyEstimate the number of times this service might be provided nationally in a one-year period? \*2,524,271Do many physicians perform this service across the United States? ☒ Yes ☐ No**\*Source: 1996 Part-B Medicare Annual Data**