

**RUC and RUC HCPAC Review Board
Recommendations
For CPT 1999**

**RUC Meetings:
September 1997, February 1998, and May 1998**

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS RECOMMENDATIONS

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CPT 1999 RUC Recommendations

CPT Code	Global Period	Coding Action	CPT Date	Main Tab	Issue	Tracking Number	RUC Date	RUC Tab	SS Rec	RUC Rec	Same as 1998?	MFS?	Comments
15000	000	R	Nov97	M	Burn Management	M1	May98	18	4.00	4.00		Yes	
15001	ZZZ	A	Nov97	M	Burn Management	M2	May98	18	2.75	2.75		Yes	
15100	090	R	Nov97	M	Burn Management	M3	May98	18	9.05	9.05	Yes	Yes	
15101	ZZZ	R	Nov97	M	Burn Management	M4	May98	18	1.72	1.72	Yes	Yes	
15120	090	R	Nov97	M	Burn Management	M5	May98	18	9.83	9.83	Yes	Yes	
15121	ZZZ	R	Nov97	M	Burn Management	M6	May98	18	2.67	2.67	Yes	Yes	
15350	090	R	Nov97	M	Burn Management	M7	May98	18	4.00	4.00		Yes	
15351	ZZZ	A	Nov97	M	Burn Management	M8	May98	18	1.00	1.00		Yes	
15400	090	R	Nov97	M	Burn Management	M9	May98	18	4.00	4.00		Yes	
15401	ZZZ	A	Nov97	M	Burn Management	M10	May98	18	1.00	1.00		Yes	
15936	090	R	Nov97	F	Pressure Ulcers		Editorial		12.38	12.38	Yes	Yes	

SPECIALTY
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15946	090	R	Nov97	F Pressure Ulcers		Editorial		21 57	21.57	Yes	Yes
15956	090	R	Nov97	F Pressure Ulcers		Editorial		15 52	15.52	Yes	Yes
16040	000	D	Nov97	M Burn Management		May98					Yes
16041	000	D	Nov97	M Burn Management		May98					Yes
16042	000	D	Nov97	M Burn Management		May98					Yes
17004	010	R	May98	5 Destruction of Lesions		Editorial		2 79	2.79	Yes	Yes
19364	090	A	Aug97	H Breast Reconstruction	C1	May98	17	41 00	41.00		Yes
20240	010	R	Nov97	N Bone Biopsy	N1	Editorial		3 23	3.23	Yes	Yes
26070	090	R	Aug97	I Arthrotomy For Removal of Loose Bone	B1	Editorial		3 69	3.69	Yes	Yes
27347	090	A	Feb98	S Excision of Tendon Sheath/Capsular Lesion	Z1	May98	19	5 78	5.78		Yes
28289	090	A	Nov97	O Hallux Rigidus Correction With Cheilectomy	01	May98		7 29	7.04		Yes
29848	090	R	May98	24 Wrist Endoscopy		Editorial		5 44	5.44	Yes	Yes
30130	090	R	Feb98	U Excision/Resection of Turbinate	AA1	Editorial		3 38	3.38	Yes	Yes

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30140	090	R	Feb98	U	Excision/Resection of Turbinate	AA2	Editorial		3 43	3.43	Yes	Yes	
31090	090	R	May97	P	Sinusotomy	A1	Editorial		9 53	9.53	Yes	Yes	
31622	000	R	Feb98	V	Bronchoscopic Procedures	BB1	May98	10				Yes	To be considered at Sept. 1998 Mtg.
31623	000	A	Feb98	V	Bronchoscopic Procedures	BB2	May98	10				Yes	To be considered at Sept 1998 Mtg
31624	000	A	Feb98	V	Bronchoscopic Procedures	BB3	May98	10				Yes	To be considered at Sept. 1998 Mtg
31643	000	A	Nov97	V	Bronchoscopy For Brachytherapy	P1	May98	11	3 60	3.50		Yes	
32001	010	A	Feb98	V	Bronchoscopic Procedures	BB4	May98	10	6 00	6.00		Yes	
33975	010	R			Ventricular Assist Devices		May98	12	21 60	21.60	Yes	Yes	Interim Value - Sept. 1998 Mtg
33976	010	R			Ventricular Assist Devices		May98	12	29 10	29.10	Yes	Yes	Interim Value - Sept 1998 Mtg.
35500	ZZZ	A	Feb98	W	Bypass Grafts	CC1	May98	20				Yes	To be considered at Sept. 1998 Mtg
35681	ZZZ	R	Feb98	W	Bypass Grafts		May98	20	8 05	3.93		Yes	Interim Value - Sept 1998 Mtg.
35682	ZZZ	A	Feb98	W	Bypass Grafts	CC2	May98	20	7 20	7.20		Yes	
35683	ZZZ	A	Feb98	W	Bypass Grafts	CC3	May98	20	8.50	8.50		Yes	

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35875	090	R	Feb98	X	Thrombectomy of Grafts	DD1	May98	21	10 13	10.13	Yes	
35876	090	R	Feb98	X	Thrombectomy of Grafts	DD2	May98	21	17 00	17.00	Yes	
36823	090	A	Aug97	L	Arterovenous Regional Chemotherapy	D1	May98	6			Yes	Carrier Price - Sept 1998 Mtg
36831	090	A	Feb98	X	Thrombectomy of Grafts	DD5	May98	21	8 00	8.00	Yes	
36832	090	R	Feb98	X	Thrombectomy of Grafts	DD3	May98	21	10 50	10.50	Yes	
36833	090	A	Feb98	X	Thrombectomy of Grafts	DD4	May98	21	11 95	11.95	Yes	
36860	000	R	Feb98	X	Thrombectomy of Grafts		May98	21	2 01	2.01	Yes	Yes
38747	ZZZ	R	Feb98	Y	Sentinel Node Biopsy	EE1	Editorial	7	4 89	4.89	Yes	Yes
38790	000	R	Feb98	Y	Sentinel Node Biopsy	EE2	Editorial		1.29	1.29	Yes	Yes
38792	000	A	Feb98	Y	Sentinel Node Biopsy	EE3	Sep98				Yes	To be considered at Sept 1998 Mtg
45126	090	A	Aug97	N	Pelvic Exenteration	F1	May98	5	38 39	38.39	Yes	
56321	090	A	Aug97	M	Laparoscopic Adrenalectomy	E1	May98	8			Yes	Carrier Price - Sept 1998 Mtg
57106	090	A	Nov97	I	Radical Vaginectomy with Removal of Paracolpos J7		May98	22	6 36	6.36	Yes	

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57107	090	A	Nov97	I	Radical Vaginectomy with Removal of Paracolpos J2	May98	22	23.00	23.00		Yes	
57108	090	D	Nov97	I	Radical Vaginectomy with Removal of Paracolpos J1	May98	22				Yes	
57109	090	A	Nov97	I	Radical Vaginectomy with Removal of Paracolpos J3	May98	22	27.00	27.00		Yes	
57110	090	R	Nov97	I	Radical Vaginectomy with Removal of Paracolpos J4	May98	22	14.29	14.29	Yes	Yes	
57111	090	A	Nov97	I	Radical Vaginectomy with Removal of Paracolpos J5	May98	22	27.00	27.00		Yes	
57112	090	A	Nov97	I	Radical Vaginectomy with Removal of Paracolpos J6	May98	22	29.00	29.00		Yes	
61712	ZZZ	D	Feb98	G	Microsurgery Add-On Codes	Sep98					Yes	To be considered at Sept 1998 Mtg
63650	090	R	May98	V	Neurostimulator Analysis & Programming	Editorial		6.74	6.74	Yes	Yes	
63655	090	R	May98	V	Neurostimulator Analysis & Programming	Editorial		10.29	10.29	Yes	Yes	
63660	090	R	May98	V	Neurostimulator Analysis & Programming	Editorial		6.16	6.16	Yes	Yes	
63690	XXX	D	Feb98	29	Neurostimulator Analysis & Programming	May98	13				Yes	
63691	XXX	D	Feb98	29	Neurostimulator Analysis & Programming	May98	13				Yes	
64830	ZZZ	D	Feb98	G	Microsurgery Add-On Codes	Sep98					Yes	To be considered at Sept 1998 Mtg.

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67027	090	R	Feb98	EC	Ganciclovir Implant			Editorial	10 85	10.85	Yes	Yes
67208	090	R	Feb98	Z	Destruction of a Choroid Lesion	FF1	May98	16	6.70	6.70	Yes	Yes
67210	090	R	Feb98	Z	Destruction of a Choroid Lesion	FF3	May98	16	8 82	8.82		Yes
67220	090	A	Feb98	Z	Destruction of a Choroid Lesion	FF2	May98	16	13 13	13.13		Yes
67311	090	R	May98	2	Strabismus Surgery			Editorial	6 65	6.65	Yes	Yes
67318	090	R	May98	2	Strabismus Surgery			Editorial	7.85	7.85	Yes	Yes
67320	ZZZ	R	Feb98		Add-on Codes - Strabismus Surgery	H1	May98	14	4 33	4.33		Yes
67331	ZZZ	R	Feb98		Add-on Codes - Strabismus Surgery	H2	May98	14	4.06	4.06		Yes
67332	ZZZ	R	Feb98		Add-on Codes - Strabismus Surgery	H3	May98	14	4.49	4.49		Yes
67334	ZZZ	R	Feb98		Add-on Codes - Strabismus Surgery	H4	May98	14	3 98	3.98		Yes
67335	ZZZ	R	Feb98		Add-on Codes - Strabismus Surgery	H5	May98	14	2.49	2.49	Yes	Yes
67340	ZZZ	R	Feb98		Add-on Codes - Strabismus Surgery	H6	May98	14	4 93	4.93		Yes
69990	XXX	A	Feb98	G	Microsurgery Add-On Codes	T1	Sep98				Yes	To be considered at Sept. 1998 Mtg.

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73560	XXX	R	Aug97	U	Radiological Examination of the Knee	G1	May98	23	0.17	0.17	Yes	Yes	
73562	XXX	R	Aug97	U	Radiological Examination of the Knee	G2	May98	23	0.18	0.18	Yes	Yes	
73564	XXX	R	Aug97	U	Radiological Examination of the Knee	G3	May98	23	0.22	0.22	Yes	Yes	
74405	XXX	D	Feb98	1	Urography	GG1	May98					Yes	
76006	XXX	A	Feb98	O	Radiological Examination Stress Views	W1	May98	24	0.41	0.41		Yes	
76977	XXX	A	May 98	N	Bone Density		Sep98					Yes	To be considered at Sept 1998 Mtg.
77336	XXX	R	Nov97	5	Radiation Treatment Delivery	JJ1	May98					Yes	No physician work.
77380	XXX	A	Feb98	5	Radiation Treatment Delivery	JJ2	May98					Yes	No physician work.
77381	XXX	A	Feb98	5	Radiation Treatment Delivery	JJ3	May98					Yes	No physician work.
77399	XXX	R	Mar98		Radiation Treatment Delivery		Editorial					Yes	Unlisted Procedure Code.
78017	XXX	D	Feb98	3	Thyroid Carcinoma Metastases Uptake		May98	25				Yes	
78020	XXX	A	Feb98	3	Thyroid Carcinoma Metastases Uptake	HH1	May98	25	0.67	0.67		Yes	
78205	XXX	R	Feb98	4	Liver Imaging	II1	May98	26	0.71	0.71	Yes	Yes	

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78206	XXX	A	Feb98	4	Liver Imaging	II2	May98	26	0.96	0.96		Yes	
78472	XXX	R	Feb98	7	Cardiac Blood Pool Imaging		May98	27	0.98	0.98	Yes	Yes	
78494	XXX	A	Feb98	7	Cardiac Blood Pool Imaging	KK1	May98	27	1.19	1.19		Yes	
78496	XXX	A	Feb98	8	Cardiac Blood Pool Imaging	KK2	May98	27	0.50	0.50		Yes	
78588	XXX	A	Feb98	9	Pulmonary Perfusion Imaging	LL1	May98	28	1.09	1.09		Yes	
78725	XXX	R	Feb98	11	Kidney Function Study	MM1	Editorial		0.38	0.38	Yes	Yes	
80054	XXX	R	May 98	W	Comprehensive Metabolic Panel		Lab					No	
82016	XXX	A	Feb98	A6	Laboratory		Lab					No	
82017	XXX	A	Feb98	A6	Laboratory		Lab					No	
82127	XXX	A	Feb98	A6	Laboratory		Lab					No	
82128	XXX	R	Feb98	A6	Laboratory		Lab					No	
82130	XXX	D	Feb98	A6	Laboratory		Lab					No	
82131	XXX	R	Feb98	A6	Laboratory		Lab					No	

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82136	XXX	A	Feb98	A6	Laboratory		Lab			No	
82139	XXX	A	Feb98	A6	Laboratory		Lab			No	
82261	XXX	A	Feb98	A6	Laboratory		Lab			No	
82379	XXX	A	Feb98	A6	Laboratory		Lab			No	
82486	XXX	R	Feb98	A6	Laboratory		Lab			No	
82491	XXX	R	Feb98	A6	Laboratory		Lab			No	
82492	XXX	A	Feb98	A6	Laboratory		Lab			No	
82541	XXX	A	Feb98	A6	Laboratory		Lab			No	
82542	XXX	A	Feb98	A6	Laboratory		Lab			No	
82543	XXX	A	Feb98	A6	Laboratory		Lab			No	
82544	XXX	A	Feb98	A6	Laboratory		Lab			No	
82657	XXX	A	Feb98	A6	Laboratory		Lab			No	
82658	XXX	A	Feb98	A6	Laboratory		Lab			No	

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82726	XXX	A	Feb98	A6	Laboratory			Lab			No	
82731	XXX	A	Feb98	13	Fibronectin	NN1		Lab			No	
83013	XXX	A	Mar98		Helicobacter Pylori Breath Test	PP1	May98		29		No	
83014	XXX	A	Feb98	10	Helicobacter Pylori Breath test	PP2	May98		29		Yes	No physician work
83019	XXX	D	Feb98	10	Helicobacter Pylori Breath Test		May98		29		No	
83020	XXX	R	Feb98	14	Hemoglobin Screening by High Performance	OO1	Editorial		0.37	0.37	Yes	Yes
83021	XXX	A	Feb98	14	Hemoglobin Screening by High Performance	OO2		Lab			No	
83080	XXX	A	Feb98	A6	Laboratory			Lab			No	
83516	XXX	A	Feb98	EC	Laboratory			Lab			No	
83716	XXX	A	Feb98	P	Lipoprotein Cholesterol -High Resolution	V1		Lab			No	
83717	XXX	D	Feb98	P	Lipoprotein Cholesterol -High Resolution	V2		Lab			No	
83788	XXX	A	Feb98	A6	Laboratory			Lab			No	
83789	XXX	A	Feb98	A6	Laboratory			Lab			No	

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83891	XXX	A	Feb98	A6	Molecular Diagnostics	K1	Lab				No	
83893	XXX	A	Feb98	A6	Molecular Diagnostics	K2	Lab				No	
83894	XXX	R	Feb98	A6	Molecular Diagnostics	K3	Lab				No	
83897	XXX	A	Feb98	A6	Molecular Diagnostics	K4	Lab				No	
83898	XXX	R	Feb98	A6	Molecular Diagnostics	K5	Lab				No	
83901	XXX	A	Feb98	A6	Molecular Diagnostics	K6	Lab				No	
83903	XXX	A	Feb98	A6	Molecular Diagnostics	K7	Lab				No	
83904	XXX	A	Feb98	A6	Molecular Diagnostics	K8	Lab				No	
83905	XXX	A	Feb98	A6	Molecular Diagnostics	K9	Lab				No	
83906	XXX	A	Feb98	A6	Molecular Diagnostics	K10	Lab				No	
83918	XXX	R	Feb98	A6	Molecular Diagnostics	K11	Lab				No	
83919	XXX	A	Feb98	A6	Molecular Diagnostics	K12	Lab				No	
84153	XXX	R	Feb98	16	Prostate Specific Antigen	QQ1	Lab				No	

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84154	XXX	A	Feb98	16	Prostate Specific Antigen	QQ2		Lab			No	
84376	XXX	A	Feb98	A6	Laboratory			Lab			No	
84377	XXX	A	Feb98	A6	Laboratory			Lab			No	
84378	XXX	A	Feb98	A6	Laboratory			Lab			No	
84379	XXX	A	Feb98	A6	Laboratory			Lab			No	
85029	XXX	D	Feb98	Q	Automated Hemogram	X1		Lab			No	
85030	XXX	D	Feb98	Q	Automated Hemogram	X2		Lab			No	
85046	XXX	A	Nov97	W	Concentration of Hemoglobin	Q1		Lab			No	
86255	XXX	R	Feb98	EC	Laboratory			Editorial	0.37	0.37	Yes	Yes
88142	XXX	R	Feb98	17	Cervical or Vaginal Cytopathology	RR1		Lab			No	
88143	XXX	A	Feb98	17	Cervical or Vaginal Cytopathology	RR2		Lab			No	
88144	XXX	A	Feb98	17	Cervical or Vaginal Cytopathology	RR3		Lab			No	
88145	XXX	A	Feb98	17	Cervical or Vaginal Cytopathology	RR4		Lab			No	

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88147	XXX	A	May 98	4	Cervical or Vaginal Cytopathology	RR5	Lab				No	
88148	XXX	A	May 98	4	Cervical or Vaginal Cytopathology	RR6	Lab				No	
88150	XXX	R	Feb98	17	Cervical or Vaginal Cytopathology	RR7	Lab				No	
88152	XXX	R	Feb98	17	Cervical or Vaginal Cytopathology	RR8	Lab				No	
88153	XXX	A	Feb98	17	Cervical or Vaginal Cytopathology	RR9	Lab				No	
88154	XXX	A	Feb98	17	Cervical or Vaginal Cytopathology	RR10	Lab				No	
88155	XXX	R	Feb98	17	Cervical or Vaginal Cytopathology	RR11	Lab				No	
88156	XXX	D	Feb98	17	Cervical or Vaginal Cytopathology	RR12	Lab				No	
88158	XXX	D	Feb98	17	Cervical or Vaginal Cytopathology	RR13	Lab				No	
88164	XXX	A	Feb98	17	Cervical or Vaginal Cytopathology	RR14	Lab				No	
88165	XXX	A	Feb98	17	Cervical or Vaginal Cytopathology	RR15	Lab				No	
88166	XXX	A	Feb98	17	Cervical or Vaginal Cytopathology	RR16	Lab				No	
88167	XXX	A	Feb98	17	Cervical or Vaginal Cytopathology	RR17	Lab				No	

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88230	XXX	R	Feb98	A6	Cytogenetic Studies	L2	Lab				No	
88237	XXX	R	Feb98	A6	Cytogenetic Studies	L3	Lab				No	
88239	XXX	R	Feb98	A6	Cytogenetic Studies	L4	Lab				No	
88240	XXX	A	Feb98	A6	Cytogenetic Studies	L5	Lab				No	
88241	XXX	A	Feb98	A6	Cytogenetic Studies	L6	Lab				No	
88245	XXX	R	Feb98	A6	Cytogenetic Studies	L7	Lab				No	
88248	XXX	R	Feb98	A6	Cytogenetic Studies	L8	Lab				No	
88249	XXX	A	Feb98	A6	Cytogenetic Studies	L9	Lab				No	
88250	XXX	D	Feb98	A6	Cytogenetic Studies	L10	Lab				No	
88260	XXX	D	Feb98	A6	Cytogenetic Studies	L11	Lab				No	
88261	XXX	R	Feb98	A6	Cytogenetic Studies	L12	Lab				No	
88264	XXX	A	Feb98	A6	Cytogenetic Studies	L13	Lab				No	
88271	XXX	A	Feb98	A6	Cytogenetic Studies	L14	Lab				No	

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88272	XXX	A	Feb98	A6	Cytogenetic Studies	L15		Lab			No	
88273	XXX	A	Feb98	A6	Cytogenetic Studies	L16		Lab			No	
88274	XXX	A	Feb98	A6	Cytogenetic Studies	L17		Lab			No	
88275	XXX	A	Feb98	A6	Cytogenetic Studies	L18		Lab			No	
88291	XXX	A	Feb98	A6	Cytogenetic Studies - Chromosome Analysis	LI	Feb98		0.52	0.52	Yes	
88305	XXX	R	Feb98	18	Surgical Pathology	SS1		Editorial	0.75	0.75	Yes	Yes
88307	XXX	R	Feb98	18	Surgical Pathology	SS2		Editorial	1.59	1.59	Yes	Yes
89264	XXX	A	Feb98	19	Sperm Identification from Testis Tissue	TT1		Lab			No	
90281	XXX	A	Feb98	21	Immunization	UU1		Immun			No	
90283	XXX	A	Feb98	21	Immunization	UU2		Immun			No	
90287	XXX	A	Feb98	21	Immunization	UU3		Immun			No	
90288	XXX	A	Feb98	21	Immunization	UU4		Immun			No	
90291	XXX	A	Feb98	21	Immunization	UU5		Immun			No	

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90296	XXX	A	Feb98	21	Immunization	UU6	Immun				No	
90371	XXX	A	Feb98	21	Immunization	UU7	Immun				No	
90375	XXX	A	Feb98	21	Immunization	UU8	Immun.				No	
90376	XXX	A	Feb98	21	Immunization	UU9	Immun				No	
90379	XXX	A	Feb98	21	Immunization	UU10	Immun				No	
90384	XXX	A	Feb98	21	Immunization	UU11	Immun				No	
90385	XXX	A	Feb98	21	Immunization	UU12	Immun.				No	
90386	XXX	A	Feb98	21	Immunization	UU13	Immun				No	
90389	XXX	A	Feb98	21	Immunization	UU14	Immun				No	
90393	XXX	A	Feb98	21	Immunization	UU15	Immun				No	
90396	XXX	A	Feb98	21	Immunization	UU16	Immun				No	
90399	XXX	A	Feb98	21	Immunization	UU17	Immun				No	
90471	XXX	A	Feb98	21	Immunization	UU18	Immun				Yes	No physician work

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90472	XXX	A	Feb98	21	Immunization	UU19	Immun.			Yes	No physician work
90476	XXX	A	Feb98	21	Immunization	UU20	Immun.			No	
90477	XXX	A	Feb98	21	Immunization	UU21	Immun			No	
90581	XXX	A	Feb98	21	Immunization	UU22	Immun.			No	
90585	XXX	A	Feb98	21	Immunization	UU23	Immun.			No	
90586	XXX	A	Feb98	21	Immunization	UU24	Immun.			No	
90592	XXX	A	Feb98	21	Immunization	UU25	Immun			No	
90632	XXX	A	Feb98	21	Immunization	UU26	Immun			No	
90633	XXX	A	Feb98	21	Immunization	UU27	Immun			No	
90634	XXX	A	Feb98	21	Immunization	UU28	Immun			No	
90636	XXX	A	Feb98	21	Immunization	UU29	Immun			No	
90645	XXX	A	Feb98	21	Immunization	UU30	Immun.			No	
90646	XXX	A	Feb98	21	Immunization	UU31	Immun.			No	

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90647	XXX	A	Feb98	21	Immunization	UU32	Immun				No	
90648	XXX	A	Feb98	21	Immunization	UU33	Immun				No	
90657	XXX	A	Feb98	21	Immunization	UU34	Immun				No	
90658	XXX	A	Feb98	21	Immunization	UU35	Immun				No	
90659	XXX	A	Feb98	21	Immunization	UU36	Immun				No	
90660	XXX	A	Feb98	21	Immunization	UU37	Immun.				No	
90665	XXX	A	Feb98	21	Immunization	UU38	Immun				No	
90669	XXX	A	Feb98	21	Immunization	UU39	Immun				No	
90675	XXX	A	Feb98	21	Immunization	UU40	Immun.				No	
90676	XXX	A	Feb98	21	Immunization	UU41	immun				No	
90680	XXX	A	Feb98	21	Immunization	UU42	Immun				No	
90690	XXX	A	Feb98	21	Immunization	UU43	Immun				No	
90691	XXX	A	Feb98	21	Immunization	UU44	Immun				No	

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90692	XXX	A	Feb98	21	Immunization	UU45	Immun.				No	
90693	XXX	A	Feb98	21	Immunization	UU46	Immun				No	
90700	XXX	R	Feb98	21	Immunization	UU47	Editorial				No	
90701	XXX	R	Feb98	21	Immunization	UU48	Immun				No	
90702	XXX	R	Feb98	21	Immunization	UU49	Immun				No	
90703	XXX	R	Feb98	21	Immunization	UU50	Immun.				No	
90704	XXX	R	Feb98	21	Immunization	UU51	Immun				No	
90705	XXX	R	Feb98	21	Immunization	UU52	Immun				No	
90706	XXX	R	Feb98	21	Immunization	UU53	Immun				No	
90707	XXX	R	Feb98	21	Immunization	UU54	Immun				No	
90708	XXX	R	Feb98	21	Immunization	UU55	Immun				No	
90709	XXX	R	Feb98	21	Immunization	UU56	Immun				No	
90711	XXX	D	Feb98	21	Immunization	UU57	Immun				No	

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90712	XXX	R	Feb98	21	Immunization	UU58	Immun.			No	
90713	XXX	R	Feb98	21	Immunization	UU59	Immun			No	
90714	XXX	D	Feb98	21	Immunization	UU60	Immun.			No	
90716	XXX	R	Feb98	21	Immunization	UU61	Immun			No	
90717	XXX	R	Feb98	21	Immunization	UU62	Immun			No	
90718	XXX	R	Feb98	21	Immunization	UU63	Immun			No	
90719	XXX	R	Feb98	21	Immunization	UU64	Immun.			No	
90720	XXX	R	Feb98	21	Immunization	UU65	Immun.			No	
90721	XXX	R	Feb98	21	Immunization	UU66	Immun			No	
90724	XXX	D	Feb98	21	Immunization	UU67	Immun			No	
90725	XXX	R	Feb98	21	Immunization	UU68	Immun			No	
90726	XXX	D	Feb98	21	Immunization	UU69	Immun			No	
90727	XXX	R	Feb98	21	Immunization	UU70	Immun			No	

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90728	XXX	D	Feb98	21	Immunization	UU71	Immun				No	
90730	XXX	D	Feb98	21	Immunization	UU72	Immun.				No	
90732	XXX	R	Feb98	21	Immunization	UU73	Immun				No	
90733	XXX	R	Feb98	21	Immunization	UU74	Immun.				No	
90735	XXX	R	Feb98	21	Immunization	UU75	Immun				No	
90737	XXX	D	Feb98	21	Immunization	UU76	Immun.				No	
90741	XXX	D	Feb98	21	Immunization	UU77	Immun.				No	
90742	XXX	D	Feb98	21	Immunization	UU78	Immun.				No	
90744	XXX	R	Feb98	21	Immunization	UU79	Immun				No	
90745	XXX	R	Feb98	21	Immunization	UU80	Immun				No	
90746	XXX	R	Feb98	21	Immunization	UU81	Immun.				No	
90747	XXX	R	Feb98	21	Immunization	UU82	Immun.				No	
90748	XXX	R	Feb98	21	Immunization	UU83	Immun				No	

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90749	XXX	R	Feb98	21	Immunization	UU84	Immun				No	
92135	XXX	A	Feb98	23	Confocal Scanning Laser Polarimetry	VV1	May98		0 35	0.35	Yes	
93571	ZZZ	A	Feb98	M	Intravascular Distal Blood Velocity Measurements U1	U1	May98	30	6 35	2.99	Yes	Interim Value - Sept 1998 Mtg
93572	ZZZ	A	Feb98	M	Intravascular Distal Blood Velocity Measurements U2	U2	May98	30	2.50	1.70	Yes	Interim Value - Sept 1998 Mtg.
93621	000	R	Nov97	Y	Comprehensive Electrophysiology	RR1	Editorial		12 66	12.66	Yes	Yes
93622	000	R	Nov97	Y	Comprehensive Electrophysiology	RR2	Editorial		12 74	12.74	Yes	Yes
94014	XXX	A	Feb98	26	Pulmonary Function Procedures	WW3	May98	9	0 52	0.52	Yes	Interim Value - Sept. 1998 Mtg.
94015	XXX	A	Feb98	26	Pulmonary Function Procedures	WW4	May98	9			Yes	No physician work.
94016	XXX	A	Feb98	26	Pulmonary Function Procedures	WW5	May98	9	0 52	0.52	Yes	Interim Value - Sept 1998 Mtg.
94060	XXX	R	Feb98	26	Pulmonary Function Procedures	WW6	May98	9	0 31	0.31	Yes	Yes
94070	XXX	R	May 98	16	Pulmonary Function Procedures	WW7	Editorial		0 60	0.60	Yes	Yes
94620	XXX	R	Feb98	26	Pulmonary Function Procedures	WW1	May98	9			Yes	To be considered at Sept 1998 Mtg
94621	XXX	A	Feb98	26	Pulmonary Function Procedures	WW2	May98	9			Yes	To be considered at Sept 1998 Mtg

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95920	XXX	R	Feb98	29	Neurostimulator Analysis & Programming	XX7	May98	13	2 11	2.11	Yes	Yes	
95970	XXX	A	Feb98	29	Neurostimulator Analysis & Programming	XX1	May98	13	0 45	0.45		Yes	
95971	XXX	A	Feb98	29	Neurostimulator Analysis & Programming	XX2	May98	13	0 78	0.78		Yes	
95972	XXX	A	Feb98	29	Neurostimulator Analysis & Programming	XX3	May98	13	1 50	1.50		Yes	
95973	XXX	A	Feb98	29	Neurostimulator Analysis & Programming	XX4	May98	13	0 92	0.92		Yes	
95974	XXX	A	Feb98	29	Neurostimulator Analysis & Programming	XX5	May98	13	3.00	3.00		Yes	
95975	XXX	A	Feb98	29	Neurostimulator Analysis & Programming	XX6	May98	13	1 70	1.70		Yes	
99298	XXX	A	Feb98	A2	Fourth Level Neonatal Intensive	ZZ1	May98	31	2 75	2.75		Yes	

CPT 1999 RUC HCPAC Review Board Recommendations

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97122	XXX	D	Feb98	A1	Physical Medicine and Rehabilitation		May98(HCPAC)	HCPAC			Yes	
97140	XXX	A	Feb98	A1	Physical Medicine and Rehabilitation	YY1	May98(HCPAC)	HCPAC	0 50	0.45	Yes	
97250	XXX	D	Feb98	A1	Physical Medicine and Rehabilitation		May98(HCPAC)	HCPAC			Yes	
97260	XXX	D	Feb98	A1	Physical Medicine and Rehabilitation		May98(HCPAC)	HCPAC			Yes	
97261	XXX	D	Feb98	A1	Physical Medicine and Rehabilitation		May98(HCPAC)	HCPAC			Yes	
97265	XXX	D	Feb98	A1	Physical Medicine and Rehabilitation		May98(HCPAC)	HCPAC			Yes	

American Medical Association

Physicians dedicated to the health of America



James G. Hoehn, MD
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Update Committee

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December 21, 1998

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Health Care Financing Administration
Department of Health and Human Services
Room 309-G
Hubert H. Humphrey Building
200 Independence Avenue, SW
Washington, DC 20201

Attn: HCFA-1006-P

Subject: Medicare Program; Revisions to Payment Policies Under the Physician Fee Schedule for Calendar Year 1999

Dear Ms. DeParle:

The American Medical Association/Specialty Society RVS Update Committee (RUC) is pleased to provide comments on the Final Rule for revisions to payment policies under the physician payment schedule for calendar year 1998, published in the *Federal Register* on November 2, 1998. This Rule establishes policy changes affecting Medicare payments for physicians' services as a result of resource-based practice expense relative value units (RVUs), in addition to several other payment policy changes.

The RUC appreciates HCFA including the RUC as one of the organizations to provide recommendations during the practice expense refinement period and beyond. We understand that most comments on the November 2, 1998 Final Rule supported using the RUC process to refine practice expense RVUs. The RUC has followed closely the development of resource-based practice expenses over the past several years and has had extensive discussions since September 1997 on a potential role. The RUC now believes that it is the organization that should assume responsibility for developing recommendations to the Health Care Financing Administration (HCFA) on refining and updating practice expense relative values. Specifically, the RUC has agreed to provide recommendations on refining the Clinical Practice Expert Panel (CPEP) data, the practice expense per hour data, and the physician time data. The RUC will also examine other refinement issues involving the general methodology utilized to calculate practice expense RVUs. Additionally, the RUC has established a process for collecting direct input data for new and revised codes which HCFA can use in its calculations of practice expense RVUs.

General Methodology

HCFA's use of the "top-down" methodology relies heavily on the specialty practice cost data derived from the AMA Socioeconomic Monitoring Survey (SMS) to calculate practice expense pools and also on CPEP data to assign practice expenses among individual codes. We understand that many aspects of the "top-down" methodology will be examined during the refinement period and the RUC is committed to developing recommendations that will enhance this methodology so that practice expense RVUs are based on reliable cost data.

We are pleased that HCFA has chosen to maintain practice expense RVUs interim throughout the refinement process. Given the large number of unresolved issues that HCFA has deferred to the refinement process, it is imperative that specialty societies and the RUC have sufficient time to correct data errors and refine the methodology. As the RUC begins the refinement process, it is also imperative that the RUC have full access to the data HCFA used in generating the new practice expense values. Currently, HCFA has utilized complex programming involving very large data files, where some of the critical details of the methodology utilized is still unknown. Additionally, any delays in fee schedule updates due to the year 2000 computer problem will slow down the refinement process and therefore may require practice expense RVUs to remain interim for a longer period of time.

Creation of Technical Component Cost Pool

HCFA created a separate technical services cost pool for codes without a work relative value, such as many radiology and pathology services. HCFA transferred the costs for this technical pool from specialty costs pools which contain codes without a work RVU. HCFA then allocated costs according to the current charge based relative value units. The RUC is concerned about the use of this methodology which had not been previously proposed or subject to public comment by the affected specialties. The RUC will make it a priority to review the CPEP data associated with these procedures so that the practice expenses for these codes can be resource based just like all other codes.

Refinement of the CPEP Data

On November 21, 1998 the RUC established the Practice Expense Advisory Committee (PEAC), a subcommittee of the RUC to be directly charged with refining the CPEP data. All of the issues identified by HCFA in the Final Rule relating to the CPEP data will be addressed by the PEAC. The PEAC will report to the RUC, which will make final recommendations to HCFA. The PEAC composition will mirror the RUC and include additional representation from the American Nurses Association, the American Academy of Physician Assistants, and the Medical Group Management Association. Other seats will be added as necessary to bring in the expertise of office managers and accountants. The PEAC will include one representative from each of the following organizations:

Nancy Ann Min-DeParle, JD

December 21, 1998

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Chair, Eugene Ogrod, MD
American Medical Association
American Osteopathic Association
CPT Editorial Panel
Health Care Professionals Advisory Committee
Two Rotating Seats for the RUC Advisory Committee
American Academy of Dermatology
American Academy of Family Physicians
American Academy of Neurology
American Academy of Ophthalmology
American Academy of Orthopaedic Surgeons
American Academy of Otolaryngology – Head and Neck Surgery, Inc.
American Academy of Pediatrics
the American Academy of Physician Assistants
American Association of Neurological Surgeons
American College of Cardiology
American College of Emergency Physicians
American College of Obstetricians and Gynecologists
American College of Physicians
American College of Radiology
American College of Surgeons
American Nurses Association
American Psychiatric Association
American Society of Anesthesiologists
American Society of Internal Medicine
American Society of Plastic and Reconstructive Surgeons
American Urological Association
College of American Pathologists
Medical Group Management Association
Society of Thoracic Surgeons

Also contributing to this refinement process will be 80 members of the RUC Advisory Committee, representing those specialty societies with a seat in the AMA House of Delegates that have elected to participate in the RUC process. Our process will also include input from the Health Care Professionals Advisory Committee, which represents audiologists, chiropractors, nurses, occupational therapists, optometrists, physical therapists, physician assistants, podiatrists, psychologists, social workers, and speech pathologists.

The RUC requests that HCFA share all comments it wishes to have reviewed regarding changes to the CPEP data with the RUC as soon as possible. The PEAC will convene on February 4, 1999 for an organizational meeting and is expected to begin its work soon thereafter. The RUC will hear a report with the PEAC's first set of recommendations in late April. With the RUC's approval, these recommendations will be submitted to HCFA in May.

Refinement of Practice Expense/Hour Data

The practice expense/hour data are based on the AMA SMS survey. The AMA has stated that these data were never collected for the purpose of developing relative values and has identified three potential problems with the use of these data for this purpose:

- The sample sizes for some specialties are too small to permit separate calculation of expense data from SMS. Even among the larger specialties, the inherent variability of the expense data will mean that the average expense figures provided will be subject to significant sampling error.
- The response rates for the expense items tend to be low relative to other questions on the survey leading to potential non-response bias.
- The SMS is a physician-level survey and physicians in group practices are asked for their share of expenses rather than the practice's expenses. Practice-level data may provide a better basis for constructing practice expense RVUs.

Although the SMS survey was not originally designed for the purpose of constructing practice expense RVUs, HCFA has made it clear that it intends to use the SMS and will look for improvements during the refinement process. The AMA is already planning modifications to the SMS over the next few years including the development of a practice-based survey to collect data on expenses and other items. The RUC believes that questions should be added to collect data on uncompensated care and non-billable hours, as well as questions pertaining to separately billable supplies and services. The RUC is very interested in providing input to any changes made to the SMS survey and believes that it can provide valuable input to AMA/SMS staff designing these questions. AMA staff responsible for the SMS have met with the RUC several times and will continue to do so during the refinement process.

Some specialties that are currently underrepresented in the SMS data may wish to increase their sample size by participating in an over-sample in a future SMS survey. While this approach is an attempt to overcome one of the identified limitations with the current survey, HCFA has not yet indicated that it will accept the data from oversamples of the SMS survey. Specifically, the RUC is very concerned that HCFA did not incorporate in the Final Rule the results of an oversample conducted for the Society of Thoracic Surgeons according to the SMS survey protocol. The RUC urges HCFA to consider these data and develop a clear policy regarding acceptable aggregate practice expense data for calculating practice expense RVUs. Such a policy is needed before additional specialties attempt to fund oversamples of the SMS survey.

Refinement of Physician Time Data

The number of practice expense RVUs assigned to the services performed by a particular specialty are determined by the practice/hour data from the SMS and the physician time data for each of the codes. HCFA utilized the RUC survey data on physician time and the Harvard data for all codes for which the RUC has not evaluated. However, HCFA made several adjustments to the Harvard and RUC data that were not fully explained in either the proposed or final rule. First, since the time data resulting from the refinement of the work relative value units have been on average 25% greater than the time data obtained by the Harvard study for the same services, HCFA has increased the Harvard time data to obtain consistency between the two data sources. Second, HCFA increased the total physician service times of E&M codes to reflect the increases in E&M relative values which occurred during the five-year review. Once HCFA increased the pre and post service times of the E&M codes by 25%, HCFA also increased the time associated with the E&M portion of global surgery codes.

The RUC acknowledges that the RUC physician time data may not be absolutely precise, however the RUC is concerned about the assumptions HCFA used to make these adjustments. The RUC will review HCFA's methodology during the refinement process and provide specific recommendations on the appropriateness of the adjustments. Additionally, the RUC will review comments from specialty societies that have already informed HCFA that their time data might be incorrect.

Development of Practice Expense RVUs for New/Revised Codes

The RUC has discussed at length its desire to provide HCFA with recommendations on practice expenses for new/revised codes. The RUC has agreed that, as the RUC reviews new or revised codes for the work component, it will also consider the direct practice expense inputs for these services. The RUC will begin this review in February and has designed a new survey instrument to collect this data. Since many aspects of the methodology for assigning indirect costs to individual codes will undergo changes during refinement, it is impractical at this time for the RUC to make recommendations on practice expense RVUs. Until the overall methodology becomes more definitive, the RUC will limit its recommendations for new and revised codes to the direct inputs required to perform a service which HCFA can then use to calculate practice expense RVUs. Additionally, due to possible alterations to the practice expense allocation methodology, the RUC recommends that all new/revised codes that receive practice expense RVUs during the refinement process be considered interim and that specialties be afforded an opportunity to refine their code level cost data during the refinement process.

Multiple Procedure Reduction

HCFA stated in the Final Rule that "Although we have not made a specific proposal with respect to multiple procedures thus far, we may do so in the future. We continue to believe

there are efficiencies when more than one service is performed during a single encounter." The RUC strongly opposes HCFA's assumption that lower practice costs are realized when more than one service is performed during a patient encounter. Until resource cost data are provided showing that physician practice expenses are reduced when multiple procedures are performed during a patient visit, there is no basis for applying a multiple procedure reduction. Currently, there is no practice expense cost data which demonstrates such practice costs savings resulting from providing multiple procedures.

Safety Issues

Several specialty societies have commented to HCFA that some codes were assigned nonfacility practice expense RVUs even though it is generally perceived that it is not safe to perform these services in the office. HCFA stated in response that it "would need more data to demonstrate that performing these service in the office is not appropriate before we would eliminate the non facility RVUs." The RUC urges HCFA to accept any information it receives from specialty societies about the appropriate clinical setting for procedures. Specialty societies are in an excellent position to provide HCFA with recommendations on which procedures should only be performed in an inpatient setting.

For example, the American Urological Association (AUA) has identified several codes for which HCFA has assigned nonfacility practice expense RVUs, yet in the AUA's opinion these procedures should not be performed in an office setting. A procedure such as a code 52240, cystourethroscopy with fulguration and or resection of large bladder tumor(s) should not be performed in the office because it requires the resources available in a major hospital, such as anesthesia machines, anesthesiologists, registered nurses, recovery rooms and access to the supporting facilities of all major medical specialties.

Uncompensated Care

As mentioned earlier, the AMA is examining adding questions to the SMS survey to collect data on uncompensated care since uncompensated is recognized as a legitimate practice expense category. Such data, applicable to all specialties, are especially pertinent to emergency physicians, who provide significant amounts of uncompensated services. The RUC urges HCFA to recognize the practice expenses involved in providing uncompensated care and include these practice expenses in HCFA's practice expense methodology.

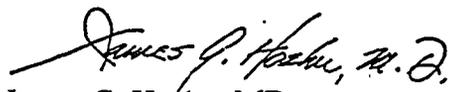
Nancy Ann Min-DeParle, JD
December 21, 1998
Page 7

RUC Recommendations for 1999

The RUC appreciates HCFA's acceptance of 93% of the RUC's recommendations on work relative values. Several codes for CPT 1999 were examined at the September 1998 RUC meeting and the RUC's recommendations for these codes are attached to this letter for HCFA's consideration.

Thank you for the opportunity to participate in the RBRVS update process and to comment on this important issue. We look forward to further discussions with you on the RUC's involvement in the numerous issues related to refining and updating the practice expense relative value units.

Sincerely,


James G. Hoehn, MD

cc: RUC Participants

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS

May 1998

Burn Management

During the Five-Year Review of the RBRVS, CPT codes 15000, 15350, and 15400 were identified as add-on services, which did not specify area size, and the RUC referred these codes to CPT for further definition and clarification. A series of new codes have been established which identify size and location of the defect (skin graft); type of graft as well as burn and wound preparation and management procedures. The new codes replace local burn treatment codes (CPT 16040-16042) and now represent services which combine a base code for the initial 100 sq cm and add-on codes for each for each additional 100 sq cm (which is applicable to adults and children over 10) and each additional one percent of the body (apply to children under 10 or infants).

CPT codes 15000 and 15001 describe burn and wound preparation. The intra service time for both CPT 15000 (30 minutes) and 15001 (20 minutes) is very similar to CPT 15100 *Split graft, trunk, arms, legs; 100 sq cm or less, or one percent of body are of infants and children (except 15050)(30 minutes)*. However, the intra-service intensity of 15000 (3.53 out of a 5.0 scale) and 15001 (3.16) is much greater than 15100 (2.77) as the depth of removing burned skin is two to five times the depth taken with 15100. Also the associated blood loss of 180-200 ml per 100 sq cm is not uncommon and frequently requires electrocautery, sutures, pressure dressings and use of cryoprecipitates to control bleeding. Therefore, the RUC recommends a work RVW of 4.00 for 15000 and 2.75 for 15001, both of which are the survey median.

The graft work for CPT codes 15350 *Application of allograft, skin; 100 sq cm or less/15351 Application of allograft, skin; each additional 100 sq cm (List separately in addition to code for primary procedure)* and 15400 *Application of xenograft, skin; 100 sq cm or less /15401 Application of xenograft, skin; each additional 100 sq cm (List separately in addition to code for primary procedure)* are very similar to the paired codes 15100/15100. However, the initial graft codes 15350 and 15400 include not only the intraoperative work for grafting the first 100 sq cm of allograft or xenograft, but also include the post operative hospital and office visits within a 90 global period. After a graft is placed, the surgeon monitors the patient in the

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hospital (and sometimes ICU) *daily* to looking for signs of infection and to determine when a new graft can be placed. Typically 2-3 *weeks* pass before the graft rejects and a new graft is placed. Patients with very large burns, who require large grafts of 500-900 sq cm, are more immunosuppressed and take longer for rejection to occur (3-4 weeks). The combination of primary and add-on codes with recommended rvus is justified when compared to billing each independent visit, eg 14 to 28 visits at 99231 would equal 8.96 to 17.95 RVUs does not even take into consideration the two hours of intraoperative work to place the graft. Therefore, the RUC recommends a work RVW of 4.00 for both 15350 and 15400, which is the survey median, and a work RVW of 1.00 for both 15401 and 15351, which is less than the survey median.

CPT Code (●New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
<p>Identify by size and location of the defect (recipient area) and the type of graft; includes simple debridement of granulations or recent avulsion.</p> <p>When a primary procedure such as orbitectomy radical mastectomy, or deep tumor removal requires a skin graft for definitive closure, see appropriate anatomical subsection for primary procedure and this section for skin graft.</p> <p><u>For tissue-cultured skin grafts, including bilaminate skin substitutes/neodermis, use 15100-15212. These codes include harvesting of keratinocytes and/or application of skin substitute/nerderrmis. Procedures are coded by recipient site.</u></p> <p><u>Codes 15000, 15001, 15350, 15351, 15400, 15401 describe burn and wound preparation and management procedures. The following definition should be applied to codes 15000, 15001, 15100, 15101, 15120, 15121 when determining the involvement of body size. The measurement of 100 sq cm is applicable to adults and children age 10 and over, percentages apply to infants and children under the age of 10.</u></p>				
15000	M1	<p>Surgical excisional preparation or creation of recipient site by excision of essentially intact skin, open wounds, burn eschar, or scar (including subcutaneous tissues) or other lesions prior to repair with free skin graft (list as separate service in addition to skin graft); first 100 sq. cm or one percent of body area of infants and children</p>	000	4.00

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CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
•15001	M2	each additional 100 sq cm or each additional one percent of body area of infants and children (List separately in addition to code for primary procedure)	ZZZ	2.75
<p>(Use code 15001 in conjunction with code 15000).</p> <p>(For excision of benign lesions, see 11400-11471).</p> <p>(For excision of malignant lesions, see 11600-11646).</p> <p>(For excision without alloplastic dressing, use 15000 only).</p> <p>(For excision with immediate skin grafting, use 15050-15261 in addition to 15000).</p> <p>(For excision with immediate allograft placement use 15350 in addition to 15000).</p> <p>(For excision with immediate xenograft placement use 15400 in addition to 15000).</p>				
15050		Pinch graft, single or multiple, to cover small ulcer, tip of digit, or other minimal open area (except on face), up to defect size 2 cm diameter (For tissue cultured skin grafts, use 15100-15121. These codes include harvesting of keratinocytes. Procedures are coded by recipient site).	090	4.30
15100	M3	Split graft, trunk, scalp, arms, legs, hands, and/or feet (except multiple digits); first 100 sq cm or less, or each one percent of body area of infants and children (except 15050)	090	9.05 (no change)
15101	M4	each additional 100 sq cm, or each additional one percent of body area of infants and children, or part thereof (List separately in addition to code for primary procedure) (Use 15101 in conjunction with code 15100)	ZZZ	1.72 (no change)
15120	M5	Split graft, face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet and/or multiple digits; first 100 sq cm or less, or each one percent of body area of infants and children (except 15050)	090	9.83 (no change)

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CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
15121	M6	each additional 100 sq. cm, or each <u>additional one</u> percent of body area of infants and children, or part thereof (<u>List separately in addition to code for primary procedure</u>) (Use 15121 in conjunction with code 15120)	ZZZ	2.67 (no change)
15350	M7	Application of allograft, skin; <u>100 sq. cm or less.</u>	090	4.00
•15351	M8	each additional 100 sq. cm (List separately in addition to code for primary procedure) (Use 15351 in conjunction with code 15350)	ZZZ	1.0
15400	M9	Application of xenograft, skin; <u>100 sq. cm or less</u>	090	4.00
•15401	M10	each additional 100 sq cm (List separately in addition to code for primary procedure) (Use 15401 in conjunction with code 15400)	ZZZ	1.00

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AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

(April 1998)

CPT Code:	15000 (M1)	Global Period: 000	Recommended RVW: 4.00
CPT Descriptor:	Surgical preparation or creation of recipient site by excision of open wounds, burn eschar, or scar (including subcutaneous tissues); first 100 sq cm or one percent of body area of infants and children		
CPT Code:	15001 (M2)	Global Period: ZZZ	Recommended RVW: 2.75
CPT Descriptor:	Surgical preparation or creation of recipient site by excision of open wounds, burn eschar, or scar (including subcutaneous tissues); each additional 100 sq cm or each additional one percent of body area of infants and children (List separately in addition to code for primary procedure)		

Vignette Used in Survey:

A 27-year-old cook was admitted to the Burn Center with grease scald burns involving the left neck, shoulder, chest, arm, and hand. A total of 25% body surface area was burned full thickness. Under general anesthesia, the left arm and hand burns were excised down to viable subcutaneous tissue; a total of 500 sq cm was excised. Vigorous bleeding was controlled by electrocautery, selective suture ligation, and topical thrombin application. Blood loss was estimated at 500 ml. *IMPORTANT: In responding to this survey, please consider ONLY the work for excision of the first 100 sq cm AND each additional 100 sq cm (bolded text above) of skin. The work for any grafts, if placed, is separately billable using different CPT codes and should not be considered for this survey.*

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

Description of Pre-Service Work:

Preoperative work includes an interval history and physical exam; reviewing the previous work-up; consulting with the referring physician, if necessary, and other health care professionals; and communicating with the patient (and/or the patient's family) to explain the operative risks and benefits and to obtain informed consent. Other preoperative services include 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:

Under general anesthesia, the left arm and hand burns are excised down to viable subcutaneous tissue; a total of 500 sq cm is excised. Vigorous bleeding is controlled by electrocautery, selective suture ligation, and topical thrombin application.

Description of Post-Service Work:

Communication with the patient, family, and other health care professionals (including written and telephone reports and orders) on the day of the procedure are considered part of the postoperative work.

CPT/Descriptor: 15000(M1) / 15001(M2) Preparation or creation of recipient site by excision

(04/98) Page 2

SURVEY DATA:

Specialty(s): American Society of Plastic and Reconstructive Surgeons; American Burn Association

Type of Sample: Random

15000 (M1)

Survey n: 415
Response: 57
Rate %: 14%

	RVW	PRE total min	INTRA total min	HOSP total min	OFF total min
low	1.20		10		
25th%	2.65		20		
MED	4.00		30		
75th%	6.00		40		
high	15.62		120		

15001 (M2)

Survey n: 415
Response: 57
Rate %: 14%

	RVW	PRE total min	INTRA total min	HOSP total min	OFF total min
low	0.75		6		
25th%	1.75		10		
MED	2.75		20		
75th%	4.00		30		
high	15.00		120		

Comparative Time and Visit Data for Surveyed Service and Key Reference Service(s):

CPT Code	Resp n	RVW	PRE total min	INTRA total min	HOSP total min	OFF total min	Exper
							med
M1	57	4.00		30			100
M2	57	1.75		20			100
16041	14	2.70	60	70	80		10
15100	13	9.05	30	30	110	30	200

KEY REFERENCE SERVICE(S):

1998 RVW	Global	CPT	Descriptor
2.70	C00	16041	Excision burn wound, without skin grafting, employing alloplastic dressing (eg, synthetic mesh), any anatomic site, greater than one percent and up to nine percent total body surface area
9.05	C90	15100	Split graft, trunk, scalp, arms, legs, hands, and/or feet (except multiple digits); 100 sq cm or less, or each one percent of body area of infants and children (except 15050)

	Mean Intensity/Complexity Measures			
	M1	M2	15100	16041
Mental Effort and Judgment				
The number of possible diagnosis and/or the number of management options that must be considered	3.44	2.44	2.69	3.15
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	3.14	2.21	2.23	2.85
Urgency of medical decision making	3.53	2.89	2.62	3.15
Technical Skill/physical Effort				
Technical skill required	3.75	3.39	2.77	3.54
Physical effort required	3.33	3.00	2.38	3.62
Psychological Stress				
The risk of significant complications, morbidity and/or mortality	3.40	2.86	2.69	2.31
Outcome depends on skill and judgment of physician	3.93	3.54	3.31	3.85
Estimated risk of malpractice suit with poor outcome	3.00	2.74	2.85	2.23
Time Segments				
PRE-service intensity/complexity			2.50	3.44
INTRA-service intensity/complexity	3.53	3.16	2.77	3.15
POST-service intensity/complexity			1.85	2.78

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S): Compare the pre-, intra-, and post-service time and the intensity (mental effort and judgment; technical skill & physical effort; and psychological stress) of the service you are rating to the key reference services listed above.

An RVW of 4.00 is recommended for M1 and an RVW of 2.75 is recommended for M2. The work of CPT codes 15000(M1)/15001(M2) are best compared with CPT codes 15100/15101. The following discussion presents similarities and differences between these code pairs:

- A.
 - Harvesting a patient's own skin (15100/15101) is carried out at 0.014 inch thickness. After removal of the skin, the donor site is treated with a simple dressing. The harvested skin is then secured to the recipient site with sutures or staples.
 - Removing burned skin with (M1/M2) is carried out at 0.030 to 0.160-0.180 inch thickness. This is approximately two to five times the depth taken with 15100/15101. It is frequently necessary to start at one level of thickness of the skin and proceed until the surgeon has reached a level of healthy viable skin or subcutaneous tissue beneath the burn eschar.
- B.
 - Harvesting 500 cm² of human skin utilizing 15100-15101 can be accomplished in many patients with one application of the dermatome to remove the skin. This results in reduced work effort.
 - Removing burn eschar with M1/M2 requires repeated passes through the skin to reach a healthy viable tissue level. Not infrequently, the depth of burn and presence of residual burn eschar (burn tissue) must be determined by microscopic studies intraoperatively.
- C.
 - Blood loss associated with harvesting skin (15100/15101) is easily controlled, because blood loss is relatively minimal.
 - In contrast, blood loss utilizing M1/M2, in removal of burn eschar, is a major issue resulting in 180-200 ml of blood loss per 100 cm². It requires electrocautery, sutures, and pressure dressings. Burn surgeons are reluctant to proceed to remove more than 100 cm² at a time until the blood loss is controlled. Bleeding problems intraoperatively are not uncommon and frequently require the use of cryoprecipitates (pooled human plasma) with thrombin/calcium solution to create a fibrin glue for control of bleeding. Massive bleeding problems do occur with large excisions involving 900 or more sq. cm; transfusions of four or more units of blood are not uncommon. Intraoperative consideration of the origin of bleeding problems may involve a survey for DIC (disseminated intravascular coagulopathy) and emergency intraoperative treatment.
- D.
 - Preoperative work for 15100/15101 involves identification of the donor site, preoperative orders and obtaining an operative permit outlining the risks of loss of skin graft.
 - Preoperative work for M1/M2 is greater in that it involves preoperative wound assessment for infection, a detailed patient history for familial bleeding disorders, review of laboratory studies to eliminate common bleeding disorders or deficiencies. A detailed description of the operative risks is presented to the patient and family including the risk of transfusion, shock and the potential of an emergency return to the operating room for uncontrollable bleeding.

With respect to the complexity/intensity measures, the following statements can be made:

The number of possible diagnoses is high for the first 100 cm² and declines thereafter because the decision has been made based upon the diagnosis and management options. Complexity of medical records and urgency of medical decision making is rated high *initially* and at the *end* of a large excision (*initial* 100 cm² and *4th* add'l 100 cm²) because of the need for blood products and decision to excise the wound deeper/larger based on blood loss. The technical skill and physical effort is intense and higher than CPT 15100 and consistent with CPT 16041. Risk of complications-morbidity for M1/M2 is higher than for CPT 15100 based upon predictable blood loss for each additional 100 cm², where bleeding has been controlled. The outcome for M1/M2 is very dependent on skill and judgment of the physician, with the risk of malpractice being relatively high in that a poor outcome of the graft is obvious and results in litigation.

ADDITIONAL RATIONALE:

None

FREQUENCY INFORMATION

1. How was this service previously reported?

15000; 16040; 16041; 16042

2. How often do physicians in your specialty perform this service?

Commonly Sometimes Rarely

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

There are an average of 51,000 acute hospital admissions for burn injury in the United States each year.. On average, 45% are hospitalized in burn centers. If one assumes 1.6 operations per burn admission there are then at a minimum 36,720 operations using CPT code 15000. This does not account for small burns and congenital integumentary deformities that would employ CPT code 15000 preceding free skin graft procedures.

1996 Medicare Part B data for CPT 15000 indicate an allowed frequency of almost 30,000 (reported primarily by plastic surgery, dermatology, and general surgery specialties). With respect to CPT codes 16040-16042, the 1996 allowed frequency was 750.

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

Yes No

?

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

(April 1998)

CPT Code: 15350 (M7) Global Period: 090 Recommended RVW: 4.00

CPT Descriptor: Application of allograft, skin; 100 sq cm or less

CPT Code: 15351 (M8) Global Period: ZZZ Recommended RVW: 1.00

CPT Descriptor: Application of allograft, skin; each additional 100 sq cm (List separately in additions to code for primary procedure)

Vignette Used in Survey:

A 74-year-old mechanic was admitted to the Burn Center with burns of both legs, lower back, and abdomen after his gasoline-saturated clothing was ignited from a spark. The burns involved 40% body surface area. During the first operative session, the patient underwent surgical preparation of the burn tissue from the left lower leg beginning at the ankle and extending to the popliteal area. After excision and hemostasis, allografts were obtained from the skin bank. Approximately 500 sq. cm. of allograft was then grafted to the excised surface and secured with 60 interrupted absorbable sutures. The graft was dressed with a low adherent dressing and reinforced with absorbent dressings and secured with net dressings. *IMPORTANT: In responding to this survey, please consider ONLY the work for grafting the first 100 sq cm AND each additional 100 sq cm (bolded text above). The work for excising the skin in preparation for the graft is separately billable using different CPT codes and should not be considered for this survey.]*

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

Description of Pre-Service Work:

Preoperative work includes an interval history and physical exam; reviewing the previous work-up; consulting with the referring physician, if necessary, and other health care professionals; and communicating with the patient (and/or the patient's family) to explain the operative risks and benefits and to obtain informed consent. Other preoperative services include 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:

After excision and hemostasis, allografts were obtained from the skin bank. Approximately 500 sq. cm. of allograft was then grafted to the excised surface and secured with 60 interrupted absorbable sutures.

Description of Post-Service Work:

Postoperative work begins after skin closure in the operating room and includes application of a low adherent dressing which is reinforced with absorbent dressings and secured with net dressings. Postoperative work also includes monitoring the patient's stability in the recovery room; writing orders; communicating with the family and other health care professionals (including written and oral reports and orders); and all hospital visits and services performed by the surgeon in ICU or on a suitable nursing floor. Discharge management includes the surgeon's final examination of the patient, instructions for continuing care of the operative sites, 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, dressing changes, and antibiotic and pain medication adjustments.

CPT/Descriptor 15350(M7) / 15350(M8) Application of allograft, skin

(04/98) Page 3

SURVEY DATA:

Specialty(s): American Society of Plastic and Reconstructive Surgeons; American Burn Association

Type of Sample: Random

15350(M7)

Survey n: 415
Response: 57
Rate %: 14%

	RVW	PRE total min	INTRA total min	HOSP total min	OFF total min	SD total min	ICU		Hosp. - Other		DD total min	Office	
							# visits	total min	# visits	total min		# visits	total min
low	1.25		5										
25th%	3.00		15										
MED	4.00	40	20	205	80	20	4	60	7	95	30	5	80
75th%	6.00		40										
high	10.50		210										

15350(M8)

Survey n: 415
Response: 57
Rate %: 14%

	RVW	PRE total min	INTRA total min	HOSP total min	OFF total min
low	1.00		5		
25th%	1.60		10		
MED	2.00		15		
75th%	4.00		18		
high	10.50		30		

Comparative Time and Visit Data for Surveyed Service and Key Reference Service(s):

CPT Code	Resp n	RVW	PRE total min	INTRA total min	HOSP total min	OFF total min	Exper med
M7	57	4.00	40	20	205	80	20
M8	57	1.00		20			20
15100	13	9.05	30	30	110	30	200
15101	20	1.72		25			78

KEY REFERENCE SERVICE(S):

1998 RVW	Global	CPT	Descriptor
9.05	090	15100	Split graft, trunk, scalp, arms, legs, hands, and/or feet (except multiple digits); 100 sq cm or less, or each one percent of body area of infants and children (except 15050)
1.72	ZZZ	15101	Split graft, trunk, scalp, arms, legs, hands, and/or feet (except multiple digits); each additional 100 sq cm, or each one percent of body area of infants and children, or part thereof

	Mean Intensity/Complexity Measures			
	M7	M8	15100	15101
Mental Effort and Judgment				
The number of possible diagnosis and/or the number of management options that must be considered	3.18	2.44	2.69	2.71
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	2.80	2.29	2.23	2.47
Urgency of medical decision making	3.11	2.47	2.62	2.82
Technical Skill/physical Effort				
Technical skill required	3.09	2.67	2.77	3.24
Physical effort required	2.78	2.62	2.38	2.76
Psychological Stress				
The risk of significant complications, morbidity and/or mortality	3.53	3.36	2.69	3.35
Outcome depends on skill and judgment of physician	3.36	3.18	3.31	3.59
Estimated risk of malpractice suit with poor outcome	2.73	2.60	2.85	2.94
Time Segments				
PRE-service intensity/complexity	3.47		2.50	
INTRA-service intensity complexity	3.09	2.92	2.77	3.29
POST-service Intensity complexity	3.16		1.85	

CPT/Descriptor 15350(M7) / 15350(M8) Application of allograft, skin

(04/98) Page 4

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

An RVW of 4.00 (survey median) is recommended for M7 and M9.

An RVW of 1.00 (less than the survey median) is recommended for M8 and M10.

The graft work for paired codes M7/M8 and M9/M10 are very similar to each other and more work than the paired codes 15100/15101. The initial graft codes M7 and M9 include not only the intraoperative work for grafting the first 100 sq cm of allograft or xenograft, but also the postoperative hospital and office visits within a 90 global period. Burn patients requiring allograft or xenograft are most often very sick and critically ill. After a graft is placed, the surgeon monitors the patient in the hospital (and sometimes ICU) *daily* to looking for signs of infection and to determine when a new graft can be placed. Typically 2-3 *weeks* pass before the graft rejects and a new graft is placed. Patients with very large burns, who require large grafts of 500-900 sq cm, are more immunosuppressed and take longer for rejection to occur (3-4 weeks).

Because the intraoperative work and volume of postoperative visits increases with larger grafts, the recommended combination of primary and add-on RVWs is justified. A 700 sq cm graft would equal 10.00 RVWs (4.00+6*1.00). With a graft this size (which is typical) the surgeon will make daily hospital visits (checking the wound, changing dressings, chart documentation, verbal and written communication with family and other health professionals, etc.) for two to four weeks before rejection occurs. Independent billing of 14 to 28 hospital visits at 99231 would equal 8.96 to 17.95 RVUs and this does not even take into consideration the two hours of intraoperative work to place the graft.

ADDITIONAL RATIONALE:

None

FREQUENCY INFORMATION**1. How was this service previously reported?**

15400

2. How often do physicians in your specialty perform this service?

Commonly Sometimes Rarely

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

1996 Medicare Part B data for CPT 15400 indicate an allowed frequency of almost 1,000 (reported primarily by plastic surgery and general surgery specialties).

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

Yes No

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

(April 1998)

CPT Code: 15400 (M9) Global Period: 090 Recommended RVW: 4.00

CPT Descriptor: Application of xenograft, skin; 100 sq cm or less

CPT Code: 15401 (M10) Global Period: ZZZ Recommended RVW: 1.00

CPT Descriptor: Application of xenograft, skin; each additional 100 sq cm (List separately in additions to code for primary procedure)

Vignette Used in Survey:

A 22-year-old mechanic suffered burns of the left neck, shoulder, and arm from a radiator scald injury. The burns involved 10% body surface. These burns were deep partial thickness. During the first operative session, the patient underwent surgical preparation of the burn on the left shoulder and arm by excision down to viable dermis. After adequate hemostasis had been achieved in the excised surface, **xenograft dressings were obtained from the skin bank and thawed. Approximately 500 sq. cm. of xenograft was then grafted to the excised surface and secured with 60 interrupted sutures. The graft was dressed with a low adherent dressing and reinforced with absorbent dressings and secured with net dressings.** *IMPORTANT: In responding to this survey, please consider ONLY the work for grafting the first 100 sq cm AND each additional 100 sq cm (bolded text above). The work for excising the skin in preparation for the graft is separately billable using different CPT codes and should not be considered for this survey.]*

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

Description of Pre-Service Work:

Preoperative work includes an interval history and physical exam; reviewing the previous work-up; consulting with the referring physician, if necessary, and other health care professionals; and communicating with the patient (and/or the patient's family) to explain the operative risks and benefits and to obtain informed consent. Other preoperative services include 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:

After adequate hemostasis had been achieved in the excised surface, xenograft dressings were obtained from the skin bank and thawed. Approximately 500 sq. cm. of xenograft was then grafted to the excised surface and secured with 60 interrupted sutures.

Description of Post-Service Work:

Postoperative work begins after skin closure in the operating room and includes application of a low adherent dressing which is reinforced with absorbent dressings and secured with net dressings. Postoperative work also includes monitoring the patient's stability in the recovery room; writing orders; communicating with the family and other health care professionals (including written and oral reports and orders); and all hospital visits and services performed by the surgeon in ICU or on a suitable nursing floor. Discharge management includes the surgeon's final examination of the patient, instructions for continuing care of the operative sites, 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, dressing changes, and antibiotic and pain medication adjustments.

CPT/Descriptor: 15400(M9) / 15401(M10) Application of xenograft, skin

(04/98) Page 2

SURVEY DATA:

Specialty(s): American Society of Plastic and Reconstructive Surgeons; American Burn Association

Type of Sample: Random

15400 (M9)

Survey n: 415
Response: 57
Rate %: 14%

	RVW	PRE total min	INTRA total min	HOSP total min	OFF total min	SD total min	ICU		Hosp. - Other		DD total min	Office	
							# visits	total min	# visits	total min		# visits	total min
low	1.00		5										
25th%	1.75		15										
MED	4.00	35	20	95	60	18	0	0	5	57	20	4	60
75th%	5.78		40										
high	9.05		100										

15401 (M10)

Survey n: 415
Response: 57
Rate %: 14%

	RVW	PRE total min	INTRA total min	HOSP total min	OFF total min
low	0.81		5		
25th%	1.25		10		
MED	1.68		15		
75th%	3.50		19		
high	9.00		30		

Comparative Time and Visit Data for Surveyed Service and Key Reference Service(s):

CPT Code	Resp n	RVW	PRE total min	INTRA total min	HOSP total min	OFF total min	Exper	
							med	
M9	57	4.00	35	20	95	60	5	
M10	57	1.00		15			5	
15100	13	9.05	30	30	110	30	200	
15101	20	1.72		25			78	

KEY REFERENCE SERVICE(S):

1998 RVW	Global	CPT	Descriptor
9.05	090	15100	Split graft, trunk, scalp, arms, legs, hands, and/or feet (except multiple digits); 100 sq cm or less, or each one percent of body area of infants and children (except 15050)
1.72	ZZZ	15101	Split graft, trunk, scalp, arms, legs, hands, and/or feet (except multiple digits); each additional 100 sq cm, or each one percent of body area of infants and children, or part thereof

Mean Intensity/Complexity Measures

	M9	M10	15100	15101
Mental Effort and Judgment				
The number of possible diagnosis and/or the number of management options that must be considered	3.00	2.13	2.69	2.71
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	2.36	1.93	2.23	2.47
Urgency of medical decision making	2.64	2.13	2.62	2.82
Technical Skill/physical Effort				
Technical skill required	2.70	2.41	2.77	3.24
Physical effort required	2.49	2.37	2.38	2.76
Psychological Stress				
The risk of significant complications, morbidity and/or mortality	2.89	2.81	2.69	3.35
Outcome depends on skill and judgment of physician	3.08	2.94	3.31	3.59
Estimated risk of malpractice suit with poor outcome	2.47	2.46	2.85	2.94
Time Segments				
PRE-service intensity/complexity	2.79		2.50	
INTRA-service intensity complexity	2.66	2.40	2.77	3.29
POST-service intensity complexity	2.60		1.85	

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

**An RVW of 4.00 (survey median) is recommended for M7 and M9.
An RVW of 1.00 (less than the survey median) is recommended for M8 and M10.**

The graft work for paired codes M7/M8 and M9/M10 are very similar to each other and more work than the paired codes 15100/15101. The initial graft codes M7 and M9 include not only the intraoperative work for grafting the first 100 sq cm of allograft or xenograft, but also the postoperative hospital and office visits within a 90 global period. Burn patients requiring allograft or xenograft are most often very sick and critically ill. After a graft is placed, the surgeon monitors the patient in the hospital (and sometimes ICU) *daily* to looking for signs of infection and to determine when a new graft can be placed. Typically 2-3 *weeks* pass before the graft rejects and a new graft is placed. Patients with very large burns, who require large grafts of 500-900 sq cm, are more immunosuppressed and take longer for rejection to occur (3-4 weeks).

Because the intraoperative work and volume of postoperative visits increases with larger grafts, the recommended combination of primary and add-on RVWs is justified. A 700 sq cm graft would equal 10.00 RVWs (4.00+6*1.00). With a graft this size (which is typical) the surgeon will make daily hospital visits (checking the wound, changing dressings, chart documentation, verbal and written communication with family and other health professionals, etc.) for two to four weeks before rejection occurs. Independent billing of 14 to 28 hospital visits at 99231 would equal 8.96 to 17.95 RVUs and this does not even take into consideration the two hours of intraoperative work to place the graft.

ADDITIONAL RATIONALE:

None

FREQUENCY INFORMATION

1. How was this service previously reported?

15400

2. How often do physicians in your specialty perform this service?

Commonly Sometimes Rarely

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

1996 Medicare Part B data for CPT 15400 indicate an allowed frequency of almost 1,000 (reported primarily by plastic surgery and general surgery specialties).

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

Yes No

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS
May 1998

Breast Reconstruction with Free Flap

Newly revised CPT code 19364 bundles CPT 1998 code 19364 and 15756 into one code. This revision was implemented to correct nomenclature confusion and to eliminate the necessity for reporting a separate free flap code for breast reconstruction services. Revised code 19364 now describes *Breast reconstruction with free flap (Includes harvesting of the flap, microvascular transfer, closure of the donor site, and inset shaping the flap into a breast)*.

The overall work of revised CPT 19364 is similar to CPT 20970 *Free osteocutaneous flap microvascular anastomosis; iliac crest* (work RVU= 43.06). Preoperative, intraoperative and postoperative components will vary depending on the defect being repaired. For example, more work is required for preoperative padding/positioning and postoperative splinting/therapy for free osteocutaneous repair of an open tibial fracture. However, the intraoperative work of CPT 19364 to functionally repair the abdominal donor site and fashion the flap at the recipient breast/ axilla site is more than for a repair of an open tibial fracture. When used for face reconstruction, the intraoperative work of a free osteocutaneous flap is very similar to breast reconstruction.

It was the consensus that CPT 19364 is more work than CPT code 19367 *Breast reconstruction with transverse rectus abdominis myocutaneous flap (TRAM), single pedicle, including closure of donor site*; (work RVU=25.73); 19368 *Breast reconstruction; with transverse rectus abdominis myocutaneous flap (TRAM), single pedicle, including closure of donor site; with microvascular anastomosis* (work RVU=32.42); and 19369 *Breast reconstruction with transverse rectus abdominis myocutaneous flap (TRAM), double pedicle, including closure donor of site* (work RVU=29.82). Free tissue transfer requires a microvascular procedure for an anastomosis of the pedicle vessels in the new recipient location. This requires extensive dissection at the harvest site and additional work at the recipient location. Additionally, the free tissue transfer requires more technical skill and effort and adds to the stress of the procedure.

Again, the services provided under revised 19364 are currently reported using both 19364 (unrevised work RVU=29.04) and 15756 (work RVU=35.23). As a result, the total RVU's reported in this manner equals 49.75 [35.23 + 14.52 (0.5 *29.04)].

The RUC recommends acceptance of 41.00 as the work RVU for revised code 19364. The recommendation represents the survey median and is based on a value for codes 19367, 19368, and 19369. The RUC also considered the following rationales in making a determination: 1) Current reporting of this procedure; 2) Changes in the CPT nomenclature to omit 19364 as an add-on code; and 3) Comparison to code 32852. With regard to 32852, the RUC also noted that the intra-service time (390 minutes) of CPT 19364 was comparable to the intra-service time for CPT code 32852 *Lung transplant, single; with cardiopulmonary bypass* (work RVU= 41.80).

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
19364	C1	Breast reconstruction with free flap (Use also code number for specific flap) (Do not report code 69990 in addition to code 19364) (19364 Includes harvesting of the flap, microvascular transfer, closure of the donor site, and inset shaping the flap into a breast)	090	41.00

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code: 19364 (C1)

Global Period: 090

Recommended RVW: 41.00

CPT Descriptor: Breast reconstruction with microvascular free flap
(Use also code number for specific flap)
(Includes harvesting of the flap, microvascular transfer, closure of the donor site, and inset shaping the flap into a breast)

Vignette Used in Survey: A 35-year old woman is referred to the plastic surgeon for unilateral breast reconstruction after undergoing a mastectomy. Pre-operative consultation, that included a lengthy discussion of surgical reconstruction options, resulted in the decision to use a microvascular free tissue transfer. At operation, a mastectomy scar is opened and pockets are created for placement of the additional tissue. The recipient blood vessels (thoracodorsal artery and vein or internal mammary artery and vein) are dissected under magnification and, if necessary, partial rib resections are carried out. The free flap (lower abdominal, gluteal, or tissue from the thigh) is harvested and transferred to the recipient site, where the operating microscope is used to perform the microanastomosis of one artery and one vein. Attention to detail is critical at this juncture of the procedure, as even micro-injury to the vessels will lead to failure of the flap. The breast mound is then created with contouring of skin and subcutaneous tissues. Both the recipient and donor sites are closed in layers over drains. The patient is observed closely for signs of free flap vascular thrombosis. She is discharged on the fifth day. Follow-up care in the office is provided for 90 days. *[IMPORTANT NOTE: In completing (the survey), consider the total work of both the free tissue transfer AND unilateral breast reconstruction. Any surgical revision(s) and/or nipple reconstruction are separately payable and are NOT part of the work of this CPT descriptor.]*

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

Description of Pre-Service Work: Pre-operative work includes obtaining and reviewing medical records for the treatment of breast cancer, and a review of ongoing chemotherapy, where indicated. A review of previous surgical procedures is required to determine the suitability of the abdomen as the chosen donor site for free tissue transfer. Pre-operative work also includes obtaining and reviewing previous perfusion, ultrasound, and laboratory studies; consulting with the referring physician, if necessary, and other health care professionals. Informed consent must include the discussion of alternative methods of reconstruction should the free tissue transfer be unsuccessful due to vascular thrombosis. The all-or-none nature of success for this procedure adds significant stress to the informed consent discussion, as well as to the performance of the surgery. Other pre-operative services include 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 mastectomy scar is opened and pockets are created for placement of the additional tissue. The recipient blood vessels (thoracodorsal artery and vein or internal mammary artery and vein) are dissected under magnification and small branches are tied with fine silk sutures. If necessary, partial rib resections are carried out. Once the free flap (lower abdominal, gluteal, or tissue from the thigh) has been isolated, it is allowed to perfuse prior to detaching it from the body. The flap is then harvested and transferred to the recipient site. The operating microscope is then used to perform the microanastomosis of one artery and one vein. Due to the awkward position in the axilla, this may require repositioning of the patient in the lateral position. Attention to detail is critical at this juncture of the procedure, as even micro-injury to the vessels will lead to failure of the flap. Successful revascularization of the flap may require a revision of vascular anastomosis if thrombosis is encountered during the procedure. Once revascularization has been achieved, then the breast mound is created with contouring of the flap into the appropriate shape and size. Both the recipient and donor sites are closed in layers over drains. Donor site closure of an abdominal (TRAM) flap requires significant time and consideration for plication of the abdominal fascia for symmetry. The upper abdominal flap is dissected to the level of the breast line to permit stretching the remaining abdominal tissues for wound closure. Replacement of the umbilicus in the center of the abdominal flap is done to provide a satisfactory aesthetic umbilicus reconstruction.

Description of Post-Service Work: Post-service work begins after skin closure in the operating room and includes the application of sterile dressings to both operative sites. Post-service work also includes monitoring the patient's stability in the recovery room; writing orders; communicating with the family and other health care professionals (including written and oral reports and orders); and all hospital visits and services performed by the surgeon, including diligent monitoring of the patient for five days for the identification and treatment of any postoperative thromboses to prevent the total loss of the flap. This hourly monitoring, which is the responsibility of the operating surgeon, may be carried out in ICU or on a suitable nursing floor. Prior to release from the hospital, the drains are removed from both operative sites. Discharge management includes the surgeon's final examination of the patient, instructions for continuing care of two operative sites, 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 from both operative sites and antibiotic and pain medication adjustments.

SURVEY DATA: Specialty(s): American Society of Plastic and Reconstructive Surgeons

Survey n:	128							POST Details = same day + ICU + other hosp + dischg + office								
Response:	34							Same day	ICU		Hosp. - Other		Dischg	Office		
Rate %:	27%	RVW	Svy LOS	total min	total min	HOSP total min	OFF total min	total min	# visits	total min	# visits	total min	total min	# visits	total min	
		low	36.00		240											
		25th%	39.36		360											
		MED	41.00	6	60	390	165	90	45	1	30	3	60	30	6	90
		75th%	45.00		480											
		high	75.00		720											

Comparative Data for Key Reference Service(s):

CPT Code	Resp n	1998 RVW	Svy LOS	Pre (min)	Intra (min)	Hosp Post (min)	Off Post (min)	ME & J* mean	TS & PE* mean	PS* mean	Experi-ence med	Comments
survey code 19364 (revised)	34	41.00	6	60	390	165	90	4.59	4.88	4.82	7	Surveyees chosen as ASPRS/ASRM surgeons practicing breast reconstruction.
15756 ref code 12/97	20	35.23	5	60	360	125	75	4.25	4.50	4.55	10	No vignette. Surveyees chosen as ASPRS/ASRM surgeons practicing breast reconstruction.
15756 RUC 5/95	104		n/a	90	360	200	100	4.28	4.45	4.37	n/a	Vignette is emergent Gustillo grade 'II-B open tibial fracture. ASRM/ASPRS surgeons
15757 ref code 12/97	16	35.23	6	60	360	140	90	4.44	4.44	4.38	10	No vignette. Surveyees chosen as ASPRS/ASRM surgeons practicing breast reconstruction.
15757 RUC 5/95	42		n/a	90	360	210	100	4.26	4.48	4.45	n/a	Vignette is emergent large soft tissue defect exposing the achilles tendon ASRM surgeons.
20970 ref code 12/97	11	43.06	8	60	480	195	75	4.50	4.75	4.50	3	No vignette. Surveyees chosen as ASPRS/ASRM surgeons practicing breast reconstruction.
20970 RUC 2/94	58		10	100	500	200	100	n/a	n/a	n/a	1	Vignette is emergent Gustillo grade III-B open tibial fracture. ASRM, ASPRS, & AAC-HNS surgeons

*ME & J: mental effort and judgment. TS & PE: technical skill and physical effort. PS: psychological stress.

KEY REFERENCE SERVICE(S):

<u>1998 RVW</u>	<u>Global</u>	<u>CPT</u>	<u>Descriptor</u>
35.23	90	15756	Free muscle flap with or without skin with microvascular anastomosis
43.06	90	20970	Free osteocutaneous flap with microvascular anastomosis; iliac crest
29.04	90	19364	Breast reconstruction with free flap (Use also code number for specific flap)

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

- Revised CPT 19364 (for CPT 1999) **bundles** CPT 1998 codes 19364 and 15756 into one code to correct nomenclature confusion and to eliminate the necessity for reporting a separate free flap code.
- The overall work of revised CPT 19364 is similar to CPT 20970. Preoperative, intraoperative, and postoperative components will vary depending on the defect being repaired. For example, more work is required for preoperative padding/positioning and postoperative splinting/therapy for free osteocutaneous repair of an open tibial fracture. However, the intraoperative work of CPT 19364 to functionally repair the abdominal donor site and fashion the flap at the recipient breast/axilla site is more than for a repair of an open tibial fracture. When used for face reconstruction, the intraoperative work of a free osteocutaneous flap is very similar to breast reconstruction.
- CPT 19364 is more work than CPT codes 19367, 19368, and 19369 (TRAM flap, single and double pedicle). Free tissue transfer requires a microvascular procedure for an anastomosis of the pedicle vessels in the new recipient location. This requires extensive dissection at the harvest site and additional work at the recipient location. Additionally, the free tissue transfer requires more technical skill and effort and adds to the stress of the procedure.

ADDITIONAL RATIONALE:

Correct reporting for *unrevised* CPT 19364 included multiple code reporting - CPT 15756 and 19364. Using the multiple procedure payment rule, this equates to 49.75 rvu's [35.23 + 50%(29.04)].

However, the survey median of 41.00 rvu's is recommended as this results in a reasonable IWP/PUT, as calculated and presented below:

Pre- and post-operative work equals 11.07 rvu's, as follows:

- Pre-op scrub, dress, wait (25min*0.8*0.9888*0.0103) = 0.20 rvu
- Pre-op evaluation and positioning (35min*2.2*0.9888*0.0103) = 0.78 rvu
- Post-op same-day hospital @ 99233 level (1*1.51) = 1.51 rvu
- Post-op other hospital 2@ 99232 level and 2 @99231 level (2*1.06)+(2*0.64) = 3.40 rvu
- Discharge management 99238 (1*1.28) = 1.28 rvu
- Post-discharge office visits @99213 (6*0.65) = 3.90 rvu (Note, per recent HCFA global rvu adjustments, office visits are not at 100% of face rvu value)

Intra-operative Intensity (IWP/PUT)

A recommendation of 41.00 (survey median) results in an IWP/PUT of 0.077 rvu/min.

FREQUENCY INFORMATION

How was this service previously reported?

CPT 19364 plus 1575X as multiple procedures

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?

ASPRS procedure statistics indicate there were 42,454 breast reconstruction procedures performed in 1996. Of this total, six percent (4,457) were performed using a free flap.

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

~~Yes~~ No

CPT 19364 BREAST RECONSTRUCTION WITH FREE FLAP - TAB 17

The following is a report developed by ASPRS in response to issues raised during the February, 1998 RUC regarding the work RVU recommendation of 41.00. ASPRS presents the following information for consideration by the RUC during the April 29 - May 3, 1998 meeting:

Issue 1

The RUC suggested that a proposed survey median of 41.00 WRVU would create a rank order anomaly with other codes, such as 51596 cystectomy, 20970 bone/skin graft iliac crest, and 20802 arm replantation.

Response:

It is inappropriate to isolate discrete information about single codes as examples for possible rank order problems. When reviewing survey data for a code one should only consider the work involved in the vignette used (particularly the intensity and complexity of the procedure), the survey instrument, the reference services used, and the response rate for the specific specialty surveyed. It was suggested that an RVW of 41.00 would create a rank order anomaly with CPT 51596 (39.52) or 20802 (41.15). However, discrete data for 51596/51597 is very different, yet there is very little difference in RVWs (39.52/38.35). Similarly, the discrete data for 20802/20805 is very similar, yet there is significant difference in RVWs for this code pair (41.15/50.00).

The RUC also suggested that the proposed survey median for 19364 would create a rank order anomaly within the plastic surgery family of codes. This is not the case:

a.	Pedicled flap	15734	17.79
b.	Pedicled TRAM	19367	25.73
c.	Supercharged TRAM	19368	32.42
d.	Free flap	15756/7	35.23
e.	Free TRAM(proposed)	19364	41.00
f.	Free iliac crest	20970	43.06

Issue 2

A RUC Facilitation Committee convened in February, 1998 attempted to base a facilitated RVW of 37.07 upon the values for CPT codes 19367, 19368, 19369.

Response:

These three codes were carrier priced until ASPRS surveyed them in 1994. The recommended values were based in part on an attempt at budget neutrality by splitting old code 19362 into three new codes. Additionally, CPT 15755 was used as a key reference. During the 5-year review, CPT 15755 was sent back to CPT, split into three codes and revalued. However, CPT codes 19367, 19368, and 19369 have not been reviewed to determine if they, too, should be adjusted upward based on the change in 15755. An important part of valuing new and revised codes includes the relationship to key reference services. However, there is no mechanism in place to "automatically" adjust codes "tagged" to key reference services if the RVW value for the reference service changes. Consequently, a "facilitated" value using CPT codes 19367, 19368, 19369, while appropriate, should also take into consideration their relationship to CPT 15755 and the recent changes to the nomenclature and value for CPT 15755.

CPT 19364 BREAST RECONSTRUCTION WITH FREE FLAP - TAB 17

Issue 3

During discussion at the February RUC meeting, some RUC members appeared to have difficulty discerning the difference in work between breast reconstruction with a supercharged TRAM (CPT 19368 (32.42 RVW) and breast reconstruction with a free flap (revised CPT 19364).

Response:

Compare CPT codes 19367 (pedicle TRAM) and 19368 (supercharged TRAM) to consider the value of adding a single microvascular anastomosis ($32.42 - 25.73 = 6.69$ RVUs). Compare CPT codes 15756 (free flap) and 15734 (pedicled flap, trunk) to consider the value of adding several microvascular anastomoses ($35.23 - 17.79 = 17.44$ RVUs). The addition of one or more microvascular anastomosis involves more dissection and increased monitoring. Additionally, the reconstruction has an "all or nothing" outcome for the patient vs a partial flap loss.

Issue 4

At the February, 1998 RUC meeting, ASPRS withdrew this proposal in order to resurvey and bring a new recommendation to the next RUC meeting.

Response:

ASPRS has surveyed how this code is billed nationally (see attached table) and re-examined the results of the survey submitted in February to the RUC. ASPRS stands by its original survey data and recommendation of 41.00 RVW. We believe that another survey of physician work would not change the key reference services chosen. The following additional information and comments are offered:

1. A review of EOBs for 48 cases billed nationally in 1997 (see attached table) for this procedure reveals that the expected or billed amount continues to be consumer driven, with different insurance carriers reimbursing at varying rates. Using the 1997 MFS and applying the multiple procedure rule to CPT code 15756 and 19364, the reimbursement for a Medicare patient undergoing unilateral breast reconstruction should have been approximately \$3792 (national average). Reviewed EOBs for this procedure indicate a reimbursement between \$3317-\$4176. For a bilateral breast reconstruction the reimbursement should have been approximately \$7584. The table shows the distribution of the codes used to bill this service and demonstrates the amount of confusion that currently exists.

It is important to point out that many replantation procedures and comparatively high-valued procedures are typically performed by a team. CPT 19364 is typically performed by one surgeon, who is performing two procedures:

- a) isolating and elevating a free flap, including open, closing and monitoring the site; and
- b) reconstructing a new breast using the elevated flap, including preparing a site previously operated upon, closing and monitoring that site.

Additionally, the flap may be elevated from a site that requires repositioning the patient during the procedure (e.g., gluteal free flap).

RECOMMENDATION:

ASPRS supports the original survey median value of 41.00 RVUs for this procedure.

Billing Survey for CPT 19364: Free flap breast reconstruction

PS Practice	No. Cases Billed 1997	Primary Procedure (CPT)	Secondary Procedure
PA	2	15756	19364-51
UT	1	19364	15734
LA	8	19364	15757
	1	15757	19364
NH	15	19364	15757- 15758 - 51
AZ	1	19364	15756
	4	19364	15755
MA	5	15756	19364
	1	15734	19364
KY	5	15756	19364-51
	1	15757	19364-51
	2	15755	19364-51
OH	1	15758	19364
	1	15756	19364
TOTAL	48		

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS
May 1998

Excision of Tendon Sheath/Capsular Lesion (Knee)

A new CPT code, 27347, was developed to describe the procedure for *Excision of lesion of meniscus or capsule (eg, cyst, ganglion), knee*. No code existed previously to report this particular procedure, which is estimated to be performed in less than 300 medical patients each year.

Code 27347 is most similar to CPT code 27345 *Excision of synovial cyst of popliteal space (Baker's Cyst)* (work RVU= 5.92). Code 27345 involves the excision of either a bursal cyst or a true ganglion of the posterior knee capsule, while 27347 involves the excision within the joint. The pre-service and post-service time for 27347 are both comparable to that reported under the code 27345. However, the intra-service time for 27345 is slightly greater in that the exposure is more difficult to identify along with the protection of the cutaneous nerves and the popliteal vessels.

The specialty noted that the survey median was too high, as 27347 is less work than 27345. The RUC, therefore, recommends the survey 25th percentile work RVU at 5.78.

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
•27347	Z1	Excision of lesion of meniscus or capsule (eg, cyst, ganglion), knee	090	5.78

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

(April 1998)

CPT Code: 2734X (Z1) **Global Period:** 090 **Recommended RVW:** 5.78**CPT Descriptor:** Excision of lesion of meniscus or capsule (eg, cyst, ganglion), knee

Vignette Used in Survey:

A 41-year-old female with a history of pain and swelling about the right knee and a definite painful cyst about the lateral aspect of the knee has had some recurrent swelling and intermittent pain. Ligamentous examination was grossly intact. The patient failed conservative treatment measures and a rheumatoid workup was negative. She requires surgical excision of the lesion.

CLINICAL DESCRIPTION OF SERVICE (This work description was NOT provided on the survey.):**Description of Pre-Service Work:**

Work within 24 hours of the procedure includes an interval history and physical exam; communicating with the patient (and/or the patient's family) to briefly rediscuss the procedure and the operative risks and benefits; and reviewing the previous x-rays, MRI and ultrasound studies prior to marking the site of surgery on the patient. Other preoperative services include 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. A tourniquet is applied on the lower extremity. The lower extremity is exsanguinated and the tourniquet inflated to appropriate pressures.

Description of Intra-Service Work:

A skin incision is made over the cyst (lateral joint line). Dissection is carried out through subcutaneous tissue, joint retinaculum, and in the case of a lateral cyst, the iliotibial band is either retracted posteriorly or incised. Sharp and blunt dissection is used to separate the cyst from adjacent tissue, taking care to maintain the walls of the cyst intact. The stalk through the joint capsule by which the cyst communicates with the joint space is exposed. An arthrotomy is performed for total excision of the cyst. The tourniquet is deflated and any bleeding points are cauterized. The defect in the joint capsule and synovium are carefully and securely repaired with interrupted sutures. The joint retinaculum and iliotibial band are repaired, and the skin is sutured.

Description of Post-Service Work:

Postoperative work begins after skin closure in the operating room and includes the application of a sterile compression dressing applied to the knee with the knee held in full extension by a "Jones dressing" or knee immobilizer splint. Postoperative work also includes monitoring the patient's stability in the recovery room; writing orders; communicating with the family and other health care professionals (including written and oral reports and orders); and all hospital visits and services performed by the surgeon; including ordering and reviewing postoperative radiographs and laboratory studies; monitoring and care of the incision; and antibiotic and pain medication management. Orders are written for postoperative physical therapy to include quadriceps muscle isometrics, straight leg raising and foot and ankle range of motion. Orders also include gait training with crutches or walker, allowing weight bearing on the operated limb. The pathology specimen report is reviewed. Discharge management includes the surgeon's final examination of the patient, instructions for 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. The first office visit after discharge includes dressing change and immobilizer or splint removal to allow range of motion exercise for the knee about which the patient is instructed. Sutures are removed on the fourteenth postoperative day. External support is discontinued when range of knee flexion exceeds 90 degrees and there is full knee extension against gravity. Office visits continue until the patient's gait and range of motion return to normal or an acceptable pre-symptomatic level.

CPT/Descriptor 2734X(Z1) Excision of lesion of meniscus or capsule (eg. cvst, ganglion), knee

(04/98) Page 2

SURVEY DATA: Specialty(s): American Academy of Orthopaedic Surgeons
Type of Sample: Random

Survey n	152													
Response:	47													
Rate %	31%													
		RVW	PRE total min	INTRA total min	HOSP total min	OFF total min	Same day total min	ICU		Hosp. - Other		Dischg day total min	Office	
								# visits	total min	# visits	total min		# visits	total min
low	4 00			25										
25th%	5 78			60										
MED	6.85	45	60	40	45	40	0	0	0	0	0	0	3	45
75th%	8 00		90											
high	13 68		120											

Time Estimates	Mean Intensity/Complexity Measures		
	2734X(Z1)	29881	27345
PRE-service	45	30	45
INTRA-service	60	60	60
POST-service	85	70	90
Mental Effort and Judgment			
The number of possible diagnosis and/or the number of management options that must be considered	3.3	3.2	3.4
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	2.9	2.9	3.0
Urgency of medical decision making	2.4	2.4	2.5
Technical Skill/physical Effort			
Technical skill required	3.6	3.8	3.6
Physical effort required	3.1	3.1	3.0
Psychological Stress			
The risk of significant complications, morbidity and/or mortality	3.0	2.8	3.7
Outcome depends on skill and judgment of physician	3.5	3.7	3.6
Estimated risk of malpractice suit with poor outcome	3.1	2.9	3.7
Time Segments			
PRE-service intensity/complexity	2.9	2.9	3.0
INTRA-service intensity complexity	3.3	3.5	3.5
POST-service intensity complexity	2.7	2.6	3.0

KEY REFERENCE SERVICE(S):

1998 RVW	Global	CPT	Descriptor
5.92	090	27345	Excision of synovial cyst of popliteal space (Baker's cyst)
7.76	090	29881	Arthroscopy, knee, surgical; with meniscectomy (medial OR lateral, including any meniscal shaving)

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

2734X(Z1) is best compare to CPT 27345. The latter is the excision of either a bursal cyst or a true ganglion of the posterior knee capsule. The pre-service and post-service work and time of Z1 are very comparable to 27345. The intra-service work of 27345 is slight greater in that the exposure is slightly more difficult to identify and protection the cutaneous nerves and the popliteal vessels. This difference is shown in the psychological intensity/complexity data for Z1 and 27345. The advisory committee recommends for Z1 the survey 25th percentile RVW of 5.78, comparing Z1 with the key reference service CPT 27345 (RVW 5.92).

ADDITIONAL RATIONALE

The survey data for the final RVW estimate indicate a bi-modal distribution at the 25th and 75th percentiles. Fourteen of 47 RVW estimates were in the 5.50-6.50 range and 16 estimates were in the 7.50-8.50 range. It is believed that the survey respondents who estimated the RVW for Z1 at or near 8.00 (the 75th percentile), assumed the patient described in the vignette would require an arthrotomy or arthroscopic meniscectomy, even though this was not stated in the vignette. Eleven respondents did not feel that the vignette described their typical patient, and several survey respondents added comments to the survey indicating a necessity for an arthrotomy or arthroscopy in many patients. This would explain the bi-modal distribution of responses. However, the advisory committee for this issue believe the work for the procedure 2734X (Z1) more closely compares with 27345 and has therefore chosen to recommend the survey 25th percentile of 5.78.

FREQUENCY INFORMATION**1. How was this service previously reported?**

A specific code for this procedure has not been available. It is assumed that the procedure may have been coded using 27345 Excision of synovial cyst of popliteal or 27328 Excision, tumor, thigh or knee area, deep, subfascial, or intramuscular

2. How often do physicians in your specialty perform this service?

Commonly Sometimes Rarely

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

The Medicare frequency is estimated at less than 300 procedures annually. The total population annual frequency is estimated in the 1000-1500 range.

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

Yes No

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS
February 1998

Hallux Rigidus Correction for Cheilectomy

A new CPT code 28289 was established to report the work involved in a distal first metatarsal cheilectomy to remove bone at the distal first metatarsal and proximal phalanx, debride the joint and reconstruct the capsule. This procedure has been most commonly reported by CPT codes, 28290, *Hallux valgus (bunion) correction, with or without sesamoidectomy; simple exostectomy (Silver type procedure)* and 28122, *Partial excision (craterization, saucerization, or diaphysectomy) of bone (eg, for osteomyelitis or tarsal bossing), tarsal or metatarsal bone, except talus or calcaneus* which do not adequately describe the procedure. A survey of 45 physicians showed a median RVU of 7.29 which is also the current work RVU for reference service CPT 28122. The RUC questioned the appropriateness of the reference codes used in the survey as well as the rationale of building discharge day management into the value of 28289 when the survey respondents determined this was not applicable. Therefore, the RUC subtracted the middle level subsequent hospital care (code 99232) RVU of 1.06 from the lowest level discharge day management (code 99238) of 1.28 to arrive at a difference of .22. The work value recommendation 7.29 was then reduced by .22 to arrive at an RVU of 7.07. The 7.07 work RVU was then compared to a new reference code, not on the original reference list, CPT code 28292, *Keller, McBride, or Mayo type procedure* with a work RVU of 7.04. In reviewing the Five-Year Review time data for CPT code 28292, the pre, intra, post service times of 30, 60, and 45 minutes and 6 office visits were very similar to the survey data collected by the American Podiatric Medical Association for 28289. The RUC, therefore recommends that the 28289 be valued equivalent to 28292, a work RVU of 7.04.

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
•28289	O1	Hallux rigidus correction with cheilectomy, debridement and capsular release of the first metatarsophalangeal joint	090	7.04

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code: 2828X

Global Period: 090

Recommended RVW: 7.29

CPT Descriptor: Hallux rigidus correction with cheilectomy

Vignette Used in Survey: A middle aged patient presents with progressive, painful restriction of the hallux metatarsophalangeal joint. The patient has been treated conservatively without success. The patient is treated surgically with a distal first metatarsal cheilectomy. This includes removal of bone at the distal first metatarsal, proximal phalanx, debridement of the MTP joint, and capsular reconstruction

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

Description of Pre-Service Work:

An interval history and physical examination are performed. A complete review of the available imaging and diagnostic studies is performed. The findings of the examination and diagnostic studies are reviewed with the patient and family. Options for treatment and recommendations are reviewed and discussed with the patient and family. An informed operative consent is obtained from the patient. Admitting orders are written and submitted to the hospital or ambulatory surgical center. The physician documents this encounter in his medical record, as well as dictating a history and physical for the surgical facility.

On the day of surgery, the physician discusses the operative procedure with the operating room staff and anesthesiologist to provide proper coordination of care. The physician waits while the patient is properly anesthetized and the extremity is appropriately prepped and draped. The extremity is exsanguinated and a tourniquet is inflated.

Description of Intra-Service Work:

Approximately, a two inch incision is made over the dorsum of the hallux metatarsophalangeal joint just medial to the extensor hallucis longus tendon. The skin and subcutaneous tissues are sharply incised. The extensor hallucis longus tendon and neurovascular structures are carefully protected. Hemostasis is obtained with electrocautery. The incision is carried down to the level of the joint capsule and by subperiosteal dissection, the distal aspect of the metatarsal and the base of the proximal phalanx are completely exposed. The pathology is then assessed including the extent of osteophyte formation on the metatarsal and phalanx, the presence of reactive synovitis, condition of the remaining articular cartilage, and presence of possible loose bodies in the metatarsophalangeal joint. The findings are appropriately documented.

If necessary, a synovectomy is sharply performed, and loose bodies are removed from within the joint. The hypertrophic osteophytes are then removed using a combination of rongeurs and high speed burrs. The metatarsal head is contoured to create a smooth transition from the dorsal shaft to the remaining intact articular cartilage. Osteophytes on the medial and lateral aspect of the metatarsal head are similarly contoured. The osteophytes on the base of the proximal phalanx are removed and contoured to recreate a more anatomic appearance.

The wound and metatarsophalangeal joint are then copiously irrigated with antibiotic solution, and the extent of the osteophyte resection is confirmed. The metatarsophalangeal joint is then placed throughout a range of motion to confirm mobility of the joint. If necessary, additional bone is removed to create a smooth contour. The tourniquet is deflated. Hemostasis is obtained with electrocautery. The metatarsophalangeal joint capsule is then repaired. The superficial tissues are closed in layers, taking care to avoid injury to the extensor hallucis longus tendon and dorsal sensory nerves. A sterile dressing is applied.

Description of Post-Service Work:

The patient is transferred to the recovery room and observed during postanesthetic stabilization. Postoperative orders are written for antibiotic and pain medications and orthotic shoes. The operative report is dictated. The surgical procedure, intraoperative findings and postoperative instructions are discussed with the patient and family and the patient is discharged after the surgeon communicates with the recovery room nurse. The initial office visit includes wound inspection, obtaining and reviewing radiographs, and a dressing change. Subsequent post-discharge office visits through the 90-day global period are necessary for removal of sutures and dressing changes; initiation, review, and adjustments to physiotherapy orders; and supervision of the recovery of range of motion.

SURVEY DATA:

Specialty(s): American Academy of Orthopaedic Surgeons; American Orthopaedic Foot and Ankle Society; American Podiatric Medical Association

Survey n:	167							POST Details = same day + ICU + other hosp + dischg + office								
Response:	75							Same day	ICU		Hosp. - Other		Dischg day	Office		
Rate %:	45%	RVW	Svy LOS	total min	total min	HOSP total min	OFF total min	total min	# visits	total min	# visits	total min	total min	# visits	total min	
		low	4.90		15											
		25th%	6.00		45											
		MED	7.29	0	30	45	30	60	30	0	0	0	0	n/a	4	60
		75th%	7.65		60											
		high	9.15		90											

Comparative Data for Surveyed Service and Key Reference Service(s):

CPT Code	Resp n	1998 RVW	Svy LOS	Pre (min)	Intra (min)	Hosp Post (min)	Off Post (min)	ME & J* mean	TS & PE* mean	PS* mean	Experience
											med
2828X COMBINED	75	7.29	0	30	45	30	60	2.77	2.81	2.74	10
2828X orthopaedic	46	7.00	0	40	45	20	60	2.80	2.78	2.35	9
2828X podiatry	29	7.40	0	30	60	30	60	2.71	2.84	3.33	10
28122	48	7.29	0	30	45	30	60	2.75	2.82	2.76	10
28290	49	5.66	0	30	45	30	60	2.32	2.54	2.46	5

*ME & J: mental effort and judgment. TS & PE: technical skill and physical effort. PS: psychological stress.

KEY REFERENCE SERVICE(S):

1998 RVW	Global	CPT	Descriptor
7.29	090	28122	Partial excision (craterization, saucerization, or diaphysectomy) of bone (eg, for osteomyelitis or tarsal bossing), tarsal or metatarsal bone, except talus or calcaneus
5.66	090	28290	Hallux valgus (bunion) correction, with or without sesamoidectomy; simple exostectomy (Silver type procedure)

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

- CPT 28290 requires excision of bone from only one side (the medial side) of the joint, whereas with the cheilectomy procedure, bone is excised from four sides of the metatarsal and four sides of the proximal phalanx. In addition, new code 2828X may also require repair of the sesamoids and removal of free floating bone. Overall, new code 2828X requires more exposure and a variety of instruments.
- CPT 28122, as used to describe diaphysectomy, and CPT 28290, as used to describe an exostectomy, do not involve capsular reconstruction and tendon balance, which are both part of the cheilectomy procedure. Additionally, neither reference code speaks to the difficult exposure required to preserve the neurovascular bundle.
- Although new code 2828X *Hallux rigidus correction with cheilectomy*, has previously been reported with CPT 28122, or possibly CPT 28290, the *intraoperative* work of a cheilectomy exceeds the amount and intensity of work required for reference CPT codes 28122 or 28290. In terms of *total* work and intensity, new code 2828X is most similar to reference code CPT 28122. Therefore, a work rvu of 7.29 is recommended for new code 2828X. This value is both the survey median and the current work rvu for CPT 28122.

ADDITIONAL RATIONALE:

A recommendation of 7.29 work rvu's results in a reasonable IWPUT, as calculated and presented below:

Pre- and post-operative work equals 4.34 rvu's, as follows:

Pre-op scrub, dress, wait (15min*0.8*0.9888*0.0103) = 0.12 rvu

Pre-op evaluation and positioning (15min*2.2*0.9888*0.0103) = 0.34 rvu

Discharge management 99238 (1*1.28) = 1.28 rvu

Post-discharge office visits @99213 (4*0.65) = 2.60 rvu (Note, per recent HCFA global work rvu adjustments, office visits are not at 100% of full work rvu value)

Intra-operative Intensity (IWPUT):

A recommendation of 7.29 (survey median) results in an IWPUT of 0.049 rvu/min (2.95 rvu/hr)

FREQUENCY INFORMATION

How was this service previously reported? CPT 28122, CPT 28290

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?

*****NOTICE OF CORRECTED ESTIMATE*****

1996 Medicare claims data indicate a frequency of 9,300 for CPT codes 28122 and 28290. Based on personal office case mix of Medicare adults, non-Medicare adults, and children, the committee believes that the Medicare frequency is one-third of the national total for *all ages* (or 27,900). Of this total for all ages, approximately one-fourth or 7,000 cases represent cheilectomies performed.

The consensus committee believes that the original estimate provided in the CPT proposal is high and would like to provide a *corrected estimate of 7,000 cases annually*, for all age groups.

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

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS

May 1998

Bronchoscopic Procedures

A series of new codes were established to describe the variations of diagnostic bronchoscopy and to account for the variations in the time and resources used in providing these services.

The RUC evaluated the specialty society's request to split out the brushings and bronchial alveolar lavage from the base code into the following codes: 31622 *Bronchoscopy; diagnostic, (flexible or rigid), with or without cell washings*, 31623 *Bronchoscopy; with brushing or protected brushings*, and 31624 *Bronchoscopy; with bronchial alveolar lavage*. The RUC carefully reviewed the specialty's recommended values and corresponding documentation and determined that the specialty society should resurvey and bring it back for the RUC's review at the September RUC meeting. The RUC had specific concerns regarding the low survey response rate and the inaccurate projections of frequency information presented on the specialty society's Summary of Recommendation forms.

CPT code 32001 *Total lung lavage (unilateral)* was established as the currently used bronchoscopy code 32999 *Unlisted procedure, lungs and pleura* and does not adequately or correctly describe this procedure. Some carriers pay for this procedure with 32999 with a -22 modifier while other carriers do not. There seems to be significant confusion in correctly documenting this procedure. The work involved in 32001 is very similar to reference procedure 32095 *Thoracotomy, limited, for biopsy of lung or pleura* (work RVW = 8.36) (90 minutes intra-service time compared to 75 minutes). The RUC recommends a work RVW of 6.00 which is the survey median.

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
▲31622	BB1	Bronchoscopy; diagnostic, (flexible or rigid), with or without cell washing or brushing	000	No recommendation at this time
•31623	BB2	with brushing or protected brushings	000	No recommendation at this time
•31624	BB3	with bronchial alveolar lavage	000	No recommendation at this time
•32001	BB4	Total lung lavage (unilateral) (For bronchoscopic bronchial alveolar lavage, use 31624)	010	6.00

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AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code: 3200X Tracking Number BB4 Global Period: 010 Recommended RVW: 6.00

CPT Descriptor: Total lung lavage
(For bronchoscopic bronchial alveolar lavage, use 3162X2)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey:

A 65-year old man with alveolar proteinosis is taken to the operating suite where general anesthesia is induced. Appropriate monitoring and emergency resuscitative equipment are readily available. A double-lumen catheter is introduced and the patient is then placed in the lateral decubitus position so that the lung can be lavaged in the dependent position. Mechanical ventilation is instituted using a high inspired oxygen concentration (i.e., in excess of 95 percent). The dependent treatment lung is isolated from the oxygen supply. Complete degassing of the treatment lung to prevent the formation of air pockets is accomplished by instilling into the lung each minute a volume of saline equal to the oxygen consumption of that lung. When the lung is filled with saline to its functional residual capacity, 500 ml of saline are alternately allowed to flow into the lung and then drain by gravity. The total volume of saline instilled during a single lung lavage ranges from 15 to 25 liters. During lavage, alveolar-capillary gas exchange is made worse. Thus, in patients with far-advanced disease, the arterial PO₂ sometimes falls to critical levels. When arterial hypoxemia is intolerable, support of oxygen exchange may be accomplished using extracorporeal oxygenation during the lavage. Usually only one lung is lavaged during one session, and the second lung is lavaged 3-7 days after the first.

Description of Pre-Service Work: The patient is examined prior to being taken to the operating suite to determine his suitability for the procedure.

Description of Intra-Service Work: General anesthesia is induced. Appropriate monitoring and emergency resuscitative equipment are readily available. A double-lumen catheter is introduced and the patient is then placed in the lateral decubitus position so that the lung can be lavaged in the dependent position. Mechanical ventilation is instituted using a high inspired oxygen concentration (i.e., in excess of 95 percent). The dependent treatment lung is isolated from the oxygen supply. Complete degassing of the treatment lung to prevent the formation of air pockets is accomplished by instilling into the lung each minute a volume of saline equal to the oxygen consumption of that lung. When the lung is filled with saline to its functional residual capacity, 500 ml of saline are alternately allowed to flow into the lung and then drain by gravity. The total volume of saline instilled during a single lung lavage ranges from 15 to 25 liters. During lavage, alveolar-capillary gas exchange is made worse. Thus, in patients with far-advanced disease, the arterial PO₂ sometimes falls to critical levels. When arterial hypoxemia is intolerable, support of oxygen exchange may be accomplished using extracorporeal oxygenation during the lavage.

Description of Post-Service Work: The patient is taken to the intensive care unit and examined twice during his recovery period. He will stay in the hospital overnight or a day longer, during which time he will be seen two more times to ascertain that he is recovering normally and that there are no postoperative complications such as bleeding or hypoxia.

SURVEY DATA:

Specialty: Society of Thoracic Surgeons/ American College of Chest Physicians/American Thoracic Society

Sample Size: 240 Response Rate: (%): 14% (33/240) Initial Median RVW: 5.75 Final Median RVW: 6.00

Type of Sample (Circle One): random panel, convenience. Explanation of sample size: STS response rate (50%); ACCP response rate (20%); ATS response rate (5%). STS and ACCP used a panel, ATS survey was random.

25th Percentile RVW: 4.50 75th Percentile RVW: 10.00 Low: 3.70 High: 15.00

Median Pre-Service Time: 40 min Median Intra-Service Time: 90 min

25th Percentile Intra-Svc Time: 60 min 75th Percentile Intra-Svc Time: 120 min Low: 30 min High: 180 min

Median Post-Service Time:	<u>Total Time</u>	<u>Number of Visits</u>
Day of Procedure:	<u>110 min</u>	<u>3</u>
ICU:	<u>40 min</u>	<u>2</u>
Other Hospital:	<u>30 min</u>	<u>2</u>
Office:	<u>20 min</u>	<u>1</u>

KEY REFERENCE SERVICE (S):

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
1)	32095	Thoracotomy, limited with biopsy	8.36
2)	32020	Tube thoracostomy	3.98
3)	31625	Bronchoscopy; with biopsy	3.37
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.

INTENSITY/COMPLEXITY MEASURES

	<u>CPT Code</u>	<u>Reference Service 1</u>	<u>Reference Service 2</u>
	3200X	32095	32020
<u>Time Estimates</u>			
Median Pre-Time	40 min	45 min	40 min
Median Intra-Time	90 min	75 min	30 min
Median Post-Time	30 min	17.50 min	20 min
<u>Mental Effort and Judgement</u>			
The number of possible diagnosis and/or the number of management options that must be considered	3	4	3
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4	3.50	3
Urgency of medical decision making	3	3	3
<u>Technical Skill/Physical Effort</u>			
Technical skill required	3	3	3
Physical effort required	3	3	3
<u>Psychological Stress</u>			
The risk of significant complications, morbidity and/or mortality	4	3	2
Outcome depends on the skill and judgement of physician	3.50	3	3
Estimated risk of malpractice suit with poor outcome	3	3	3

INTENSITY/COMPLEXITY MEASURES

CPT Code

**Reference
Service 1**

**Reference
Service 2**

3200X

32095

32020

Time Segments

Pre-Service intensity/complexity	3	3	2
Intra-Service intensity/complexity	4	3	2
Post-Service intensity/complexity	3	2.50	3

ADDITIONAL RATIONALE

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

Physician representatives and staff members from the surveying organizations represented discussed the relativity of the codes and recommendations and elected to go with the median recommended RVWs in each case. We felt these were tight surveys with solid data.

FREQUENCY INFORMATION

How was this service previously reported? 32999

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? 100

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

December 1997

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS
May 1998

Bronchoscopy for Brachytherapy

A new code, 31643, was established to describe the services for *Bronchoscopy; with placement of catheter(s) for intracavitary radioelement application*. The code was developed as a result of ongoing issues related to the reporting of bronchoscopies for the placement of clinical brachtherapy catheters. Currently, the CPT code series of 31622-31656 is used to describe diagnostic and therapeutic bronchoscopic procedures. Prior to the creation of 31643, no code existed to accurately describe the bronchoscopic placement of clinical brachytherapy catheters.

Under 31643, a general bronchoscopy is performed, and under the fluoroscopic guidance, precise placement of a catheter (catheter site determination in conjunction with radiation oncologist) is performed and secured so that coughing will not tend to displace it. After placement of the catheter, fairly intense follow-up is required to be certain that the catheter is still in place during the delivery of radiation.

In determining a work RVU, the RUC reviewed code work values for similar services, such as those listed under 31625 *Bronchoscopy; with biopsy* (work RVU=3.37). In comparing the intra-service time for 31625 versus that required for 31643, the RUC concluded that 31643 required more time. Also taken into consideration was the respondent's survey median: 3.60. In view of these discrepancies, the RUC recommends a work RVU of 3.50 for code 31643. This value represents a midpoint between the work RVU for 31625 (3.37) and the survey median (3.60).

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CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
•31643	P1	Bronchoscopy; with placement of catheter(s) for intracavitary radioelement application (For intracavitary radioelement application, see 77761- 77763, 77781-77784)	000	3.50

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AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code: 3164X Tracking Number: Global Period: 000 Recommended RVW: 3.60

CPT Descriptor: Bronchoscopy; with placement of catheter(s) for intracavitary radioelement application

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey:

Typical Patient/Service: A 48-year-old woman with a bronchogenic malignancy undergoes brachytherapy, primarily to treat an obstructing endobronchial tumor causing shortness of breath and postobstructive pneumonia. Preoperatively, she is medicated with 10 mg Versed and 2 mg Stadol. The patient is bronchoscoped in the supine position under fluoroscopic guidance. The bronchoscope is introduced through the right naris, and passed by the vocal cords, into the trachea, and into the right mainstem bronchus. A malignancy nearly totally occludes the right mainstem bronchus, but the bronchoscope is manipulated carefully distally beyond the occlusion to the basilar segments of the right lower lobe, which are patent distally. Under fluoroscopic guidance a catheter is placed through the bronchoscopy for brachytherapy. The 'scope is then carefully withdrawn over the catheter and the catheter is secured in place at the nose. The patient is then sent for brachytherapy in the Radiation Therapy unit and will undergo same day discharge if there are no complications.

Description of Pre-Service Work: The patient is examined prior to the induction of anesthesia to verify that she is able to undergo the procedure.

Description of Intra-Service Work: The patient is bronchoscoped in the supine position under fluoroscopic guidance. The bronchoscope is introduced through the naris, and passed by the vocal cords, into the trachea, and into the bronchus. The bronchoscope is manipulated carefully beyond the occlusion. Under fluoroscopic guidance a catheter is placed through the bronchoscope for brachytherapy. The 'scope is then carefully withdrawn over the catheter and the catheter is secured in place at the nose.

Description of Post-Service Work: The patient is examined in the hospital after radiation therapy but prior to discharge to ascertain that there are no complications from the insertion of the bronchoscope, such as bleeding.

SURVEY DATA:

Specialty: Society of Thoracic Surgeons/American College of Chest Physicians/American Thoracic Society

Sample Size: 240 Response Rate: (%): 42/240 (18%) Initial Median RVW: 3.60 Final Median RVW: 3.60

Type of Sample (Circle One): random, panel, convenience. Explanation of sample size: STS response rate (60%); ACCP response rate (25%), ATS response rate (5%). STS and ACCP used a panel, ATS survey was random.

25th Percentile RVW: 3.06 75th Percentile RVW: 4.10 Low: 2.00 High: 5.50

Median Pre-Service Time: 30 min Median Intra-Service Time: 35 min

25th Percentile Intra-Svc Time: 30min 75th Percentile Intra-Svc Time: 45 min Low: 10min High: 50 min

Median Post-Service Time: Total Time Number of Visits

Day of Procedure: 30 2

ICU: 0 0

Other Hospital: 30 2

Office: n/a n/a

KEY REFERENCE SERVICE (S):

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
1)	31625	Bronchoscopy; with biopsy	3.37
2)	31622	Bronchoscopy; diagnostic, (flexible or rigid) w/wo cell washing or brushing	2.80
3)			
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.

INTENSITY/COMPLEXITY MEASURES

	<u>CPT Code</u> 3164X	<u>Reference Service 1</u> 31625	<u>Reference Service 2</u> 31622
<u>Time Estimates</u>			
Median Pre-Time	30 min	30 min	25 min
Median Intra-Time	35 min	30 min	20 min
Median Post-Time	30 min	20 min	20 min
<u>Mental Effort and Judgement</u>			
The number of possible diagnosis and/or the number of management options that must be considered	3	3	2
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3	3	2
Urgency of medical decision making	2	2	2
<u>Technical Skill/Physical Effort</u>			
Technical skill required	3	3	2
Physical effort required	2	2	2
<u>Psychological Stress</u>			
The risk of significant complications, morbidity and/or mortality	3	2	2
Outcome depends on the skill and judgement of physician	3	3	2
Estimated risk of malpractice suit with poor outcome	2	2	1

INTENSITY/COMPLEXITY MEASURES

CPT Code

Reference
Service 1
31625

Reference
Service 2
31622

3164X

Time Segments

Pre-Service intensity/complexity	2	2	1
Intra-Service intensity/complexity	3	2	2
Post-Service intensity/complexity	2	2	1

ADDITIONAL RATIONALE

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

Physician representatives and staff members from the surveying organizations represented discussed the relativity of the codes and recommendations and elected to go with the median recommended RVWs in each case. We felt these were tight surveys with solid data.

FREQUENCY INFORMATION

How was this service previously reported? 31641; 31622-22; 31899

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? 350

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

December 1997

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS
May 1998

Ventricular Assist Devices (VAD)

CPT codes 33975, *Implantation of ventricular assist device; single ventricular support* and 33976, *Implantation of ventricular assist device; biventricular support* have undergone significant changes in the amount of physician work required since they were last surveyed in 1993. The technology of VAD implantation has changed both the level of work intensity during intraservice implantation and increased the post operative time since patients are being managed for months and even years with the device in place.

The RUC recommends that the global period on 99375 and 99376 be changed from 90 days to 10 days, thus allowing physicians to report E/M services between the 11th and the 90th postoperative days separately. The amount of post procedure work has increased exponentially since these codes were last surveyed in 1993. In 1993, the RUC survey showed that CPT code 99232 was performed 29 times for inpatient E/M services without any outpatient post-op E/M services with a total of 25.81 RVWs for post op E/M services [99232 X 29 @ .89 = 25.81]. Information from a recent survey of four centers who frequently performed VAD indicates that on average, 2 visits are performed per day during the hospital stay and one outpatient E/M service is performed each week after discharge from the hospital. If the global period were retained at 90 days, the E/M component of this service would need to reflect nearly 45.00 work RVUs. The RUC recommends an interim solution of changing the global period to 010 days and has requested the specialty society to conduct a survey for the next RUC meeting.

The work RVUs of 21.60 (CPT 33975) and 29.10 (99376) will be considered interim until adequate survey data developed and the specialty society presents these codes at the September 1998 RUC meeting.

CPT Code (•New)	CPT Descriptor	Global Period	Work RVU Recommendation
33975	Implantation of ventricular assist device; single ventricle support	010	21.60 (Interim)
33976	biventricular support	010	29.10 (Interim)

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

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April 15, 1998

James G. Hoehn, M.D.
Chairman, AMA RUC
515 N. State St.
Chicago, IL 60610

Dear Dr. Hoehn:

The Society of Thoracic Surgeons/American Association for Thoracic Surgeons is requesting that the RUC reconsider the work values for CPT 33975 and 33976, Implantation of ventricular assist devices, single and biventricular implantation, respectively. Enclosed are data we have recently gathered regarding postoperative services for ventricular assist device (VAD) implantations. These procedures (CPT 33975, 33976) were originally surveyed in 1993. At that time the postoperative times were estimated to be approximately 720 minutes for 33975 and 780 minutes for 33976. The RUC-approved work values for that year were 20.00 and 27.25, respectively. As you can see from the attached table this would make the postoperative services for 33975 greater than the total RVWs for the entire procedure!

Right now physicians implanting these devices are spending more time that involves greater work intensity in the operating room doing the intraservice implantation. They are also doing a tremendous amount of postoperative work and not being compensated for it. (Please see attached correspondence). The technology of VAD implantation has changed and patients are being kept alive much longer with these newer devices in place. Some of them can be discharged from the hospital. Whereas before, most patients were on VADs for a limited number of days or weeks in the hospital, waiting for a heart transplant, now many of them are being managed for months and even years with the device in place.

HCFA has directed us to discuss changing the work values on these codes with the RUC to more accurately represent what is being done today. We see three possible alternatives to getting our surgeons fairly compensated for this procedure:

1. The RUC could raise the work value on 33975 and 33976 from 50% to 100% to reflect the actual scale of work being performed.
2. The RUC could change the global period on 33975 and 33976 from 90 days to 10 days, thus allowing physicians to report L/M services between the

11th and the 90th postoperative days separately.

3. The RUC could leave the work values as they are and the global period as it is, but permit separate billing for E/M services much as the transplant surgeons do for postoperative immunosuppression therapy management.

I believe the attached information supports this request, and we look forward to discussing it with the RUC on May 1, 1998.

Sincerely,

A handwritten signature in cursive script that reads "Sidney Levitsky M.D." followed by a stylized flourish.

Sidney Levitsky, M.D.

STS/AATS RUC Advisor, Chairman STS/AA'S Committee on Nomenclature and Coding

cc: John F. Mayer, Jr., M.D.

Mehmet Oz, M.D.

Don Turney

APR-14-98 TUE 01:29 PM UPMC CT SURGERY

FAX NO. 4126481029

P.01



UPMC HEALTH SYSTEM

*Division of Cardiothoracic Surgery*Department of Surgery
School of Medicine

April 13, 1998

Fax No. 313-665-0296

Society of Thoracic Surgeons
Attn: Jean Fitzgerald

Dear Ms. Fitzgerald:

In the past two years, from January 1996 to the present, we have implanted ventricular assist devices in various configurations in a large number of patients who are awaiting cardiac transplant on our heart transplant waiting list. During that time, approximately 40 patients were supported over a period of two weeks or greater, extending up to periods as long as 4 to 6 months prior to receiving their donor heart. In this category, we had 16 patients who had received the Novacor semi-implantable portable left ventricular assist device, 10 patients who received the Thoratec left ventricular assist device, and 14 patients who received the Thoratec bi-ventricular assist device. The Novacor, as you know, allows patients to be discharged from the hospital to home as long as they are within three hours of travel time to the transplant center. This is a left ventricular assist device only. This is in counter distinction to the Thoratec system, which can be used as an LVAD alone or as an LVAD and RVAD in combination. These patients have a large 400 pound console which requires traditionally in-patient hospitalization. We have taken steps over the past year to be progressive with patient discharge allowing them to live off site from the hospital in a half-way home, which requires a 24 hour biomedical engineer to live in the same vicinity as the patient to aid with their care. These two systems, therefore, impose different restrictions with respect to physician supervision, outpatient and inpatient visits and the type of care given in the early to late post-operative phases.

There are some common physician responsibilities across all devices. In particular in the first three days postoperatively the patients are relatively unstable and have varying degrees of right ventricular dysfunction along with varying amounts of postoperative bleeding and often are recovering from mild end organ dysfunction which pre-existed the implant. For that reason, daily visits often include interpretation of echocardiograms, chest x-rays, and physiologic parameters which can be read from the pump consoles. The physician is also responsible for supervising the conduct and control over the biomedical engineers who are at the bedside constantly for the first 24 hours and then make hourly visits for the first three days, which are then tapered to three times a day fairly quickly. Biomedical engineers report directly to the staff physician who makes interpretations of the fluctuations in the physiologic parameters as well as the engineering parameters from the pump.

Over the period of the next week to two weeks, the physician continues to see the patients on a daily basis, giving not only routine postoperative care, but also again, having a high index of suspicion for the difficult complications which are seen in this phase. In general, most patients are Dobutamine dependent for at least the first week as their right ventricles recover if they are on univentricular support. The daily assessments are made on weanability of Dobutamine, echocardiograms are ordered whenever physiologic parameters indicate that RV dysfunction, tricuspid insufficiency or cardiac tamponade may be suspect. Anticoagulation is usually started within the first 24 to 48 hours and again daily anticoagulation with initially heparin and then coumadin/aspirin are physician dictated.

Over the first two weeks the engineers and nurses see the patients 2 to 3 times per day and again report to the staff physician. Daily dressing changes need to be checked around driveline sites for these devices since these percutaneous conduits to the heart as well as the electrical conduits to the Novacor pump need fastidious care. The incidence of infection has been as high as 20-25% even with careful driveline care. A large component of the evaluation process then in the first two weeks focuses on the rehabilitation of end organ dysfunction, institution of anticoagulation, and detection of complications of arrhythmia, tamponade, and right heart failure. After a patient has reached the four week mark, patient training and teaching takes a large component of the responsibility of the physician. This training is supervised by the physician and carried out by biomedical engineers and Artificial Heart Program nursing staff. A protocol has to be met whereby if a patient is to be discharged, the family members are trained in CPR, understand the components of the device, and are prepared to make changes in the batteries as well as trouble shoot alarms. Once this training program is completed, then the patient may be discharged from hospital. Thoratec patients are sent to Family House, which is our half-way home for patients recovering or they sometimes remain until transplantation. Novacor patients, if suitable, may be discharged home. Following this discharge, the nurse coordinator is in touch with the family at all times about concerns and relays these questions to the staff physician, who then makes therapeutic decisions as necessary. Patients are visited at home by the staff nurse, who then reports to the physician. Weekly visits are carried out for the first 2 months post VAD implant. Patients return to the hospital on a weekly basis initially and then every two weeks as recovery progresses. If a patient should be out beyond the three month period and stable, then they come to the outpatient facility once a month for a physician visit.

Patients who cannot be discharged either due to family reasons or because of complications which are most commonly either related to arrhythmias, end organ dysfunction or infection, remain in hospital and then are seen on a more frequent basis. Rounds are made daily and treatment is guided by the specific complication.

The Novacor left ventricular assist system has an electronic console which is attached to a portable computer through its controller which allows us to use it for diagnostic purposes. This

is checked on a daily basis while patients are in hospital. The Thoratec, on the other hand, has a less sophisticated console, but information is still obtained by the engineer from alarm systems which again allow diagnostic procedures to be ordered as necessary.

In general, although a certain component of the post operative care of a ventricular assist device patient is routine post-cardiac care, it becomes significantly more complex due to the potential for cardiac tamponade in these end stage heart failure patients due to dysfunction of the coagulation system. Coupled to this is the fact that in most cases patients who are on left ventricular assist devices still have a component of RV dysfunction. Subtle changes in their physiology may dictate more stringent supervision. Similarly, the attention which needs to be placed on wound care and driveline care is much greater in the normal patient population.

Another complication in ventricular assist device patients is that of ventricular and atrial arrhythmias. In general, ventricular tachy arrhythmias, which relate to surgical trauma, ischemia, or metabolic changes, are seen in roughly a third to 40% of the patients. This requires arrhythmia management which includes use of antiarrhythmic agents and potentially defibrillation and the use of implantable defibrillators. Again, in most cases, medical management is satisfactory, but these therapies are usually dictated by the implant surgical team following the patient. The importance of diagnosing rhythm disturbances appropriately relates to the effect they have on right ventricular function in a patient only on an LVAD. The incidence of cardiac tamponade appears to be approximately 29% in the Novacor population; 18% in the Thoratec LVAD population; and 40% in the Thoratec BiVAD population. Tamponade is often a very subtle finding in a left ventricular assist device and does not always correlate with the presence or absence of a fluid collection on the echocardiogram. The index of clinical suspicion with certain typical physiologic findings requires careful assessment of the patient findings to detect this properly.

There are two other late complications which require careful scrutiny. One is the treatment of hypertension which appears to be more of a problem on ventricular assist device patients than was previously recognized. We have found for example in our own population that approximately 74% of Novacor patients and 50% of Thoratec patients have systemic hypertension which requires therapy, when it was only present in 15-20% preoperatively. It appears that once diagnosed systemic hypertension is present in anywhere from 70-80% of the time once the patients are on the ventricular assist device. In the first two weeks single agents, either Hydralazine or Captopril are adequate for management, but approximately 15% of patients require more than two agents. Chronically, about a third of the patients are treatable with a single agent; but, another third require 2 or more. Systemic hypertension, then, has to be monitored and treated on an ongoing basis in the VAD patient. This again is done by the surgical team following the patient.

Finally, we have also found that infections, although of a certain nature occur early after device implantation, patients who get ventricular assist devices are at risk for both driveline and blood stream infections even 3 to 4 months post-implantation. Careful scrutiny of driveline and wound sites is required and the nurses care of dressings around these regions have to be monitored

carefully. Although the incidence of infection in drivelines is approximately 27%, which is around the average for published data, these can become quite insidious if not carefully treated. Similarly, blood stream infection is seen in about 15% of patients in our institution, but it has been reported as high as 50% in some other centers.

I hope this short summary gives you an idea of the potential complications and problems that require careful monitoring and care by the physician watching a VAD patient. In general, the amounts of prosthetic material which are implanted in these patients requires heightened sensitivity to diagnostic dilemma such as tamponade and infection and require a high level of scrutiny to prevent serious consequences of their use.

Please do not hesitate to call if I can be of more specific guidance. I will be at the ISHLT meeting, but I will be checking in to the office with respect to pages and messages that need to be dealt with. My secretary, Lois, will be able to reach me should that be required and I can talk to you further. Thanks again and I hope this is of help to you.

Sincerely yours,



Robert L. Kormos, M.D.
Associate Professor of Surgery
and
Director, Artificial Heart Program

RLK/lmm

Subject: response to e-mail dated 4/1/98
 Date: 08-04-98 16:44:23 EDT
 From: kschwehm@ochsner.org (KARLA SCHWEHM)
 To: jeaftzge@aol.com

Ochsner organization

LVAD Post-Operative Services Required:

After surgery, the patient spends 3-14 days in the ICU. During this main critical time period, the physician sees the patient 2-3 times per day. The bulk of these visits is to ensure hemodynamic stability during the wearing of a ventricle and inotropes.

Once the patient is considered stable and is transferred to the floor, he/she is then seen by the physician on morning and evening rounds. The driveline is assessed and dressing is changed per physician during one of these visits. Also, the patient's daily hospital events which includes vital signs, LVAD flows, volume status, S/S right heart failure, review of laboratory and radiology studies, progression in physical therapy and medication regime are reviewed.

This level of care is continued for about 2-4 weeks or until the patient is discharged from the hospital. At that time, the physician follows up with the patient once per week to review the following items: laboratory results, patient's weight, vital signs, volume status, LVAD flows, equipment alarms or malfunctions, S/S heart failure, ability to perform necessary emergency backup procedures, affect coding skills, companion reliability, driveline site assessment for S/S infection and dressing is changed, medications, level of discomfort, need for further studies (i.e., EKG, abdominal ultrasound, CXR, etc.) and treatment of any adverse event(s) that may have occurred. This continues until the patient is transplanted, which is usually a 2-12 month time period.

Should any additional information be required, please do not hesitate to contact Sooje Ordoyne via e-mail at kschwehm@ochsner.org or via telephone at (504)847-3966.

Thank you

----- Headers -----

Return Path: <kschwehm@ochsner.org>
 Received: from relay36.mx.aol.com (relay36.mail.aol.com [172.31.40.210]) by air18.mail.aol.com (v40.19) with SMTP; Wed, 08 Apr 1998 16:44:23 -0400
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 Message-Id: <s52b9a8d.094@ochsner.org>
 X-Mailer: Novell GroupWise 4.1
 Date: Wed, 08 Apr 1998 15:40:32 -0500
 From: KARLA SCHWEHM <kschwehm@ochsner.org>
 To: jeaftzge@aol.com
 Subject: response to e-mail dated 4/1/98

Columbia

Evaluation and Management of Implantable I.VAD patients

- Patients are seen twice a day for the first 40 days
- Post-op following includes:
 - Physical exam
 - Management of inotropic support
 - Management of Right Sided Circulatory failure including NO
 - Evaluation of surgical wounds and driveline exit site
 - Management of cardiopulmonary system
 - Laboratory interpretation
 - Diabetic management
 - Arrhythmia management
 - Adjustment of medications
 - Minor post op surgical procedures
 - Diagnosis and management of:
 - low output states
 - bleeding
 - cardiac tamponade
 - pulmonary hypertension
 - infection
 - endocarditis
 - fluid status (diuresis)
 - Device regurgitation
 - Nutritional deficits
- Outpatients seen in clinic on weekly basis
- Physical exam and assessment
- Phlebotomy and laboratory interpretation
- EKG
- Diagnosis and management of:
 - dehydration/fluid overload
 - pain management
 - anemia
 - infection
 - medication adjustments

Columbia

Subj: LVAD reimbursement
 Date: 98-04-09 16:06:29 EDT
 From: Catanes@columbia.edu (Kathy Catanes)
 Reply to: mrc07@columbia.edu
 To: jeffitrye@aol.com

Dear Ms. Fitzgerald:
 Dr. Oz has asked that I forward the following information to you regarding the LVAD patients at Columbia. If you have any questions please contact Dr. Oz:

Sincerely, Kathy Catanes
 Forwarded message follows:

Dr. [REDACTED] is a 56 y/o physician transferred on Biomedicus support after a failed CABG. He underwent TCI implantation complicated by lower extremity vascular compromise from the groin from the IABP and the earlier femoral artery cannulation. After multiple fasciotomies and daily skin care and debridement the leg was salvaged. He was transferred to the floor on POD #12 and to rehab on POD #30. While in the hospital he was seen twice daily, had CVP/H catheters inserted, and multiple CXR to follow pneumonia, and abdominal examinations and evaluations for pain. He had daily evaluation of his drivelines and was on antibiotics for several infections. He was seen as an outpatient for 9 weeks and was eventually transplanted without complication.

Ms. [REDACTED] is a 35 y/o female with post partum coronary dissection and failed CABG transferred on Abiomed support and converted to a TCI implantable system. She was seen twice daily after transfer from the ICU on POD #11 and while in rehab for 15 days. She had pneumonia, abnormal mental status and drive line drainage, all of which were successfully managed. In addition due to the catastrophic nature of her illness she was seen by the psychiatric team for ongoing management of psychological issues. She was followed as an outpatient weekly for 9 weeks and her serum chemistries, CBC, driveline exit site and overall recovery were assessed. She was subsequently transplanted without complication.

Pt. P1 59 y/o with hx of HTN, MI, CABG 3/87. Admitted 8/18/98 with CHF symptoms. Patient's condition worsened and she underwent LVAD placement on 11/13/97. Post-op required inotropic support and management for anemia. The patient was assessed twice daily for 20 days. Patient required intensive training regarding management and care of LVAD by the LVAD team. Pt. was sent to Inpt. Rehab and seen on a daily basis for 16 days and was discharged on 12/19/97 and followed in the outpt. clinic on a weekly basis for 12 weeks. In addition the patient required a consult for pain management. In 3/13/98 the pt. was seen in outpt. clinic for a device malfunction. Pt. developed CHF and tachyarrhythmia, admitted and started on Dobutamine. On 3/17/98 pt. went to OR for device replacement and was seen twice daily until discharge on 4/4/98. She is currently followed in the outpatient clinic weekly.

Patient P2 32 y/o male with idiopathic cardiomyopathy on inotropic support suffered cardiac arrest and underwent LVAD placement on 3/4/98. Post op course even twice daily requiring increased assessment secondary to neurological insult. Problems included dysphagia, agitation, tachexia and anoxic encephalopathy. Pt. currently undergoing Inpt. Rehab.

Patient MFL 35 y/o (related cardiomyopathy with history of VT/VF and AICD placement) underwent LVAD placement 2/27/98 after frequently due to bleeding with re-exploration secondary to cardiac tamponade. Developed thyrotoxicosis secondary to Amiodarone. Diabetes requiring IV insulin for management. AIN and right heart failure necessitated institution of inotropic support and readmission to ICU. Underwent thyroidectomy and cholecystomy tube placement. Pt. continues to have runs of VT. He remains cachectic, requiring TPN and continued diuresis.

Pt. AS 64 y/o with ischemic cardiomyopathy underwent LVAD placement on 3/12/98. Post-op coagulopathy with bleeding necessitating leaving the chest open. Pt. returned to OR for removal of chest packing and mediastinal debridement. Seen at least 2 times/day, remains in ICU. Post-op course includes hepatic encephalopathy, right heart failure requiring Nitric oxide administration and respiratory failure. Pt. required a tracheostomy and remains ventilator dependent.

These are representative for our LVAD population. The median patient is in the ICU for 1 week, on the floor for 3 weeks, and in rehab for 3 weeks. Following patient and family education on a daily basis, they are discharged and return for weekly evaluations, in particular managing diuretics, hemoglobin drops from potential miscellaneous sites, and the condition of the driveline with related infections.

Of the 125 patients who have had devices inserted at Columbia Presbyterian, we have had 20% re-admissions, mostly for bleeding, infections, immunologic modulation or device malfunctions. Over 30% of our patients have at least one infection after the operation requiring treatment. We have changed 9 devices and experienced a 24% overall mortality rate. The average patient has over 100 in-hospital visits and 15 outpatient encounters, demanding a team of LVAD engineers, nurse coordinators, cardiac surgery fellows and attending surgeons. Multiple consultation services are involved, but the cardiac surgeon is the patient care coordinator in every instance.

Mahmet Oz
mco2@columbia.edu

----- End of forwarded message -----

----- Headers -----

Return-Path: <catanes@cucis.cis.columbia.edu>

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by rly-zc04.mx.aol.com (8.8.5/8.8.5/AOL-4.0.0)

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for <jea1tzge@aol.com>; Thu, 9 Apr 1998 16:04:29 -0400 (EDT)



DEPARTMENT OF HEALTH & HUMAN SERVICES

Health Care Financing Administr.

Refer to: FAR042

MAR 20 1998

7500 SECURITY BOULEVA
BALTIMORE MD 21244-18

Ms. Sherry L. Smith
Director, Physician Payment System
Americam Medical association
515 N. State Street
Chicago, Illinois 60610

Dear Ms. Smith:

Enclosed is a letter from The Society of Thoracic Surgeons concerning the relative value units for codes 33975-33978. The Society maintains that the 90-day post-operative work of the surgeon has increased dramatically since the RUC values for these codes were adopted in 1994. We would appreciate it if the RUC would reexamine the work RVUs for these codes.

Sincerely,

A handwritten signature in cursive script, appearing to read "Terrence L. Kay".

Terrence L. Kay
Director

Division of Practitioner and Ambulatory Care
PPPPG/CHPP

Enclosure

THE SOCIETY OF THORACIC SURGEONS

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January 13, 1998

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We would like to bring to the attention of the HCFA, the relative value units and global surgical period for CPT Codes 33975-33978, insertion and removal of ventricular assist devices. When these codes were established in 1993, ventricular assist devices were basically being implanted for short-term, bridge-to-heart transplant usage. Most patients remained in the hospital for 60 to 90 days on ventricular assistance while awaiting a suitable donor heart. The mean time on ventricular assistance in 1993 was approximately 77 days.

As I am sure you are aware, the number of donor hearts available for transplant has not increased since 1993, but the number of patients eligible to receive them has. As a consequence, more patients have had ventricular assist devices implanted while they await a donor heart. The mean time from implantation of the LVAD to transplantation has increased nationwide, and, for example, is currently 120 days in New York City. Between 1993 and 1995, studies showed patients to have been supported an average of 117±24 days on long-term left ventricular assist, including home discharge with frequent outpatient visits. Thus, as management skills and technology improve, more and more of the patients are being successfully managed on ventricular assist devices for longer and longer periods, including on an outpatient basis.

Currently, many LVAD patients have been discharged home and some have remained there for over a year. The longest documented patient on a left ventricular assist device spent 34 months on outpatient support. Patients are in hospital on average 30 days, and can stay as long as a year. Approximately 74 patients were put on long-term outpatient ventricular assist devices in 1996, and as of August 1997, there were 68 patients discharged with the devices in place. In November 1997 bridge patients averaged 85 days on their LVAD, and long-term patients averaged 108 days. Because of the complex long-term management of the ventricular assist devices now occurring, the current relative

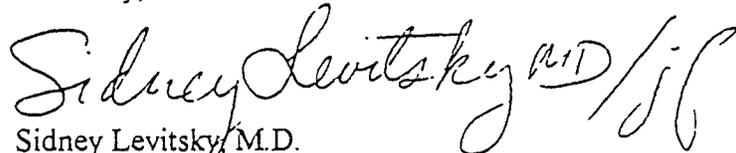
value units for these procedures are inadequate to cover the amount of postoperative work surgeons must undertake in many cases. While our 1993 RUC survey indicated that 2-3 postoperative visits were needed for ventricular assist devices, today postoperative services are highly variable and patient encounters within the 90 day global period occur on a daily basis in the hospital and approximately one to two times a week on an outpatient basis.

To achieve more equitable reimbursement for this complex procedure, we are asking that the HCFA review these codes and consider recommending that the global period for ventricular assist device implantation be changed from 90 days to 10 days. Or, an alternative would be to make an exception to the global surgery rules and allow surgeons to separately bill the E/M encounters associated with this procedure, just as transplant surgeons are permitted to separately report evaluation and management of immunosuppression therapy. This would allow surgeons to report the frequent complex postoperative patient evaluation and management encounters in a more fair and accurate fashion.

Please note that the average age of patients for LVAD implantation is 47 ± 17 years. The majority of these patients are not insured by Medicare. In 1996, the National Claims History indicated only 51 left ventricular assist device implantations. Although this is an expensive procedure, it would not have a great impact on the Medicare budget.

We appreciate the RUC's consideration of this request and would be happy to provide further information or answer questions if needed.

Sincerely,

A handwritten signature in cursive script that reads "Sidney Levitsky, M.D." followed by a stylized flourish.

Sidney Levitsky, M.D.
Chairman, STS/AATS Committee on Nomenclature and Coding
STS/AATS RUC Advisor

cc: Bart McCann, M.D.

Terry Kay, HCFA

John Mayer, Jr. M.D., STS/AATS RUC Representative

Mehmet Oz, M.D

Don Turney, STS Staff

James G. Hoehn, M.D., RUC Chairman

Sherry Smith, Director, AMA Director, Physician Payment Systems

AMA SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATIONS
JULY 1993

ADULT CARDIAC PROCEDURES - TAB 17

As with the pneumonectomy procedures, the RUC's evaluation of the adult cardiac procedures focused on the ratios of the new codes to the current codes for adult cardiac procedures with assigned relative values. The RUC recommends that the current value of 24.13 for code 33460 be reduced to 23.13 to reflect the deletion of code 33452 for valvotomy.

Likewise, the RUC is recommending that the value of code 33860 be reduced from the current value of 35.09 to 34.74 and that new code 33861 be assigned a value of 35.00, which is somewhat less than the current value of 33860, to allow for the greater work involved in the new code 33863 relative to the other two procedures.

New code 33973 is an entirely new operation that has evolved over the past 5 years. It is likely to be done when the chest is already open, in which case modifier -51 would be used. The new code 33974 would require a return trip to the operating room, however. The RUC's discussion noted the increased difficulty of procedures involving the ascending aorta compared with those involving the femoral artery. 33973 would currently be coded using an unlisted procedure code or modifier -22.

New codes 33975-33978 describe use of new technologies recently approved by the FDA. They involve a separate operation that frequently takes place during the global period following a cardiac operation.

Tracking Number	CPT Code (• New)	CPT Descriptor	Coding Change	Global Period	RVW Recommendation
		TRICUSPID VALVB			
	33452	Valvotomy, tricuspid valve, with cardiopulmonary bypass (33452 has been deleted. To report, see 33463, 33464)	deleted	090	N/A
	33460	Valvuloplasty or Valvectomy, tricuspid valve, with cardiopulmonary bypass	revised	090	23.13

Tracking Number	CPT Code (• New)	CPT Descriptor	Coding Change	Global Period	RVW Recommendation
AT20	•33463	Valvuloplasty, tricuspid valve; without ring insertion	new	090	24.75
AT21	•33464	with ring insertion	new	090	26.50
	33465	Replacement, tricuspid valve, with cardiopulmonary bypass	revised	090	27.22 (No Change)
	33468	Tricuspid valve repositioning and plication for Ebstein anomaly		090	28.89 (No Change)
		THORACIC AORTIC ANEURYSM			
	33860	Ascending aorta graft, with cardiopulmonary bypass, with or without coronary implant, with or without valve suspension; without valve replacement	revised	090	34.74
AT22	•33861	with coronary reconstruction	new	090	35.00
AT23	•33863	with aortic root replacement using composite prosthesis and coronary reconstruction	new	090	37.15
	33865	with valve replacement <i>(33865 has been deleted. To report, see 33860 or 33861 and 33405 or 33406)</i>	deleted	090	N/A
	33870	Transverse arch graft, with cardiopulmonary bypass		090	38.66 (No Change)
	33875	Descending thoracic aorta graft, with or without bypass		090	27.60 (No Change)
	33877	Repair of thoracoabdominal aortic aneurysm with graft, with or without cardiopulmonary bypass		090	41.28 (No Change)
AT24	33930	Donor cardiectomy-pneumonectomy, with preparation and maintenance of <u>allograft</u> homograft	revised	XXX	14.00
	33935	Heart-lung transplant with recipient cardiectomy-pneumonectomy		090	No Recommendation
AT25	33940	Donor cardiectomy, with preparation and maintenance of <u>allograft</u> homograft	revised	XXX	12.00

Tracking Number	CPT Code (• New)	CPT Descriptor	Coding Change	Global Period	RVW Recommendation
	33945	Heart transplant, with or without recipient cardiectomy		090	No Recommendation
		CARDIAC ASSIST			
	33970	<u>Insertion of intra-aortic balloon assist device counterpulsation; insertion-only, through the femoral artery, open approach</u> (for percutaneous insertion, use 93556)	revised	090	8.25 (No Change)
	33971	<u>Removal of intra-aortic balloon assist device including repair of femoral artery, with or without graft</u>	revised	090	4.13 (No Change)
	33972	monitoring-only (33972 has been deleted. To report, see appropriate E/M code)	deleted	090	N/A
AT26	•33973	Insertion of intra-aortic balloon assist device through the ascending aorta	new	090	10.00
AT27	•33974	Removal of intra-aortic balloon assist device from the ascending aorta, including repair of the ascending aorta, with or without graft	new	090	13.00
AT28	•33975	Implantation of ventricular assist device; single ventricle support	new	090	20.00
AT29	•33976	biventricular support	new	090	27.25
AT30	•33977	Removal of ventricular assist device; single ventricle support	new	090	17.50
AT31	•33978	biventricular support	new	090	20.00

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

Tracking Number: AT28 CPT Code: ●339X3 Global Period: 090

CPT Descriptor: Implantation of ventricular assist device; single ventricle support

Clinical Description of Service (including pre-, intra- and post-service work, and typical patient):

55 year old man with a massive, acute myocardial infarction, s/p triple coronary artery bypass grafting and inability to wean from cardiopulmonary bypass.

KEY REFERENCE SERVICE(S): (If revised code is not indicated as a key reference service, please include the reason for its exclusion)

<u>CPT Code</u>	<u>CPT Descriptor:</u>	<u>RVW</u>
33641		
33970		

Relationship to Key Reference Service(s) and/or other Rationale for RVW Recommendation: (Include all applicable elements of work in rationale: time; technical skill & physical effort; mental effort and judgement; and stress)

The results of our survey produced a set of tightly grouped data where the differential between the 25th and 75th percentiles was not great. Thus, we felt the median value proposed indicated a strong consensus with the profession of the correct work valuation for this code.

SURVEY DATA:

Median Intra-Service Time: 135mins Low: 45mins High: 4.320mins

Median Pre-Service Time: 120mins Median Post-Service Time: 720mins

Length of Hospital Stay: 14.0da

Number & Level of Post-Hospital Visits: 3

Other Data: _____

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

Tracking Number: AT29 CPT Code: ●339X4 Global Period: 090

CPT Descriptor: Implantation of ventricular assist device; biventricular support

Clinical Description of Service (including pre-, intra- and post-service work, and typical patient):

56 year old woman with history of diabetes and smoking who presents with acute inferior myocardial infarction and suddenly develops severe congestive heart failure on day 3 after infarction. Undergoes emergency double coronary artery bypass grafting and mitral valve replacement for ruptured chordae from the mitral valve. Fails to wean from bypass with biventricular failure. ICU management involves assist device supervision and management, coagulation function management, assessment of degree of device dependence, supervision of pump-head exchange on a daily basis, etc.

KEY REFERENCE SERVICE(S): (If revised code is not indicated as a key reference service, please include the reason for its exclusion)

<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
33641		
33430		

Relationship to Key Reference Service(s) and/or other Rationale for RVW Recommendation: (Include all applicable elements of work in rationale: time; technical skill & physical effort; mental effort and judgement; and stress)

The results of our survey produced a set of tightly grouped data where the differential between the 25th and 75th percentiles was not great. Thus, we felt the median value proposed indicated a strong consensus with the profession of the correct work valuation for this code.

SURVEY DATA:

Median Intra-Service Time: 240mins Low: 90mins High: 4,320mins

Median Pre-Service Time: 120mins Median Post-Service Time: 780mins

Length of Hospital Stay: 17.5da

Number & Level of Post-Hospital Visits: 2

Other Data: _____

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

Tracking Number: AT30 CPT Code: ●339X5 Global Period: 090

CPT Descriptor: Removal of ventricular assist device; single ventricle support

Clinical Description of Service (including pre-, intra- and post-service work, and typical patient):

55 year old man with a massive, acute myocardial infarction, s/p triple coronary artery bypass grafting and inability to wean from cardiopulmonary bypass.

KEY REFERENCE SERVICE(S): (If revised code is not indicated as a key reference service, please include the reason for its exclusion)

<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
33641		
33200		

Relationship to Key Reference Service(s) and/or other Rationale for RVW Recommendation: (Include all applicable elements of work in rationale: time; technical skill & physical effort; mental effort and judgement; and stress)

SURVEY DATA:

Median Intra-Service Time: 150mins Low: 60mins High: 360mins

Median Pre-Service Time: 180mins Median Post-Service Time: 540mins

Length of Hospital Stay: 15.0da

Number & Level of Post-Hospital Visits: 3

Other Data: _____

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

Tracking Number: AT31 CPT Code: ●339X6 Global Period: 090

CPT Descriptor: Removal of ventricular assist device; biventricular support

Clinical Description of Service (including pre-, intra- and post-service work, and typical patient):

56 year old woman with history of diabetes and smoking who presents with acute inferior myocardial infarction and suddenly develops severe congestive heart failure on day 3 after infarction. Undergoes emergency double coronary artery bypass grafting and mitral valve replacement for ruptured chordae from the mitral valve. Fails to wean from bypass with biventricular failure.

KEY REFERENCE SERVICE(S): (If revised code is not indicated as a key reference service, please include the reason for its exclusion)

<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
33641		
33200		

Relationship to Key Reference Service(s) and/or other Rationale for RVW Recommendation: (Include all applicable elements of work in rationale: time; technical skill & physical effort; mental effort and judgement; and stress)

SURVEY DATA:

Median Intra-Service Time: 180mins Low: 80mins High: 360mins

Median Pre-Service Time: 180mins Median Post-Service Time: 600mins

Length of Hospital Stay: 14.5da

Number & Level of Post-Hospital Visits: 3

Other Data: _____

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS
May 1998

Thrombectomy of Grafts

A series of codes was developed for the reporting of thrombectomy of graft procedures. The codes were developed following a request by HCFA that the definition of CPT 35875 *Thrombectomy of arterial or venous graft*; be clarified. In the past, this code was utilized by physicians for both thrombectomy of a lower extremity arterial bypass graft and for thrombectomy of hemodialysis graft. During the Five-Year Review of the RBRVS, HCFA referred code 35875 to CPT for redefinition as the physician work for these services differed significantly, with thrombectomy of the arterial graft representing more work than thrombectomy of a hemodialysis graft. HCFA also requested that 36832 be split into three separate codes: one specifically for thrombectomy of hemodialysis grafts; one for revision of hemodialysis grafts without thrombectomy; and one for the revision of hemodialysis grafts.

Code 35875

The best procedural comparison for 35875 *Thrombectomy of arterial or venous graft; (other than hemodialysis graft or fistula)*; is 34201 *Embolectomy or thrombectomy, with or without catheter; femoropopliteal, aortoiliac artery by leg incision* (work RVU= 9.13). Code 35875 is usually performed through a leg incision, similar to 34201. Balloon catheters are used in both procedures in a similar manner. Code 35875 involves more work than 34201 because the leg has already been operated upon, and dissection is typically carried out through dense scar. Code 35875 typically represents more intensity than the typical procedure performed under 34201. Also, code 35875 carries one day longer length of stay than 34201. Based on the survey median, the relationship to the current code 35875 and the comparison to 34201, the RUC recommends a RVW of 10.13 for code 35875.

Code 35876

CPT code 35876 was revised to describe *Thrombectomy of arterial or venous graft; with revision of arterial or venous graft*. The most commonly referenced code for the revised code was 35656 *Bypass graft, with other than vein; femoral-popliteal* (work RVU= 19.53). Code 35876 is designed specifically to exclude hemodialysis grafts. Survey respondents stated that 35656 requires 25 minutes more intra-service time than 35876, but that 35876 was greater in intensity. The services had equal lengths of stay. The specialty society subtracted 25 minutes of surgery time at an average IWP/UT of .08 per minutes, resulting in a calculation of $19.53 - 25 \times 0.08 = 17.53$. Based on the survey median, extrapolation by unblending the current code 35876, and extrapolation from 35656, an RVW of 17.00 (the survey median) is recommended for code 35876.

Code 36832

Code 36832 was revised to report *Revision, arteriovenous fistula; without thrombectomy, autogenous or nonautogenous, dialysis graft (separate procedure)*. Again, codes 35875, 35876, and 36832 are redefined codes created to distinctly separate services performed on arteriovenous hemodialysis access grafts from services performed on arterial or venous bypass grafts. The best comparison codes are 36821 *Arteriovenous anastomosis, direct any site (e.g. Cimino type) (separate procedure)* (work RVU=8.93) and 36830 *Creation of arteriovenous fistula by other than direct arteriovenous anastomosis (separate procedure); nonautogenous graft*. The physician work of these two services bracket the work of 36832. CPT code 36821 is the creation of one vascular anastomosis in a virgin surgical field. CPT 36830 includes placement of two vascular anastomoses plus creation of a subcutaneous tunnel for the graft, The newly revised code, 36832, involves digging out a previously placed graft through a scarred surgical field, then revising one or both anastomoses, or the conduit itself,

The distribution of survey values for 36832 was very tight with a 25th percentile of 10.00 rvu, median survey value of 10.50 rvu, and 75th percentile of 12 rvu. This procedure was previously coded by using 36832 or 35876. The value of 36832 has not been examined since the Harvard study. This code was not a code for which the original RVW was ascertained. Based on the survey results, respondents stated that an RVW of 6.45 was significantly inadequate. The survey median for this code was 10.50. The RUC recommends an acceptance of 10.50.

Code 36833

Code 36833 was developed to describe *Revision, arteriovenous fistula; with thrombectomy, autogenous or nonautogenous dialysis graft (separate procedure)*. Again, the reference codes used in development of the RVU were codes 36821 and 36830. Code 36833 involves digging out a previously placed graft through a scarred surgical field, performing a Fogarty balloon catheter thrombectomy, and then revising one or both anastomoses, or the conduit itself. Altogether this is very similar to the total intra-service work of placing a totally new dialysis graft at a virgin site (e.g. 36830) Both the pre and post service work elements of 36833 are very similar to those in 36821 and 36830. The survey median of 11.95 is recommended by the RUC.

Code 36831

Newly created code 36831 *Thrombectomy, arteriovenous fistula without revision, autogenous or nonautogenous dialysis graft (separate procedure)* was created to capture services for hemodialysis graft thrombectomy procedures. Previously, no code existed to accurately report these specific procedures. The most commonly cited reference service for 36831 was CPT 34201 (previously cited, work RVU=9.13). Survey respondents cited a three-day hospital length of stay for 34201 vs. no days for newly created code 36831. Intra-service time for 34201 (75 minutes) was longer than that for 36831 (60 minutes). Based on the data, it was noted that the RVW for 36831 should be less than the RVW for 34201, by a greater margin than exists between the median survey of 9.00 RVU and the RVW for 34201 which is 9.13. Based on the slight differences in time and intensity between 36831 and 34201, an RVW of 8.00 (the 25th percentile) is recommended for 36831.

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
▲35875	DD1	Thrombectomy of arterial or venous graft; <u>(other than hemodialysis graft or fistula);</u>	090	10.13
35876	DD2	with revision of arterial or venous graft <u>(For thrombectomy of hemodialysis graft or fistula, see 36831, 36833)</u>	090	17.00
36832	DD3	Revision, of an arteriovenous fistula; with or without thrombectomy, autogenous or nonautogenous, <u>dialysis</u> graft (separate procedure)	090	10.50
•36833	DD4	with thrombectomy, autogenous or nonautogenous dialysis graft (separate procedure)	090	11.95
•36831	DD5	Thrombectomy, arteriovenous fistula without revision, autogenous or nonautogenous dialysis graft (separate procedure)	090	8.00
36860		<u>External</u> cannula declotting (separate procedure); without balloon catheter	000	2.01 (No Change)

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

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

(April 1998)

CPT Code: 3587A (DD1) Global Period: 090 Recommended RVW: 10.13

CPT Descriptor: Thrombectomy of arterial or venous graft (other than hemodialysis graft or fistula);

Vignette Used in Survey:

A 75-year-old male presents with sudden onset ischemic rest pain in his left foot. He had a synthetic left fem-pop bypass graft placed three years earlier. Review of an angiogram reveals graft occlusion requiring a thrombectomy. At operation, the bypass is dissected, the graft opened, and a balloon catheter thrombectomy performed. Inflow and outflow arteries are evaluated, searching for cause of graft thrombosis. No contributory pathology is found. The graft opening is sutured, blood flow reestablished, hemostasis achieved, and perfusion of the foot ascertained. The incisions are closed.

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, reviewing the angiogram in detail; and consulting with the referring physician, the anesthesiologist, 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, circumferential exposure of the graft and adjacent arteries is obtained by dissection in the region of the proximal anastomosis. Systemic anticoagulation is administered, and vascular occluding clamps are placed on the arteries. An incision is made in the hood of the graft at the anastomosis, and a Fogarty balloon catheter is utilized for thrombectomy of the graft and downstream arteries. Multiple passes of the catheter are made until the surgeon believes all obtainable thrombus has been evacuated. Inflow and outflow arteries are evaluated, searching for cause of the graft thrombosis. If no contributory pathology is found, the arteries are flushed with blood to remove loose debris and air, the graft opening is sutured, blood flow reestablished, hemostasis achieved, and perfusion of the foot ascertained. If there is inadequate flow to the foot, the graft is reopened and additional maneuvers are performed. When acceptable blood flow to the foot is obtained, the wounds are closed in layers. Drains are placed as needed.

Description of Post-Service Work:

Post-service work begins after skin closure in the operating room and includes the application of sterile dressings. Additional post-service work on the day of surgery includes writing postoperative orders, dictating the operative note and a letter to referring physician, monitoring the patient's stability in the recovery room; communicating with the family, and contacting other health care professionals as needed. Post-service work also includes all subsequent hospital visits and services performed by the surgeon, including close follow-up to detect and treat possible complications such as bleeding, infectious re-thrombosis of the graft; reperfusion injury leading to compartment syndrome; or renal injury from myoglobinuria. Routine postoperative care includes management of the incision; intravenous therapy, antibiotic therapy, analgesia, and removal of all tubes and drains. Discharge management includes the surgeon's final examination of the patient, instructions for continuing care, arrangements for physical therapy, visiting nurse, and other outpatient ancillary services, communication with referring physicians, 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. This includes wound, antibiotic, and pain management, plus removal of sutures; and communication with visiting nurses, physical therapists, and referring physicians.

CPT/Descriptor: 3587A(DD1) Thrombectomy of arterial or venous graft
(other than hemodialysis graft or fistula);

(04/98) Page 2

SURVEY DATA:

Specialty(s): The Society for Vascular Surgery
Type of Sample: Random

	RVW	PRE total min	INTRA total min	HOSP total min	OFF total min	Same day total min	ICU		Hosp - Other		Dischg day total min	Office	
							# visits	total min	# visits	total min		# visits	total min
low	9 00		45										
25th%	9 13		90										
MED	10.00	60	90	103	30	30	0	0	3	53	20	2	30
75th%	12 00		120										
high	28 00		180										

KEY REFERENCE SERVICE(S):

1998 RVW	Global	CPT	Descriptor
9.13	090	34201	Embolectomy or thrombectomy, with or without catheter; femoropopliteal, aortoiliac artery, by leg incision
19.53	090	35656	Bypass graft, with other than vein; femoral-popliteal

LOS and Time Estimates (Median)	Mean Intensity/Complexity Measures		
	3587A(DD1)	34201	35656
LOS	4	3	4
PRE-service time	60	60	60
INTRA-service time	90	75	150
POST-service time	133	120	150
Mental Effort and Judgment			
The number of possible diagnosis and/or the number of management options that must be considered	3.42	3.15	3.56
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	3.39	3.15	3.44
Urgency of medical decision making	4.15	4.07	2.56
Technical Skill/physical Effort			
Technical skill required	3.70	3.41	3.86
Physical effort required	3.36	3.19	3.33
Psychological Stress			
The risk of significant complications, morbidity and/or mortality	3.85	3.78	3.67
Outcome depends on skill and judgment of physician	4.06	3.74	3.78
Estimated risk of malpractice suit with poor outcome	3.45	3.38	3.56
Time Segments			
PRE-service intensity/complexity	3.52	3.37	3.44
INTRA-service intensity/complexity	3.67	3.37	3.67
POST-service intensity/complexity	3.06	2.81	3.00

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

Overview:

DD1 through DD5 are being presented based on a request by HCFA that the definition of CPT 35875 (thrombectomy of arterial or venous graft) be clarified. In the past, this code was employed by physicians both for thrombectomy of a lower extremity arterial bypass graft and for thrombectomy of a hemodialysis graft. HCFA and the CMDs were concerned that physician work for these services differed significantly, with thrombectomy of the arterial graft representing more work than thrombectomy of a hemodialysis graft. In 1996, SVS/ISCVS collected data from 16 practices involving 209 claims for 35875. In this data sample 35875 was used for thrombectomy of an arterial graft in 60% of cases, while in 40% of cases the code had

CPT/Descriptor 3587A(DD1) Thrombectomy of arterial or venous graft
(other than hemodialysis graft or fistula);

(04/98) Page 3

been used for thrombectomy of a hemodialysis graft. With the new descriptors recently created by CPT, DD1 represents thrombectomy of an arterial (or venous) graft, but not a hemodialysis graft or fistula. That is, DD1 represents the component of 35875 with the presumed greater physician work. The other component is now DD5, thrombectomy of a hemodialysis graft.

The best procedural comparison for DD1 is probably 34201, embolectomy / thrombectomy of the femoropopliteal, aortoiliac arteries by leg incision. This reference was chosen by 85% of respondents. DD1 is usually performed through a leg incision, similar to 34201. Balloon catheters are used in both procedures in a similar manner. DD1 involves more work than 34201 because the leg has already been operated upon, and dissection is typically carried out through dense scar. This is reflected in the intensity values for DD1 compared to 34201. Both DD1 and 34201 may turn into exceptionally difficult cases in certain patients, but the typical DD1 represents more intensity than the typical 34201. Respondents also felt DD1 carries one day longer length of stay than 34201. The 1998 RVW for 34201 is 9.13. By this analogy the RVW of DD1 should be more than the RVW of 34201. Surgeons who cited 34201 as a reference code for DD1 commonly concluded that the RVW for DD1 should be approximately 1.0 rvu more (median = 10.00) than the RVW for 34201 (9.13).

ADDITIONAL RATIONALE

The distribution of survey values for DD1 is very tight. The 25th percentile is 9.13 rvu, median survey value is 10.00 rvu, and 75th percentile is 12.00. The 1998 MFS RVW for 35875 is 10.01, a value that presumably represents a blend of the physician work in DD1 and DD5. Of the two components previously coded for using 35875, DD1 is undoubtedly the procedure with the greater work. Thus, one may reason that the new rvu for DD1 should be slightly greater than the current rvu by approximately the same increment that the new rvu for DD5 will be less than the current rvu. Since the survey median for DD5 was 9.00 rvu, this line of reasoning justifies an rvu for DD1 between 10.01 and 11.00.

Based on the survey median, the relationship to the current code 35875, and the comparison to 34201, an RVW of 10.13 is recommended for DD1.

FREQUENCY INFORMATION

1. How was this service previously reported?

CPT 35875

2. How often do physicians in your specialty perform this service?

Commonly Sometimes Rarely

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

In 1996, Medicare payment frequency for 35875 was 30,323. Our previous data suggests that 60% of these cases will now be coded as DD1. Thus, we estimate the frequency of DD1 to be approximately 18,000 per year.

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

Yes No

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

(April 1998)

CPT Code: 3587B (DD2) Global Period: 090 Recommended RVW: 17.00

CPT Descriptor: Thrombectomy of arterial or venous graft (other than hemodialysis graft or fistula); with revision of arterial or venous graft

Vignette Used in Survey:

A 75-year-old male presents with sudden onset ischemic rest pain in his left foot. He had a synthetic left fem-pop bypass graft placed three years earlier. Review of an angiogram reveals graft occlusion requiring a thrombectomy. At operation, the bypass is dissected, the graft opened, and a balloon catheter thrombectomy performed. Inflow and outflow arteries are evaluated, searching for cause of graft thrombosis. Severe intimal hyperplasia is identified in the popliteal artery just beyond the distal graft anastomosis. This region of the popliteal artery is exposed and patch angioplasty is performed across the stenosis. The graft opening is sutured, blood flow reestablished, hemostasis achieved, and perfusion of the foot ascertained. Incisions are closed.

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, reviewing the angiogram in detail, and consulting with the referring physician, the anesthesiologist, and other health care professionals as needed within 24 hours prior to the operation. In addition, the surgeon discusses operative risks and benefits with the patient (and/or the patient's family) in order to obtain informed consent. Pre-service, 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, circumferential exposure of the graft and adjacent arteries is obtained by dissection in the region of the proximal anastomosis. Systemic anticoagulation is administered, and vascular occluding clamps are placed on the arteries. An incision is made in the hood of the graft at the anastomosis, and a Fogarty balloon catheter is utilized for thrombectomy of the graft and downstream arteries. Multiple passes of the catheter are made until the surgeon believes all obtainable thrombus has been evacuated. Inflow and outflow arteries are evaluated, searching for cause of the graft thrombosis. A critical stenosis is identified just beyond the distal anastomosis of the graft. A second surgical incision is made over this portion of the graft and carried through typically dense scar to find the distal anastomosis. The bypass graft and outflow arteries are dissected circumferentially. Circumferential dissection of the outflow artery is extended until the surgeon believes he has passed the area of stenosis. Vascular clamps are applied to the graft and arteries. An arteriotomy is started on the distal hood of the graft and extended down the outflow artery to a point beyond the stenosis. A long synthetic patch is sewn as a patch angioplasty along the length of the arteriotomy. The arteries are flushed with blood to remove loose debris and air, blood flow re-established, hemostasis achieved, and perfusion of the foot ascertained. If there is inadequate flow to the foot, the graft is reopened and additional maneuvers are performed. When acceptable blood flow to the foot is obtained, the wounds are closed in layers. Drains are placed as needed.

Description of Post-Service Work:

Post-service work begins after skin closure in the operating room and includes the application of sterile dressings. Additional post-service work on the day of surgery includes writing postoperative orders, dictating the operative note and a letter to referring physician, monitoring the patient's stability in the recovery room; communicating with the family, and contacting other health care professionals as needed. Post-service work also includes all subsequent hospital visits and services performed by the surgeon, including close follow-up to detect and treat possible complications such as bleeding, infection, re-thrombosis of the graft; reperfusion injury leading to compartment syndrome; or renal injury from myoglobinuria. Routine postoperative care includes management of the incision, intravenous therapy, antibiotic therapy, analgesia, and removal of all tubes and drains. Discharge management includes the surgeon's final examination of the patient, instructions for continuing care, arrangements for physical therapy, visiting nurse, and other outpatient ancillary services, communication with referring physicians, 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. This includes wound, antibiotic, and pain management, plus removal of sutures, and communication with visiting nurses, physical therapists, and referring physicians.

CPT/Descriptor: 3587B(DD2) Thrombectomy of arterial or venous graft (other than hemodialysis graft or fistula), with revision of arterial or venous graft

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SURVEY DATA:

Specialty(s): The Society for Vascular Surgery

Type of Sample: Random

Survey n: 139
 Response: 34
 Rate %: 24%

	RVW	PRE total min	INTRA total min	HOSP total min	OFF total min	Same day total min	ICU		Hosp - Other		Dischg day total min	Office	
							# visits	total min	# visits	total min		# visits	total min
low	11 00		50										
25th%	14 00		120										
MED	17.00	60	155	120	35	30	1	10	4	60	20	2	35
75th%	19 52		180										
high	35 00		240										

KEY REFERENCE SERVICE(S):

1998 RVW	Global	CPT	Descriptor
19.53	090	35656	Bypass graft, with other than vein; femoral-popliteal
9.13	090	34201	Embolectomy or thrombectomy, with or without catheter; femoropopliteal, aortoiliac artery, by leg incision

LOS and Time Estimates (Median)	Mean Intensity/Complexity Measures		
	3587B(DD2)	35656	34201
LOS	5	5	3
PRE-service time	60	90	60
INTRA-service time	155	180	90
POST-service time	155	145	120
Mental Effort and Judgment			
The number of possible diagnosis and/or the number of management options that must be considered	3.67	3.65	3.05
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	3.52	3.48	3.05
Urgency of medical decision making	4.22	3.00	4.05
Technical Skill/physical Effort			
Technical skill required	4.15	3.86	3.21
Physical effort required	3.73	3.57	3.05
Psychological Stress			
The risk of significant complications, morbidity and/or mortality	4.06	3.62	3.68
Outcome depends on skill and judgment of physician	4.24	3.71	3.63
Estimated risk of malpractice suit with poor outcome	3.67	3.67	3.53
Time Segments			
PRE-service intensity/complexity	3.62	3.29	3.16
INTRA-service intensity complexity	4.09	3.57	3.26
POST-service intensity complexity	3.24	2.86	2.95

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

In a manner exactly analogous to the overview presented for DD1, the presumed components of 35876 (thrombectomy of arterial or venous graft; with revision of arterial or venous graft) are now being split out as DD2 and DD4. DD2 is defined specifically to exclude hemodialysis grafts [thrombectomy of arterial or venous graft (other than hemodialysis graft or fistula)], while the corresponding new code, DD4, is specifically defined for thrombectomy and revision of hemodialysis grafts. The 1998 RVW for 35876 is 13.67 rvu. As far as we know, no data exist to determine the relative frequency with which 35876 was used in the past for services now defined as DD2 vs. those services now defined as DD4. There is no doubt that the typical work of DD2 is greater than that of DD4.

CPT/Descriptor 3587B(DD2) Thrombectomy of arterial or venous graft (other than hemodialysis graft or fistula),
with revision of arterial or venous graft

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ADDITIONAL RATIONALE

The distribution of survey values for DD2 is reasonably tight. The 25th percentile is 14.00 rvu, median survey value is 17.00 rvu, and 75th percentile is 19.52 rvu. As stated above, the 1998 RVW for the parent code 35876 is 13.67 rvu, and this presumably represents a blend of the greater work in DD2 and the lesser work involved in DD4. Since DD2 represents the procedure with the greater work of the two components previously coded for with 35876, it is reasonable that the new rvu for DD2 should be greater than the current rvu for 35876, while the new rvu for DD4 will be less than the current rvu for 35876. Since the survey median for DD4 is 12.00 rvu, this line of reasoning justifies an rvu for DD2 that would equal the RVW of 35876 (13.67) plus the difference between 35876 and median survey DD4 ($13.67 - 12.00 = 1.67$), justifying a total of at least 15.75 rvu.

The most commonly cited reference service is CPT 35656, with an RVW of 19.53. Respondents felt 35656 required 25 minutes more intra-service time than DD2, but DD2 had somewhat greater intensity. The services had equal length of stay. If one subtracts 25 minutes of surgery time at an average IWP/UT of 0.08 per minute, the value of DD2 may be calculated at $19.53 \text{ minus } 25 * 0.08 = 17.53$

Based on the survey median, extrapolation by unblending the current code 35876, and extrapolation from CPT 35656, an RVW of 17.00 (the survey median) is recommended for DD2.

FREQUENCY INFORMATION

1. How was this service previously reported?

CPT 35876.

2. How often do physicians in your specialty perform this service?

Commonly Sometimes Rarely

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

In 1996, Medicare payment frequency for 35876 was 8,259. There are no data we know of to determine how many of these will now be coded as DD2, vs. those to be coded as DD4. The best guess may be a 50/50 split, or perhaps 4,000 DD2 per year.

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

Yes No

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

(April 1998)

CPT Code:	3683A(DD3)	Global Period:	090	Recommended RVW:	10.50
CPT Descriptor:	Revision, arteriovenous fistula; without thrombectomy, autogenous or nonautogenous graft (separate procedure)				

dialysis

Vignette Used in Survey:

A 57-year-old female, on hemodialysis for one year, developed increasing venous outflow pressures in her arterio-venous dialysis graft. Angiogram reveals venous anastomotic hyperplasia causing severe outflow stenosis. At operation the graft and venous outflow tract are dissected. The stenotic region is opened longitudinally and repaired by patch angioplasty. Blood flow is reestablished, hemostasis achieved, and wounds are closed.

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, reviewing the angiogram in detail; and consulting with the referring physician, the nephrologist, the anesthesiologist, and other health care professionals as needed within 24 hours prior to the operation. In addition, the surgeon discusses operative risks and benefits with the patient (and/or the patient's family) in order to obtain informed consent. Pre-service, 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:

The most common site for these arteriovenous dialysis grafts is in the forearm or upper arm. The pathology usually encountered is venous hyperplasia along the outflow track of the graft causing a severe stenosis, reduction of blood flow through the graft, ineffective dialysis, and eventual graft thrombosis if treatment is not undertaken. At operation, circumferential exposure of the venous outflow end of the graft and the adjacent outflow veins is obtained by dissection through typically scarred tissue. Systemic anticoagulation is administered, and vascular occluding clamps are placed. An incision is made in the hood of the graft at the anastomosis and extended across the venous stenosis until vein of normal caliber is encountered. A long synthetic patch is sewn as a "patch angioplasty" along the length of the arteriotomy, using ocular loupe magnification. The graft and outflow vein are flushed with blood to remove loose debris and air, then blood flow is re-established, and hemostasis achieved. Blood flow through the dialysis graft and to the hand beyond the graft is evaluated for adequacy. Once satisfactory flow is obtained, the wounds are closed in layers.

Description of Post-Service Work:

Post-service work begins after skin closure in the operating room and includes the application of sterile dressings. Additional post-service work on the day of surgery includes writing postoperative orders, dictating the operative note and a letter to referring physician, monitoring the patient's stability in the recovery room; communicating with the family, and contacting other health care professionals as needed. Post-service work also includes all subsequent hospital visits and services performed by the surgeon, including close follow-up to detect and treat possible complications such as bleeding, infection, re-thrombosis of the graft, and inadequate blood flow to the hand. Routine postoperative care includes management of the incision; intravenous therapy, antibiotic therapy, and analgesia. Discharge management includes the surgeon's final examination of the patient, instructions for continuing care, directions regarding when the graft may be used for hemodialysis, communication with referring physician and nephrologist, and preparation of discharge records. Additionally, all post-discharge office visits regarding this procedure that take place within 90 days of the operation are considered part of the postoperative work. The work of these visits includes wound, antibiotic, and pain management, removal of sutures, and communication with referring physician and nephrologist.

CPT/Descriptor: 3683A(DD3) Revision of an arteriovenous fistula; without thrombectomy, autogenous or nonautogenous graft (separate procedure)

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SURVEY DATA:

Specialty(s): The Society for Vascular Surgery
 Type of Sample: Random

Survey n: 139
 Response: 32
 Rate %: 23%

	RVW	PRE total min	INTRA total min	HOSP total min	OFF total min	Same day total min	ICU		Hosp. - Other		Dischg day total min	Office	
							# visits	total min	# visits	total min		# visits	total min
low	8.00		60										
25th%	10.00		75										
MED	10.50	45	90	40	15	40	0	0	0	0	0	1	15
75th%	12.00		100										
high	17.50		160										

KEY REFERENCE SERVICE(S):

1998 RVW	Global	CPT	Descriptor
12.00	090	36830	Creation of arteriovenous fistula by other than direct arteriovenous anastomosis (separate procedure); nonautogenous graft
8.93	090	36821	Arteriovenous anastomosis, direct, any site (eg, Cimino type) (separate procedure)

LOS and Time Estimates (Median)	Mean Intensity/Complexity Measures		
	3683A(DD3)	36830	36821
LOS	0	0	0
PRE-service time	45	45	45
INTRA-service time	90	113	60
POST-service time	55	65	50
Mental Effort and Judgment			
The number of possible diagnosis and/or the number of management options that must be considered	2.84	2.61	2.64
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	2.88	2.71	2.55
Urgency of medical decision making	2.72	2.29	2.27
Technical Skill/physical Effort			
Technical skill required	3.47	3.18	3.00
Physical effort required	2.81	2.75	2.36
Psychological Stress			
The risk of significant complications, morbidity and/or mortality	2.88	2.79	2.36
Outcome depends on skill and judgment of physician	3.59	3.39	3.36
Estimated risk of malpractice suit with poor outcome	2.44	2.39	2.36
Time Segments			
PRE-service intensity/complexity	2.72	2.61	2.55
INTRA-service intensity complexity	3.13	3.04	2.82
POST-service intensity complexity	2.38	2.43	2.09

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

DD3, DD4, and DD5 are redefined codes created to distinctly separate services performed on arteriovenous hemodialysis access grafts (DD3, DD4, DD5) from services performed on arterial or venous bypass grafts (DD1, DD2). Currently, great confusion exists regarding appropriate application of CPT 35876 (thrombectomy of arterial or venous graft; with revision of arterial or venous graft) versus CPT 36832 (revision of an arteriovenous fistula, with or without thrombectomy, autogenous or nonautogenous graft). It is hoped that all confusion in this realm will end with these new and more clear definitions.

The best comparison codes are 36821 (arteriovenous anastomosis, direct, any site [eg Cimino type]) and 36830 (creation of arteriovenous fistula by other than direct arteriovenous anastomosis, nonautogenous graft). The physician work of these two services

CPT/Descriptor: 3683A(DD3) Revision of an arteriovenous fistula; without thrombectomy,
autogenous or nonautogenous graft (separate procedure)

(04/98) Page 3

certainly brackets the work of DD3. CPT 36821 is the creation of one vascular anastomosis in a virgin surgical field. CPT 36830 involves placement of two vascular anastomoses plus creation of a subcutaneous tunnel for the graft. DD3 involves digging out a previously placed graft through a scarred surgical field, then revising one or both anastomoses, or the conduit itself. Pre- and post-service work elements are very similar. Thus, the RVW for DD3 should necessarily be more than that for 36821 (8.93 rvu), but less than that for 36830 (12.00 rvu).

ADDITIONAL RATIONALE

The distribution of survey values for DD3 is very tight with a 25th percentile of 10.00 rvu, a median survey value of 10.50 rvu, and 75th percentile of 12.00 rvu. As stated above, this procedure was previously coded by using either 36832 or 35876. Even the survey's single lowest submitted RVW (8.00 rvu) is substantially greater than the current RVW of 6.45 for CPT 36832. The value for 36832 has not been examined since the Harvard study. This was not a code for which collection of survey data was undertaken during those original efforts. Little is known regarding the basis on which the original RVW was ascertained. Based on the current survey, however, we can only conclude that surgeons who actually perform this operation in 1998 believe that an RVW of 6.45 is woefully inadequate. In contrast, the median survey for DD3 is less than the current RVW for 35876, which is 13.67.

While a formulaic construct using IWP/UT may not be acceptable for primary determination of RVWs, one may at least scrutinize this mathematical approach as supplementary information:

Pre-op scrub, dress, wait (15min*0.8*0.9888*0.0103) = 0.12 rvu
 Pre-op evaluation and positioning (30 min*2.2*0.9888*0.0103) = 0.74 rvu
 Intra-op time (90 min.) * mid-level IWP/UT (0.08) = 7.20 rvu
 Discharge management 99238 (1*1.28) = 1.28 rvu
 Post-discharge visits (two 15 min. [99213]visits) = 2*0.65 = 1.30 rvu
 for a procedure total = 10.64 rvu

Thus, two substantially different analytic techniques support the median survey value for DD3. An RVW of 10.50 (the survey median) is recommended for DD3.

FREQUENCY INFORMATION

1. How was this service previously reported?

CPT 36832, 35875, and 35876.

2. How often do physicians in your specialty perform this service?

Commonly Sometimes Rarely

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

In 1996, Medicare payment frequency for 36832 was 41,978. DD3 and DD4 will be split out of this number. To our knowledge, there are no data to determine how many of these will now be coded as DD3, vs. those to be coded as DD4. Likewise, some number of previously used CPT 35875 and 35876 will now be coded as DD3. Our best guess regarding frequency of DD3 will be less than 20,000 annually.

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

Yes No

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

(April 1998)

CPT Code: 3683B(DD4) Global Period: 090 Recommended RVW: 11.95

CPT Descriptor: Revision of an arteriovenous fistula; with thrombectomy, autogenous or nonautogenous graft (separate procedure) dialysis

Vignette Used in Survey:

A 57-year-old female, on hemodialysis for one year, developed increasing venous outflow pressures in her arterio-venous dialysis graft. The graft failed before a diagnostic evaluation could be completed, requiring urgent revision. The graft is dissected and opened, followed by a balloon catheter thrombectomy. Examination reveals venous anastomotic hyperplasia as cause of graft failure. Outflow vein dissection is extended beyond stenosis. Stenotic region is opened longitudinally and repaired by suturing a patch across the stenosis. Blood flow is reestablished, hemostasis achieved, and wounds are closed.

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, reviewing any recent angiograms in detail; and consulting with the referring physician, the nephrologist, the anesthesiologist, and other health care professionals as needed within 24 hours prior to the operation. In addition, the surgeon discusses operative risks and benefits with the patient (and/or the patient's family) in order to obtain informed consent. Pre-service, 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:

The most common site for these arteriovenous dialysis grafts is in the forearm or upper arm. At operation, circumferential exposure of the venous outflow end of the graft is obtained by dissection through typically scarred tissue. Systemic anticoagulation is administered, and vascular occluding clamps are placed. An incision is made in the hood of the graft, and a thrombus filled lumen is encountered. Fogarty balloon thrombectomy catheters are passed repeatedly in the proximal and distal directions until forceful arterial inflow and adequate venous backbleeding are obtained. The graft opening is closed using fine vascular suture under ocular loupe magnification. An operative angiogram is obtained to determine the etiology of graft failure by injecting contrast material while making a single x-ray exposure or using digital subtraction fluoroscopy. The most common pathology found in this situation is severe intimal hyperplasia in the outflow vein, although arterial stenosis or failure of the conduit itself include other typical findings. If venous outflow hyperplasia is found, vascular occluding clamps are replaced, the distal-most portion of the dialysis graft is opened, and the incision carried across the vein stenosis and extended until normal caliber vein is encountered. A long synthetic patch is sewn as a "patch angioplasty" along the length of the arteriotomy, using ocular loupe magnification. The graft and outflow vein are flushed with blood to remove loose debris and air, then blood flow is re-established, and hemostasis achieved. Blood flow through the dialysis graft and to the hand beyond the graft is evaluated for adequacy. Once satisfactory flow is obtained, the wounds are closed in layers. If other causes of graft thrombosis are found, they are dealt with as required.

Description of Post-Service Work:

Post-service work begins after skin closure in the operating room and includes the application of sterile dressings. Additional post-service work on the day of surgery includes writing postoperative orders, dictating the operative note and a letter to referring physician, monitoring the patient's stability in the recovery room; communicating with the family, and contacting other health care professionals as needed. Post-service work also includes all subsequent hospital visits and services performed by the surgeon, including close follow-up to detect and treat possible complications such as bleeding, infection, re-thrombosis of the graft, and inadequate blood flow to the hand. Routine postoperative care includes management of the incision; intravenous therapy, antibiotic therapy, and analgesia. Discharge management includes the surgeon's final examination of the patient, instructions for continuing care, directions regarding when the graft may be used for hemodialysis, communication with referring physician and nephrologist, and preparation of discharge records. Additionally, all post-discharge office visits regarding this procedure that take place within 90 days of the operation are considered part of the postoperative work. The work of these visits includes wound, antibiotic, and pain management, removal of sutures, and communication with referring physician and nephrologist.

CPT/Descriptor: 3683B(DD4) Revision of an arteriovenous fistula, with thrombectomy, autogenous or nonautogenous graft (separate procedure)

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SURVEY DATA:

Specialty(s): The Society for Vascular Surgery

Type of Sample: Random

Survey n.	139													
Response.	33													
Rate %	23%													
		RVW	PRE total min	INTRA total min	HOSP total min	OFF total min	Same day total min	ICU		Hosp. - Other		Discong day total min	Office	
								# visits	total min	# visits	total min		# visits	total min
low	3.25			60										
25th%	11.00			90										
MED	11.95		45	120	45	15	45	0	0	0	0	0	1	15
75th%	12.00			120										
high	20.00			180										

KEY REFERENCE SERVICE(S):

1998 RVW	Global	CPT	Descriptor
12.00	090	36830	Creation of arteriovenous fistula by other than direct arteriovenous anastomosis (separate procedure); nonautogenous graft
8.93	090	36821	Arteriovenous anastomosis, direct, any site (eg, Cimino type) (separate procedure)

LOS and Time Estimates (Median)	Mean Intensity/Complexity Measures		
	3683B(DD4)	36830	36821
LOS	0	0	0
PRE-service time	45	45	45
INTRA-service time	120	113	60
POST-service time	55	65	50
Mental Effort and Judgment			
The number of possible diagnosis and/or the number of management options that must be considered	3.18	2.63	2.38
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	2.88	2.63	2.50
Urgency of medical decision making	3.03	2.17	2.25
Technical Skill/physical Effort			
Technical skill required	3.64	3.29	2.88
Physical effort required	3.09	2.79	2.38
Psychological Stress			
The risk of significant complications, morbidity and/or mortality	4.03	2.79	2.13
Outcome depends on skill and judgment of physician	3.55	3.46	3.13
Estimated risk of malpractice suit with poor outcome	2.30	2.33	1.88
Time Segments			
PRE-service intensity/complexity	2.88	2.54	2.50
INTRA-service intensity/complexity	3.48	3.00	2.75
POST-service intensity/complexity	2.45	2.33	2.00

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

As noted in the DD3 summary of Recommendation, DD3, DD4, and DD5 are redefined codes created to distinctly separate services performed on arteriovenous hemodialysis access grafts (DD3, DD4, DD5) from services performed on arterial or venous bypass grafts (DD1, DD2). Currently, the service described by DD4 is commonly coded for by CPT 35876 (thrombectomy of arterial or venous graft; with revision of arterial or venous graft) and CPT 36832 (revision of an arteriovenous fistula, with or without thrombectomy, autogenous or nonautogenous graft). These two CPT codes have widely disparate RVWs, 13.67 rvu and 6.45 rvu respectively. With a new and entirely clear definition for DD4, it is hoped that a single, appropriate RVW will be identified and that all questions of inappropriate coding will be resolved.

CPT/Descriptor: 3683B(DD4) Revision of an arteriovenous fistula, with thrombectomy,
autogenous or nonautogenous graft (separate procedure)

(04/98) Page 3

Similar to DD3, the best comparison codes for DD4 are 36821 (arteriovenous anastomosis, direct, any site [eg Cimino type]) and 36830 (creation of arteriovenous fistula by other than direct arteriovenous anastomosis; nonautogenous graft). CPT 36821 is the creation of one vascular anastomosis in a virgin surgical field. CPT 36830 involves placement of two vascular anastomoses plus creation of a subcutaneous tunnel for the graft. DD4 involves digging out a previously placed graft through a scarred surgical field, performing a Fogarty balloon catheter thrombectomy, then revising one or both anastomoses, or the conduit itself. Altogether, this is very similar to the total intra-service work of placing a totally new dialysis graft at a virgin site (i.e. 36830). Pre- and post-service work elements of DD4 are very similar to 36821 and 36830.

ADDITIONAL RATIONALE

The distribution of survey values for DD4 is also very tight with a 25th percentile of 11.00 rvu, a median survey value of 11.95 rvu, and a 75th percentile of 12.00 rvu. DD4 was previously coded either as 36832 (6.45) or 35876 (13.67). Once again, the survey's single lowest submitted RVW (8.25 rvu) is substantially greater than the current RVW of 6.45 for CPT 36832. As stated previously, 36832 has not been examined since the Harvard studies and little is known regarding the basis on which the original RVW was ascertained. Based on the current survey, we conclude that surgeons who actually perform this operation in 1998 believe that an RVW of 6.45 rvu is inadequate. In addition, 36832 represents a blend of revision without thrombectomy and revision with thrombectomy, thereby making DD4, the service with thrombectomy, likely to have a higher RVW than the blended service. The median survey RVW for DD4 is less than that of the other CPT codes currently used for this service, that is CPT 35876, with an RVW of 13.67.

While a formulaic construct using IWPUT may not be acceptable for primary determination of RVWs, one may at least scrutinize this mathematical approach as supplementary information:

Pre-op scrub, dress, wait (15min*0.8*0.9888*0.0103) = 0.12 rvu
 Pre-op evaluation and positioning (30 min*2.2*0.9888*0.0103) = 0.74 rvu
 Intra-op time (120 min.) * mid-level IWPUT (0.08) = 9.60 rvu
 Discharge management 99238 (1*1.28) = 1.28 rvu
 Post-discharge visits (one 15 min. [99213]visits) = 0.65 rvu
 for a procedure total = 12.39 rvu

Thus, two substantially different analytic techniques support the median survey value for DD4. An RVW of 11.95 (the survey median) is recommended for DD4.

FREQUENCY INFORMATION

1. How was this service previously reported?

CPT 36832, 35875, and 35876.

2. How often do physicians in your specialty perform this service?

Commonly Sometimes Rarely

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

In 1996, Medicare payment frequency for 36832 was 41,978. DD3 and DD4 will be split out of this number. To our knowledge, there are no data to determine how many of these will now be coded as DD3, vs. those to be coded as DD4. Likewise, some number of previously used CPT 35875 and 35876 will now be coded as DD4. Our best guess regarding frequency of DD4 will be less than 20,000 annually.

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

Yes No

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

(April 1998)

CPT Code: 3683C(DD5) Global Period: 090 Recommended RVW: 8.00

CPT Descriptor: Thrombectomy of arteriovenous fistula without revision, autogenous or nonautogenous graft (separate procedure) ^{dialysis}

Vignette Used in Survey:

A 57-year-old female, on hemodialysis for one year, presents with thrombosis of her arterio-venous dialysis graft after an episode of hypotension. (The patient recovered from that episode.) The graft is dissected and opened, followed by a balloon catheter thrombectomy. Examination reveals no venous outflow hyperplasia or other intrinsic graft problems that might have contributed to graft failure. Graft opening is sutured, blood flow reestablished, and hemostasis achieved. Wounds are closed.

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, reviewing any recent angiograms in detail; and consulting with the referring physician, the nephrologist, the anesthesiologist, and other health care professionals as needed within 24 hours prior to the operation. In addition, the surgeon discusses operative risks and benefits with the patient (and/or the patient's family) in order to obtain informed consent. Pre-service, 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:

The most common site for these arteriovenous dialysis grafts is the forearm or upper arm. At operation, circumferential exposure of the venous outflow end of the graft is obtained by dissection through typically scarred tissue. Systemic anticoagulation is administered, and vascular occluding clamps are placed. An incision is made in the hood of the graft, and a thrombus filled lumen is encountered. Fogarty balloon thrombectomy catheters are passed repeatedly in the proximal and distal directions until forceful arterial inflow and adequate venous backbleeding are obtained. The graft opening is closed using fine vascular suture under ocular loupe magnification. An operative angiogram is obtained to determine the etiology of graft failure by injecting contrast material while making a single x-ray exposure or using digital subtraction fluoroscopy. The most common pathology found in this situation is severe intimal hyperplasia in the outflow vein, but occasionally no contributory pathology is found. This is likely to be the case if the patient has suffered a recent episode of hypotension. If the angiogram reveals no identifiable problems, blood flow through the dialysis graft and to the hand beyond the graft is evaluated once more for adequacy. If satisfactory, the wounds are closed in layers.

Description of Post-Service Work:

Post-service work begins after skin closure in the operating room and includes the application of sterile dressings. Additional post-service work on the day of surgery includes writing postoperative orders, dictating the operative note and a letter to referring physician, monitoring the patient's stability in the recovery room; communicating with the family, and contacting other health care professionals as needed. Post-service work also includes all subsequent hospital visits and services performed by the surgeon, including close follow-up to detect and treat possible complications such as bleeding, infection, re-thrombosis of the graft, and inadequate blood flow to the hand. Routine postoperative care includes management of the incision; intravenous therapy, antibiotic therapy, and analgesia. Discharge management includes the surgeon's final examination of the patient, instructions for continuing care, directions regarding when the graft may be used for hemodialysis, communication with referring physician and nephrologist, and preparation of discharge records. Additionally, all post-discharge office visits regarding this procedure that take place within 90 days of the operation are considered part of the postoperative work. The work of these visits includes wound, antibiotic, and pain management; removal of sutures, and communication with referring physician and nephrologist.

CPT/Descriptor: 3683C(DD5) Thrombectomy of arteriovenous fistula without revision, autogenous or nonautogenous graft (separate procedure)

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SURVEY DATA:

Specialty(s): The Society for Vascular Surgery
 Type of Sample: Random

Survey n:	139													
Response:	32													
Rate %:	23%													
		RWW	PRE total min	INTRA total min	HOSP total min	OFF total min	Same day total min	ICU		Hosp - Other		Dischg day total min	Office	
								# visits	total min	# visits	total min		# visits	total min
low	5 00			45										
25th%	8 00			60										
MED	9.00		53	60	35	15	35	0	0	0	0	0	1	15
75th%	9 11			79										
high	12.00			150										

KEY REFERENCE SERVICE(S):

1998 RVW	Global	CPT	Descriptor
9.13	090	34201	Embolectomy or thrombectomy, with or without catheter; femoropopliteal, aortoiliac artery, by leg incision
8.93	090	36821	Arteriovenous anastomosis, direct, any site (eg, Cimino type) (separate procedure)

LOS and Time Estimates (Median)	Mean Intensity/Complexity Measures		
	3683C(DD5)	34201	36821
LOS	0	3	0
PRE-service time	53	60	45
INTRA-service time	60	75	75
POST-service time	50	120	50
Mental Effort and Judgment			
The number of possible diagnosis and/or the number of management options that must be considered	2.56	3.10	2.50
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	2.72	3.09	2.42
Urgency of medical decision making	3.06	3.71	2.50
Technical Skill/physical Effort			
Technical skill required	2.97	3.23	3.08
Physical effort required	2.50	2.91	2.58
Psychological Stress			
The risk of significant complications, morbidity and/or mortality	2.77	3.50	2.42
Outcome depends on skill and judgment of physician	3.19	3.73	3.25
Estimated risk of malpractice suit with poor outcome	2.34	3.23	2.42
Time Segments			
PRE-service intensity/complexity	2.69	3.05	2.58
INTRA-service intensity complexity	2.94	3.18	2.75
POST-service intensity complexity	2.34	2.64	2.25

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

Currently, the only code that exists for thrombectomy of any kind of graft without a concomitant revision is CPT 35875 (thrombectomy of arterial or venous graft). As noted in the DD1 Summary of Recommendation, 35875 is currently used for thrombectomy of arterial and venous bypass grafts (now DD1) and for thrombectomy of arteriovenous hemodialysis grafts (now DD5). As it turns out, HCFA, the CMDs, and all surveyed surgeons agree that a distinct difference exists between the work of DD1 and DD5, with DD5 representing the lesser effort. Creation of this new, specific code for hemodialysis graft thrombectomy (DD5) will allow appropriate creation of a distinct and fair RVW

CPT/Descriptor: 3683C(DD5) Thrombectomy of arteriovenous fistula without revision, autogenous
or nonautogenous graft (separate procedure)

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The most commonly cited reference service for DD5 was CPT 34201, embolectomy or thrombectomy, with or without catheter, femoropopliteal, aortoiliac artery, by leg incision. CPT 34201 has an RVW of 9.13. Survey respondents cited a three day hospital length of stay for 34201 vs. 0 days for DD5. Intra-service time was slightly longer for reference code 34201 (75 min.) than for DD5 (60 min.). Based on these data, one would argue that the RVW for DD5 should be less than the RVW 34201 by a greater margin than exists between the median survey of 9.00 rvu and the RVW for 34201 which is 9.13

ADDITIONAL RATIONALE

The distribution of survey values for DD5 is tight with a 25th percentile of 8.00 rvu, a median survey value of 9.00 rvu, and a 75th percentile of 9.11 rvu. The median survey of 9.00 is substantially less than that of the parent code, 35875, whose RVW is 10.01

While a formulaic construct using IWP/UT may not be acceptable for primary determination of RVWs, one may at least scrutinize this mathematical approach as supplementary information

Pre-op scrub, dress, wait (15min*0.8*0.9888*0.0103) = 0.12 rvu

Pre-op evaluation and positioning (38 min*2.2*0.9888*0.0103) = 0.85 rvu

Intra-op time (60 min) * mid-level IWP/UT (0.08) = 4.80 rvu

Discharge management 99238 (1*1.28) = 1.28 rvu

Post-discharge visits (one 15 min. [99213]visits) = 0.65 rvu

for a procedure total = 7.70 rvu

Based on the slight difference in time and intensity between DD5 and 34201 and the formulaic RVW construct presented above, it is difficult to justify the survey median RVW of 9.00 and, instead, an RVW of 8.00 (the 25th percentile) is recommended for DD5.

FREQUENCY INFORMATION

1. How was this service previously reported?

CPT 35875

2. How often do physicians in your specialty perform this service?

Commonly Sometimes Rarely

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

In 1996, Medicare payment frequency for 35875 was 30,323. DD1 and DD5 will be split out of this number. Our data analysis in 1996 suggested that 40% of 35875 represented the service now defined as DD5. Our best guess regarding frequency of DD5 is approximately 12,000 annually.

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

Yes No

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
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Arteriovenous Regional Chemotherapy Perfusion

CPT Code 36823 *Insertion of arterial and venous cannula(s) for isolated extracorporeal circulation and regional chemotherapy perfusion to an extremity, with or without hyperthermia, with removal of cannula(s) and repair of arteriotomy and venotomy sites* was created to describe a unique combination of a highly invasive procedure with chemotherapy supported by a membrane oxygenator/perfusion device. The specialty society chose to withdraw this issue from the May 1998 RUC agenda. The specialty society plans to present this code at the September 1998 RUC meeting, after adequate survey data is developed. Until that time, the RUC agrees with the specialty society that CPT code 36823 be “carrier priced.” This service is infrequently performed with fewer than 1000 cases reported per year in all patient groups.

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
•36823	D1	Insertion of arterial and venous cannula(s) for isolated extracorporeal circulation and regional chemotherapy perfusion to an extremity, with or without hyperthermia, with removal of cannula(s) and repair of arteriotomy and venotomy sites	090	Carrier Price (Interim Recommendation)

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AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS
May 1998

Pelvic Exenteration

A new CPT code, 45126, was developed to describe *Pelvic exenteration for colorectal malignancy, with proctectomy (with or without colostomy), with removal of bladder and ureteral transplantations, and/or hysterectomy, or cervicectomy, with or without removal of tubes(s), with or without removal of ovary(s), or any combination thereof*. Currently, two CPT codes exist to describe pelvic exenteration procedures: CPT code 51597 *Pelvic exenteration, complete, for vesical, prostatic or urethral malignancy, with removal of bladder and ureteral transplantations, with or without hysterectomy and/or abdominoperineal resection of rectum and colon colostomy or any combination thereof* (work RVU=38.35), and CPT code 58240 *Pelvic exenteration for gynecologic malignancy, with total abdominal hysterectomy or cervicectomy, with or without removal of tube(s), with or without removal of ovary(s), with removal of bladder and ureteral transplantations, and/or abdominoperineal resection of rectum of colon and colostomy or any combination thereof* (work RVU= 38.39). Code 51597 is specific to vesicle, prostatic or urethral malignancy, and CPT code 58240 is specific to gynecologic malignancy. The exenteration performed for primary colorectal malignancy is not represented in these two codes.

The new code, 45126, allows for several combinations of exenterative proctectomy with *en bloc* removal of other pelvic organs for treating colorectal cancers (i.e., proctectomy with one or more of: cystectomy and resection of the distal ureters; hysterectomy or cervicectomy; removal of tube(s); and/or ovary (s)). The exenteration reported under 45126 may be either primary (to treat *de novo* disease) or secondary (to treat recurrent disease). Additionally, 45126 specifies the actual purpose of the procedure (treatment of colorectal malignancy) and the defining combinations of organ resections added en bloc to exenterative proctectomy.

The RUC agreed that codes 45126, 58240, and 51597 are equivalent in work and recommends an RVU of 38.39. The value is slightly less than the survey median of 38.40. The median is the result of responses collected from 47 general surgeons and colon and rectal surgeons, and is comparable to the work RVU's for CPT codes 58240 (RVU=38.39) and 51597 (RVU=38.35).

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
•45126	F1	Pelvic exenteration for colorectal malignancy, with proctectomy (with or without colostomy), with removal of bladder and ureteral transplantations, and/or hysterectomy, or cervicectomy, with or without removal of tube(s), with or without removal of ovary(s), or any combination thereof	090	38.39

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

(April 1998)

CPT Code: 4511X (F1) Global Period: 090 Recommended RVW: 38.39

CPT Descriptor: Pelvic exenteration for colorectal malignancy, with proctectomy (with or without colostomy), with removal of bladder and ureteral transplantations, and/or hysterectomy, or cervicectomy, with or without removal of tube(s), with or without removal of ovary(s), or any combination thereof

Vignette Used in Survey:

A 60-year-old female with hypothyroidism (euthyroid on thyroxine replacement) and well-controlled essential hypertension presents with episodic rectal bleeding and urinary frequency. She underwent total abdominal hysterectomy and left salpingo-oophorectomy at age 39 for benign disease. Colonoscopy discloses a bulky tumor beginning at 6 cm from the anal verge, endoscopic ultrasonography suggests transmural rectal invasion into adjacent pelvic tissues, and biopsies return well-differentiated adenocarcinoma. CT scan demonstrates blurring of tissue planes between rectum and bladder, enlarged perirectal nodes, and an inhomogeneous right ovarian mass. Cystoscopy and pelvic examination under anesthesia show inflammatory changes near the bladder trigone and a bulky pelvic mass that seems fixed anteriorly. Metastatic screening is negative although CEA is elevated. She is offered exploration and possible pelvic exenteration; she elects to proceed with operation. Exenterative proctectomy, with cystectomy and right salpingo-oophorectomy, is done *en bloc*. She is invasively monitored and ventilated in the ICU for 4 days. On postoperative day 7, she becomes febrile and tachypneic; she is found to have a ureteral anastomotic leak that is managed with percutaneous drains and requires ICU re-admission for 3 more days. She is discharged on postoperative day 13.

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

Description of Pre-Service Work:

Pre-service work as an outpatient in such complex operations requires more than one day of preservice work. By prior conventions, this work was confined to the one day prior to operation. This seems to represent the past, when patients were hospitalized for the day prior to operation, and all the work was compressed by the convenience of the hospitalization. Now, prior to the operation the patient receives instructions about an antibiotic and mechanical bowel preparation. The patient is also evaluated and marked for two stoma sites. The patient receives a preoperative history, physical and review of all pertinent preoperative labs and x-ray tests. Informed consent and transfusion consents are obtained. Orders are written and provided to the operative receiving area for Same Day Surgery Admission patients, including final enema administration, and preoperative parenteral antibiotic infusion.

On the operative day, the preoperative work-up is reviewed with particular attention to the CT scan. The adequacy of the bowel prep and the markings for potential stoma sites are verified. Patient and family questions are answered. After changing to scrub clothes, the surgeon again meets the patient in the Operating Room. After awaiting induction of anesthesia, the surgeon oversees patient positioning in stirrups for lithotomy positioning, paying attention that all pressure points are properly supported and padded. The surgeon oversees application of lower extremity intermittent pneumatic compression devices to avoid encroachment on the perineal operative field. The previously identified potential stoma sites are re-marked with indelible ink. (Cystoscopy with ureteral stent placement is performed and coded separately by the consulting urologist; during the procedure, the primary surgeon reviews the cystoscopic findings directly with the urologist and discusses potential options for management of bladder and ureter involvement by tumor.) The anus is oversewn, and the surgical prep of the abdominal wall, vagina, and perineum are reviewed with the circulating nurse. The surgeon verifies with the nursing staff that all necessary surgical instruments and supplies are readily available in the operative suite (eg, titanium clips for marking the limits of resection for future radiotherapy without interfering with future radiologic imaging studies). The surgeon puts on and adjusts a headlight then scrubs and gowns. The abdomen and perineum are draped to allow wide access to both operative fields and all potential stoma sites.

Description of Intra-Service Work:

The abdomen is entered through a long midline incision, excising the prior hysterectomy scar. Adhesions to the anterior abdominal wall are lysed to gain full access to the peritoneal cavity. The abdomen is thoroughly explored including para-aortic node biopsy and with special attention to detect malignancy outside the confines of the pelvis (eg, liver, peritoneal or omental implants). Adhesions in the pelvis are biopsied for frozen section examination. The obturator fossa and region lateral to the external iliac vessels are explored to determine whether extension beyond the psoas muscle has occurred. Care is taken not to separate adherent viscera from the rectosigmoid to avoid opening up tumor-containing tissue planes. There is a large, bulky pelvic mass in which posterior bladder, rectum, and right ovary are involved. The mass appears free from the sacrum posteriorly and does not appear to invade the pelvic sidewalls. Adhesion biopsies return negative for cancer, and there is no evidence of tumor outside of the pelvis. The tumor appears resectable by pelvic exenteration. The left colon is thoroughly mobilized and the left ureter is identified. The inferior mesenteric artery is divided at its origin. The right colon is mobilized to allow identification of the right ureter and in anticipation of urinary tract reconstruction. The ureters are traced towards the pelvis with care to avoid devascularizing them by excessive skeletonization. The sigmoid colon is divided and the distal end traced into the pelvis. The rectosigmoid is sharply dissected free from the sacrum posteriorly, care being taken to avoid entering the presacral venous plexus. The lateral rectal vascular stalks are sequentially ligated. The iliac vessels are identified bilaterally and the pelvic visceral branches are divided. At any point where brisk bleeding ensues and the patient is hypotensive, the dissection is halted and the area packed until the anesthesiologist restores intravascular volume and blood components given, if needed. The anterior attachments of the bladder to the abdominal wall are divided. The right ovarian ligaments are divided. The pelvic peritoneum is incised and mobilized centrally with the bladder, right adnexa, and rectosigmoid stump, clearing the obturator fossas and the iliac node chains. The ureters and urethra are divided. A perineal incision encompassing the urethra, labia minora, and anus is made and deepened upwards through the anococcygeal ligament and up through the perineal fascia overlying the ischioanal fat. The levator ani is identified and detached from its pelvic insertions and then from its retropubic periosteal insertions, ultimately meeting the pelvic dissection. The specimen is removed through the perineum en bloc and oriented for the pathologist with marking sutures and verbally (the pathologist is called to the OR to receive the specimen). Any margins with suspicion of tumor are checked by frozen section. Clips are placed along the pelvic margins of resection to guide any future radiotherapy.

Attention is turned to reconstruction. A segment of ileum is isolated with its blood supply. An ileostomy is then completed. The isolated segment of ileum is to serve as the urinary diversion. The ureters are mobilized and implanted in the base of the ileal conduit. The distal limb of the conduit is brought out through a separate skin incision and matured as an ileal conduit (stoma). Ureteral stents are placed within the ureters and brought out through the ileal stoma and marked appropriately as right and left. The pelvic peritoneal defect is closed with absorbable mesh. A tract through the abdominal wall is created at the previously marked colostomy site. The proximal sigmoid stump is cleared of tissue for exteriorization as a colostomy and is delivered through the tract to skin level. The sigmoid is then fixed internally with sutures to the peritoneum of the anterior abdominal wall to minimize paracolostomy hernia and prolapse potential. The small bowel is positioned to minimize adhesions and to avoid torsion. The abdominal incision is closed in layers after several pelvic drains are placed through separate stab incisions. The perineal wound is carefully closed in layers over suction drains. The colostomy is opened and matured. Sterile dressings and a colostomy and ileostomy bag are applied.

Description of Post-Service Work:

Post-service work begins after skin closure in the operating room and includes the application of sterile dressings, writing postoperative orders, completing the operative dictation, communicating with family and other health care professionals, and all hospital visits and services performed by the surgeon, including ICU care and ventilator management as needed, as well as ordering and reviewing postoperative radiographs and laboratory studies, wound and drain care, and managing antibiotics and analgesics (including coordination of epidural analgesics with the anesthesiologist). The patient is returned intubated and ventilated to the ICU. The patient develops oliguria despite an apparently adequate central venous pressure. Swan-Ganz monitoring is initiated and additional surgeon visits to the ICU are made on the operative day to manage postoperative fluids and blood component therapy as well as the ventilator. Over the next 48 hours, further volume resuscitation followed by gentle diuresis is required and the ventilatory support is weaned. The patient is extubated on the third postoperative day and transferred from the ICU the morning of the 4th postoperative day. Enteral feedings, managed by the surgeon, are initiated on postoperative day four through a nasoenteral tube passed at the time of operation. On postoperative day seven, the patient is acutely febrile and hypotensive and is returned to the ICU, where she requires vigorous fluid resuscitation and vasopressors in addition to

The surgeon and consulting urologist agree that urinary tract evaluation is indicated and a CT scan is obtained which shows a small leak at the ureteral anastomosis. A percutaneous drain is placed by the radiologist. She is found to be hypoxemic but V/Q scan is negative for pulmonary embolism, and she responds to vigorous pulmonary toilet and supplemental oxygen. The patient improves over the next 48 hours and is transferred out of the ICU on postoperative day 10. The surgeon reviews the case with the consulting medical oncologist and radiation therapist and presents the patient to the hospital Tumor Board. She is transitioned to an oral diet, and the drains are sequentially removed. The abdominal wound staples are removed on postoperative day 13 and she is discharged to home. Discharge management includes the surgeon's final examination of the patient, instructions for continuing care, and preparation of discharge records and confirming arrangements for home nursing care and enterostomal visits. Additionally, all post-discharge office visits for the first 90 days after the day of operation are considered part of the postoperative work for this procedure, including removal of sutures, ordering and evaluating periodic imaging and laboratory reports, overseeing stomal function, coordination of postoperative chemoradiotherapy, and antibiotic and/or analgesic adjustments.

SURVEY DATA: Specialty(s): American College of Surgeons; American Society of Colon and Rectal Surgeons

Survey n:	87													
Response:	47													
Rate %:	54%													
		RVW	PRE total min	INTRA total min	HOSP total min	OFF total min	Same day total min	ICU		Hosp. - Other		Dischg day total min	Office	
								# visits	total min	# visits	total min		# visits	total min
	low	28.00		240										
	25th%	38.35		240										
	MED	38.40	90	300	270	100	40	4	80	9	110	40	5	100
	75th%	39.50		298										
	high	51.19		600										

Comparative Time and Visit Data for Surveyed Service and Key Reference Service(s):

CPT Code	Resp n	RVW	PRE total min	INTRA total min	HOSP total min	OFF total min	Exper	
							med	
4511X	47	38.39*	90	300	270	100	1	
58240 ref service	35	38.39	90	300	229	75	0	
51597 ref service	34	38.35	85	300	248	85	0	
58240 5-yr rev	54 ACOG		120	480	387	90	n/a	
51597 5-yr rev	75 AUA		90	300	330	90	n/a	

*recommended

KEY REFERENCE SERVICE(S):

1998 RVW	Global	CPT	Descriptor
38.39	090	58240	Pelvic exenteration for gynecologic malignancy, with total abdominal hysterectomy or cervicectomy, with or without removal of tube(s), with or without removal of ovary(s), with removal of bladder and ureteral transplantations, and/or abdominoperineal resection of rectum and colon and colostomy, or any combination thereof
38.35	090	51597	Pelvic exenteration, complete, for vesical, prostatic or urethral malignancy, with removal of bladder and ureteral transplantations, with or without hysterectomy and/or abdominoperineal resection of rectum and colon and colostomy, or any combination thereof

	<i>Mean</i> Intensity/Complexity Measures		
	4511X	58240	51597
Mental effort and judgment	4.67	4.57	4.62
Technical skill and physical effort	4.76	4.69	4.79
Psychological stress	4.59	4.54	4.64

[Note: This survey does not include other intensity measures because it was conducted prior to the release of the new survey instrument.]

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S): Compare the pre-, intra-, and post-service time and the intensity (mental effort and judgment; technical skill & physical effort; and psychological stress) of the service you are rating to the key reference services listed above.

CPT codes 4511X, 58240, and 51597 describe the same procedure, pelvic exenteration. There are two language differences in the nomenclature for these three pelvic exenteration codes:

1. The diagnosis; and
2. The "*with or without*" designations for the primary and secondary components exenterated.

These language differences do not effect any differences in work. Therefore, an RVW of 38.39 is recommended for CPT 4511X. This value is slightly less than the survey median and is comparable to the RVWs for CPT codes 58240 and 51597.

ADDITIONAL RATIONALE (eg, if recommended RVUs are based on an alternative method instead of the survey results):

None.

FREQUENCY INFORMATION

How was this service previously reported?

51597 or 58240

Of six collected series of exenterations for colorectal cancers, 40% were performed in males and 60% performed in females. Rodriguez-Bigas collected 857 exenterations for all diseases of which 38% were done for colorectal malignancy. If we assume men are most likely coded with the urology (anterior pelvic exenteration) code and that women are most often coded using the gynecologic code, then: $0.38 \times 0.6 = 0.23$ colorectal exenterations in women and $0.38 \times 0.4 = 0.14$ colorectal exenterations in men. Therefore, 23% now coded with gynecologic exenteration code will use the new colorectal code and 14% now coded with the urologic exenteration code will be coded with the new code.

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. Locally advanced (at initial presentation) primary colorectal malignancies: there are 150,000 new cases of colorectal cancer annually in US; 10-15% will be locally advanced but confined to the pelvis and without distant unresectable metastases = 15,000 to 22,500

B. Pelvic recurrences of colorectal cancer: pelvic locoregional disease is the most common recurrence pattern of rectal cancer; 4-33% of rectal cancers will have pelvic recurrences, and 40-50% are resectable; rectal cancer = 40,000 new cases/year so $40,000 \times 15\% \times 50\% = 3000$; most recur within first two years so about 1500/year

TOTAL A + B = 16,500 to 24,000

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

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Laparoscopic Adrenalectomy

CPT Code 56321 *Laparoscopy, surgical; with adrenalectomy, partial or complete, or exploration of adrenal gland with or without biopsy, transabdominal, lumbar or dorsal* was created to accurately describe the application of laparoscopy to adrenalectomy, and also allow for outcomes analysis or tracking of the laparoscopic procedure.

The specialty society chose to withdraw this issue from the May 1998 RUC agenda. The specialty society plans to present this code along with 56345 *Laparoscopic surgical; splenectomy* and 56347 *Laparoscopic surgical; jejunostomy (eg, for decompression or feeding)* at the September 1998 RUC meeting, when adequate survey data is developed. Until that time, the RUC agrees with the specialty society that CPT code 56321 be "carrier priced". This laparoscopic procedure is relatively new and not commonly performed at this time.

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
•56321	E1	Laparoscopy, surgical; with adrenalectomy, partial or complete, or exploration of adrenal gland with or without biopsy, transabdominal, lumbar or dorsal	090	Carrier Price (Interim Recommendation)

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Radical Vaginectomy with Removal of Paracolpos

A series of new codes have been established to capture the complexity of radical colpectomy procedures as the existing colpectomy codes are often performed for benign conditions. Typically, gynecologic oncologists perform these procedures because of their complexity. Previous surgery has destroyed the usual anatomic landmarks and the absence of the uterus and cervix make dissection of the bladder, ureters, rectum, and urethra more difficult than a similar procedure CPT Code 58210 *Radical abdominal hysterectomy, with bilateral total pelvic lymphadenectomy and para-aortic lymph node sampling (biopsy), with or without removal of tube(s), with or without removal of ovary(s)*.

The work described by 57107 *Vaginectomy, partial removal of vaginal wall; with removal of paravaginal tissue (radical vaginectomy)* is an abdominal procedure rather than a vaginal procedure that requires removal of all the supporting tissues in the upper vagina. This procedure carries a very high risk of bladder dysfunction or injury requiring extended catheter care. The work involved in 57107 is most similar to 58210 (work RVU=28.55) even though the survey data shows a slightly lower median intra-service time and lower intensity rankings. These differences result primarily from the fact that 58210 includes a bilateral pelvic lymphadenectomy, while 57107 does not. Therefore, the RUC recommends the survey median work value of 23.00.

CPT code 57109 *Vaginectomy, partial removal of vaginal wall; with removal of paravaginal tissue (radical vaginectomy) with bilateral total pelvic lymphadenectomy and para-aortic lymph node sampling (biopsy)* is also very similar to CPT 58210 in the amount of physician work involved. However, survey respondents estimated more intra-service time for 57109 (240 minutes compared to 200 minutes for 58210). Both 57109 and 58210 have almost identical amounts of post-operative care and levels of intensity. The RUC recommends a work RVU of 27.00 which is the 25th percentile of the survey results.

CPT code 57111 *Vaginectomy, complete removal of vaginal wall; with removal of paravaginal tissue (radical vaginectomy)* and 57112 *Vaginectomy, complete removal of vaginal wall; with removal of paravaginal tissue (radical vaginectomy) with*

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bilateral total pelvic lymphadenectomy and para-aortic lymph node sampling (biopsy) are both similar to the radical hysterectomy (58210). However, survey data show a higher median intra-service time 240 minutes (57111) and 200 (58210) and a corresponding higher intra-service intensity ranking 5(57111) and 4(58210). These differences reflect the greater demands on the physicians technical skill entailed in performing 57111. Because 58210 includes a bilateral pelvic lymphadenectomy, the RUC recommends a survey median 27.00 work RVUs which seemed most appropriate. According to survey data, this is an extremely rare procedure performed less than fifty times a year.

CPT 57112, is similar to 58210, but requires in total more physician work. Survey respondents estimated more intra-service time 270 minutes (57112) and 200 minutes (58210), higher levels of mental effort (5 compared to 4) and higher pre- and intra service time (pre-4.50 compared to 4 and intra-5 compared to 4). The higher intra-service work for 57112 is more technically challenging because previous surgery has destroyed the usual anatomic landmarks and the absence of the uterus and cervix make dissection of the bladder, ureters, rectum, and urethra more difficult. Also, 57112 is a very rare procedure that is performed less than fifty times a year. Therefore, the RUC recommends a work RVU of 29.00 for CPT code 57112, which is the survey median.

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
•57106	J7	Vaginectomy, partial removal of vaginal wall;	090	6.36 (Renumbered code 57108)
57108	J1	Colpectomy, obliteration of vagina; partial <u>(57108 has been deleted. To report see 57106</u>	090	N/A
•57107	J2	with removal of paravaginal tissue (radical vaginectomy)	090	23.00

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CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
•57109	J3	with removal of paravaginal tissue (radical vaginectomy) with bilateral total pelvic lymphadenectomy and para-aortic lymph node sampling (biopsy)	090	27.00
57110	J4	<u>Vaginectomy, complete removal of vaginal wall;</u>	090	14.29 (No Change)
•57111	J5	with removal of paravaginal tissue (radical vaginectomy)	090	27.00
•57112	J6	with removal of paravaginal tissue (radical vaginectomy) with bilateral total pelvic lymphadenectomy and para-aortic lymph node sampling (biopsy)	090	29.00

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57107

5711X1

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code: 5711X1 Tracking Number: 52 Global Period: 090 Recommended RVW: 23.00

CPT Descriptor: Vaginectomy, partial removal of vaginal wall; with removal of paravaginal tissue (radical vaginectomy)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 68 year old diabetic women with hypertension who had a hysterectomy 20 years ago for severe menorrhagia was found to have a superficially invasive cancer in the vaginal apex. Treatment options of surgery versus radiation therapy were discussed. Because of the patient's advanced age, medical problems, and low risk of nodal spread, she was advised that the surgical approach would consist of a radical partial vaginectomy without lymphadenectomy to minimize the risks of surgery. She chose the operative approach and is now prepared for surgery. Following the surgical procedure and recovery in the hospital, she receives follow-up care during the 90 day global period.

Description of Pre-Service Work: Pre-service work includes taking a comprehensive history and performing a comprehensive physical examination to determine the patient's current medical status. Indications and alternatives including risks and benefits of the procedure are carefully reviewed with the patient and family members. An informed consent is obtained. The physician will admit the patient to the hospital, dictate an admission history and physical, prepare the hospital records and chart in accordance with hospital policy, will check on the patient, and will review preoperative studies including blood work, x-rays and additional studies as needed. The physician then scrubs for the procedure and waits for induction of anesthesia and surgical preparation of the patient.

Description of Intra-Service Work: The patient is examined under anesthesia to assess her operability. An abdominal skin incision is made and carried by layers until the peritoneal cavity is entered. An exploration of the abdomen, pelvis and retroperitoneal area is performed. The upper half of the vagina is removed by dissecting the bladder off the anterior vaginal wall and the rectum off the posterior vaginal wall, followed by dissection of the ureters from the parametria. The ligamentous supports for the vagina are incised lateral and posterior to the vagina, and the ureter is untunnelled from the ligamentous supports by cutting, clamping and suturing the vascular structures surrounding them. The peritoneal cavity is irrigated and hemostasis is secured with hemostatic agents and electrocautery. Closed suction drains typically are used. The abdomen is closed in layers and local anesthetic is administered to the skin when indicated. The patient is transferred to a stretcher and escorted to the recovery room.

Description of Post-Service Work: Post-service work begins in the operating room following skin closure with the application of sterile dressings. Post-service work includes monitoring the patient's stability in the recovery room, communicating with the family and other health care professionals (including written and oral reports and orders), ordering and reviewing post-operative radiographs and laboratory studies, careful attention to fluid volume and electrolyte status, monitoring and care of the incision, monitoring, maintaining, and removing all tubes, drains and catheters, antibiotic and pain medication management, and all other hospital visits. Discharge management includes the surgeon's final examination of the patient with instructions for continuing care and preparation of discharge records. Additionally all post-discharge visits for this procedure for 90 days after the day of operation are considered part of the post-service work, including removal of sutures, ordering and evaluating periodic imaging and laboratory studies, if needed, obtaining and reviewing all final surgical histopathology results, further coordination of care with referring physician, antibiotic and pain medication adjustments, and referral to specialists such as radiation oncologists when required.

CPT Code: 5711X1

SURVEY DATA:

Specialty: The American College of Ob-Gyn (ACOG)

Sample Size: 119 Response Rate: (%): 24% (29) Initial Median RVW: 22.75 Final Median RVW: 23.0

Type of Sample (Circle One): random, (panel) convenience. Explanation of sample size: rare procedure

25th Percentile RVW: 21.00 75th Percentile RVW: 25.00 Low: 13.20 High: 28.50

Median Pre-Service Time: 75 Median Intra-Service Time: 180

25th Percentile Intra-Svc Time: 145 75th Percentile Intra-Svc Time: 210 Low: 90 High: 270

Median Post-Service Time:	<u>Total Time</u>	<u>Number of Visits</u>
Day of Procedure:	<u>40</u>	<u> </u>
ICU:	<u>0</u>	<u>0</u>
Other Hospital:	<u>75</u>	<u>5</u>
Office:	<u>45</u>	<u>3</u>

KEY REFERENCE SERVICE (S):

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
1)	58210	Radical hysterectomy with lymphadenectomy	28.55
2)	57108	Partial colectomy	6.36
3)			
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.

INTENSITY/COMPLEXITY MEASURES

	<u>CPT Code</u>	<u>Reference Service 1</u>	<u>Reference Service 2</u>
	5711X1	57108	58210
<u>Time Estimates</u>			
Median Pre-Time	<input type="text" value="75"/>	<input type="text" value="30.5"/>	<input type="text" value="60"/>
Median Intra-Time	<input type="text" value="180"/>	<input type="text" value="50.5"/>	<input type="text" value="200"/>
Median Post-Time	<input type="text" value="40"/>	<input type="text" value="15.5"/>	<input type="text" value="45"/>

Mental Effort and Judgement

The number of possible diagnosis and/or the number of management options that must be considered	4.0	2	4
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The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.0	2	4
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Urgency of medical decision making	4.0	1.5	4
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Technical Skill/Physical Effort

Technical skill required	5.0	2	5
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Physical effort required	4.0	2	5
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Psychological Stress

The risk of significant complications, morbidity and/or mortality	4.0	2	5
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Outcome depends on the skill and judgement of physician	5.0	2	5
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Estimated risk of malpractice suit with poor outcome	4.0	2	4
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INTENSITY/COMPLEXITY MEASURES

CPT Code

Reference Service 1

Reference Service 2

5711X1

57108

58210

Time Segments

Pre-Service intensity/complexity	4.0	1.5	4
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Intra-Service intensity/complexity	4.0	2	4
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Post-Service intensity/complexity	4.0	1.5	4
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ADDITIONAL RATIONALE

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

Survey data for 5711X1 differ markedly from the data for 57108 (Colpectomy, obliteration of vagina; partial), accurately reflecting the dissimilarity of the procedures. The primary difference is that 5711X1 is an abdominal procedure rather than a vaginal procedure. 5711X1 requires removal of all of the supporting tissues of the upper vagina in comparison to removal of only the vaginal wall in 57108. In addition, 5711X1 carries a very high risk of bladder dysfunction or injury requiring extended catheter care, while the risk of these complications is minimal for 57108. Respondents estimated twice as much pre-service time, more than three times as much intra-service time, a significantly longer hospital stay, and more post-operative visits for 5711X1. The higher intensity rankings for 5711X1 reflect the significantly greater technical skill and physical effort required, as well as the substantially greater risk of complications or associated morbidity.

The radical partial vaginectomy (5711X1) is most similar to the radical hysterectomy (58210). The survey data show a slightly lower median intra-service time and lower intensity rankings for physical effort and risk of complications. These differences result primarily from the fact that 58210 includes a bilateral pelvic lymphadenectomy, while 5711X1 does not. However, 5711X1 is actually more technically demanding because previous surgery has destroyed the usual anatomic landmarks and the absence of the uterus and cervix make dissection of the bladder, ureters, and rectum more difficult. Therefore, the survey median of 23.00 work RVUs seemed appropriate for 5711X1.

FREQUENCY INFORMATION

How was this service previously reported? 58999

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? 300

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

December 1997

5711X2

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

57109
 CPT Code: 5711X2 Tracking Number: 53 Global Period: 090 Recommended RVW: 27.00

CPT Descriptor: Vaginectomy, partial removal of vaginal wall; with removal of paravaginal tissue (radical vaginectomy) with bilateral total pelvic lymphadenectomy and para-aortic lymph node sampling (biopsy)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 49 year old woman who underwent a vaginal hysterectomy for carcinoma in situ 3 years ago was found to have a 1 cm lesion in the vaginal apex. A biopsy revealed an invasive squamous cell carcinoma. She was counseled about treatment options of a partial radical vagnectomy with bilateral pelvic lymphadenectomy and para-aortic lymph node sampling versus radiation therapy. She chose the operative approach and is now prepared for surgery. Following the surgical procedure and recovery in the hospital, she receives follow-up care during the 90 day global period.

Description of Pre-Service Work: Pre-service work includes taking a comprehensive history and performing a comprehensive physical examination to determine the patient's current medical status. Indications and alternatives including risks and benefits of the procedure are carefully reviewed with the patient and family members. An informed consent is obtained. The physician will admit the patient to the hospital, dictate an admission history and physical, prepare preoperative orders and coordinate scheduling of surgery with the designated assistant. The physician will be responsible for preparing the hospital records and chart in accordance with hospital policy, will check on the patient, and will review preoperative studies including blood work, x-rays and additional studies as needed. The physician then scrubs for the procedure and waits for induction of anesthesia and surgical preparation of the patient.

Description of Intra-Service Work: The patient is examined under anesthesia to assess her operability. An abdominal skin incision is made and carried by layers until the peritoneal cavity is entered. An exploration of the abdomen, pelvis and retroperitoneal areas is performed. The upper half of the vagina is removed by dissecting the bladder off the anterior vaginal wall and the rectum off the posterior vaginal wall followed by dissection of the ureters from the parametria. The ligamentous supports for the vagina are incised lateral and posterior to the vagina and the ureter is untunnelled from the ligamentous supports by cutting, clamping and suturing the vascular structures surrounding them. A radical bilateral pelvic lymphadenectomy is performed either prior to or immediately following the radical excision of the upper half of the vagina. The pelvic lymphadenectomy skeletonizes the common iliac, external iliac, hypogastric and obturator vessels in order to remove all of the lymph nodes that drain the upper vagina. Hemostasis is secured with hemostatic agents and electrocautery. Closed suction drains typically are used. The abdomen is closed in layers and local anesthetic is administered to the skin when indicated. The patient is transferred to stretcher and escorted to the recovery room.

Description of Post-Service Work: Post-service work begins in the operating room following skin closure with the application of sterile dressings. Post-service work includes monitoring the patient's stability in the recovery room, communicating with the family and other health care professionals (including written and oral reports and orders), ordering and reviewing post-operative radiographs and laboratory studies, careful attention to fluid volume and electrolyte status, monitoring and care of the incision, monitoring, maintaining and removing all tubes drains and catheters, antibiotic and pain medication management, and all other hospital visits and services performed by the surgeon. Discharge management includes the surgeon's final examination of the patient with instructions for continuing care and preparation of discharge records. Additionally all post-discharge visits for this procedure for 90 days after the day of operation are considered part of the post-service work, including removal of sutures, ordering and evaluating periodic imaging and laboratory studies, if needed, obtaining and reviewing of all final surgical histopathology results, further coordination of care with referring physician, antibiotic and pain medication adjustments, and referral to specialists such as radiation oncologists when required.

SURVEY DATA:

Specialty: The American College of Ob-Gyn (ACOG)

Sample Size: 119 Response Rate: (%)25%(30) Initial Median RVW: 27.00 Final Median RVW: 27.00

Type of Sample (Circle One): random, panel convenience. Explanation of sample size: rare procedure

25th Percentile RVW: 27.00 75th Percentile RVW: 29.10 Low: 23 High: 32.85

Median Pre-Service Time: 60 Median Intra-Service Time: 240

25th Percentile Intra-Svc Time: 195 75th Percentile Intra-Svc Time: 240 Low: 160 High: 360

Median Post-Service Time:	Total Time	Number of Visits
Day of Procedure:	<u>52.50</u>	<u> </u>
ICU:	<u>0</u>	<u>0</u>
Other Hospital:	<u>90</u>	<u>5</u>
Office:	<u>60</u>	<u>3</u>

Handwritten notes:
 - 99231 * 4 99238 * 1
 3 * 99213
~~52.50~~ TOTAL Time

KEY REFERENCE SERVICE (S):

	CPT Code	CPT Descriptor	RVW
1)	58210	Radical hysterectomy with lymphadenectomy	28.85
2)	38770	Pelvic lymphadenectomy	13.97
3)			
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.

INTENSITY/COMPLEXITY MEASURES

	CPT Code	Reference Service 1	Reference Service 2
	5711X2	58210	38770
Time Estimates			
Median Pre-Time	<u>60</u>	<u>60</u>	<u>60</u>
Median Intra-Time	<u>240</u>	<u>200</u>	<u>120</u>

5711X2

Mental Effort and Judgement

The number of possible diagnosis and/or the number of management options that must be considered	4	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	3
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Urgency of medical decision making	4	4	3
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Technical Skill/Physical Effort

Technical skill required	5	5	3
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Physical effort required	5	5	3
--------------------------	---	---	---

Psychological Stress

The risk of significant complications, morbidity and/or mortality	5	5	3
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Outcome depends on the skill and judgement of physician	5	5	3
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Estimated risk of malpractice suit with poor outcome	4	4	3
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INTENSITY/COMPLEXITY MEASURES

<u>CPT Code</u>	<u>Reference Service 1</u>	<u>Reference Service 2</u>
5711X2	58210	38770

Time Segments

Pre-Service intensity/complexity	4	4	3
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Intra-Service intensity/complexity	5	4	3
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Post-Service intensity/complexity	4	4	3
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ADDITIONAL RATIONALE

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

Total physician work is very similar for 5711X2 and 58210 (radical hysterectomy). Survey respondents estimated more intra-service time for 5711X2 and almost identical amounts of post-operative care and levels of intensity. Intra-service work for 5711X2 is actually more technically demanding because previous surgery has destroyed the usual anatomic landmarks and the absence of the uterus and cervix make dissection of the bladder, ureters, and rectum more difficult.

5711X2

5711X2 includes a bilateral pelvic lymphadenectomy (38770-50). Applying Medicare payment rules for bilateral and multiple procedures, total work RVUs for 5711X2 would be:

23.00 (recommended RVUs for 5771X1)
+9.92 RVUs [RVUs for 38770-50-51 → (13.23 + 50% x 13.23 = 19.85) x 50%]
32.92 RVUs

The survey median of 27.00 seems reasonable for 5711X2.

FREQUENCY INFORMATION

How was this service previously reported? 38770-50, 57108-22-51

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? 600

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

December 1997

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

CPT Code: 5711X3 Tracking Number: 56 Global Period: 090 Recommended RVW: 27.00

CPT Descriptor: Vaginectomy, complete removal of vaginal wall; with removal of paravaginal tissue (radical vaginectomy)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 70 year old woman who underwent a hysterectomy 30 years ago for a benign condition was found to have a verrucous vaginal cancer involving the middle and lower 1/3 of the vagina. She has been advised to undergo surgical removal of the cancer consisting of a total radical vaginectomy. She was counseled that a lymphadenectomy is not required because of the low risk of lymphatic spread for this tumor type. The patient is now prepared for surgery. Following the surgical procedure and recovery in the hospital, she receives follow-up care during the 90 day global period.

Description of Pre-Service Work: Pre-service work includes taking a comprehensive history and performing a comprehensive physical examination to determine the patient's current medical status. Indications and alternatives including risks and benefits of the procedure are carefully reviewed with the patient and family members. An informed consent is obtained. The physician will admit the patient to the hospital, dictate an admission history and physical, prepare preoperative orders and coordinate scheduling of surgery with the designated assistant. The physician will be responsible for preparing the hospital records and chart in accordance with hospital policy, will check on the patient, and will review preoperative studies including blood work, x-rays and additional studies as needed. The physician then scrubs for the procedure and waits for induction of anesthesia and surgical preparation of the patient.

Description of Intra-Service Work: The patient is examined under anesthesia to assess her operability. An abdominal skin incision is made and carried by layers until the peritoneal cavity is entered. An exploration of the abdomen, pelvis and retroperitoneal areas is performed. The bladder is dissected off the anterior vaginal wall and the rectum is dissected off the posterior vaginal wall down to the level of the distal vagina. The ureters are dissected from their peritoneal attachments and are untunnelled from the ligamentous tissue adjacent to the vagina. All of the ligamentous support is cut at the level of the pelvic sidewall permitting mobilization of the vagina. All vascular pedicles must be clamped and sutured. Following complete mobility of the vaginal wall, the surgeon makes a separate incision at the vaginal introitus and develops a tissue plane lateral to the vaginal wall with great care being taken to avoid injury to the bladder and rectum. The vaginal incision is extended to meet the incision made previously through the abdominal wall. Once this is accomplished the entire vagina and paravaginal tissues are excised. The peritoneal cavity is then irrigated and hemostasis is secured with hemostatic agents and electrocautery. Closed suction drains typically are used. The abdomen is closed in layers and local anesthetic is administered to the skin when indicated. The patient is transferred to a stretcher and escorted to the recovery room.

Description of Post-Service Work: Post-service work begins in the operating room following skin closure with the application of sterile dressings. Post-service work includes monitoring the patient's stability in the recovery room, communicating with the family and other health care professionals (including written and oral reports and orders), ordering and reviewing post-operative radiographs and laboratory studies, careful attention to fluid volume and electrolyte status, monitoring and care of the incisions, monitoring maintaining and removing all tubes drains and catheters, antibiotic and pain medication management, and all other hospital visits and services performed by the surgeon. Discharge management includes the surgeon's final examination of the patient with instructions for continuing care and preparation of discharge records. Additionally all post-discharge visits for this procedure for 90 days after the day of the operation are considered part of the post-service work, including removal of sutures, ordering and evaluating periodic imaging and laboratory studies, if needed, obtaining and reviewing all final surgical histopathology results, further coordination of care with referring physician, antibiotic and pain medication adjustments, and referral to specialists such as radiation oncologist when required.

SURVEY DATA:

Specialty: The American College of Ob-Gyn (ACOG)

Sample Size: 119 Response Rate: (%): 23%(28) Initial Median RVW: 25.00 Final Median RVW: 27.00

Type of Sample (Circle One): random, panel, convenience. Explanation of sample size: rare procedure

25th Percentile RVW: 23.00 75th Percentile RVW: 27.75 Low: 20 High: 32

Median Pre-Service Time: 82.50 Median Intra-Service Time: 240

25th Percentile Intra-Svc Time: 185 75th Percentile Intra-Svc Time: 240 Low: 140 High: 360

Median Post-Service Time: Total Time Number of Visits

Day of Procedure: 45 _____

ICU: 0 _____

Other Hospital: 90 5

Office: 60 3

99231 * 4
99238 * 1

→ 99213 * 3

549 TOTAL

KEY REFERENCE SERVICE (S):

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
1)	58210	Radical hysterectomy with lymphadenectomy	28.85
2)	57110	Colpectomy, obliteration of vagina; complete	14.19
3)			
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.

INTENSITY/COMPLEXITY MEASURES

	<u>CPT Code</u>	<u>Reference Service 1</u>	<u>Reference Service 2</u>
<u>Time Estimates</u>	5711X3	58210	57110
Median Pre-Time	82.50	60	60
Median Intra-Time	240	200	150
Median Post-Time	45	45	40

5711X3

Mental Effort and Judgment

The number of possible diagnosis and/or the number of management options that must be considered	4	4	3
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4	4	3
Urgency of medical decision making	4	4	3

Technical Skill/Physical Effort

Technical skill required	5	5	3
Physical effort required	5	5	3

Psychological Stress

The risk of significant complications, morbidity and/or mortality	5	5	3
Outcome depends on the skill and judgment of physician	5	5	3
Estimated risk of malpractice suit with poor outcome	4	4	4

INTENSITY/COMPLEXITY MEASURES

<u>CPT Code</u>	<u>Reference Service 1</u>	<u>Reference Service 2</u>
5711X3	58210	57110

Time Segments

Pre-Service intensity/complexity	4	4	3
Intra-Service intensity/complexity	5	4	3
Post-Service intensity/complexity	4	4	3

ADDITIONAL RATIONALE

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

Survey data for 5711X3 differ markedly from the data for 57110 (Colpectomy, obliteration of vagina; complete), accurately reflecting the dissimilarity of the procedures. The primary difference is that 5711X3 requires both an abdominal and a vaginal incision, but 57110 involves only a vaginal incision. 5711X3 includes removal of all of the supporting tissues of the entire vagina, while 57110 requires only removal of the vaginal wall. In addition, 5711X3 carries a high risk of bladder dysfunction or injury requiring extended catheter care; the risk of these complications is minimal for 57110. Respondents estimated substantially more pre- and intra-service time, a significantly longer hospital stay, and more post-operative visits for 5711X3. The higher

5711X3

intensity rankings for 5711X3 reflect the significantly greater technical skills and physical effort required, as well as the substantially greater risk of complication or associated morbidity.

The radical complete vaginectomy (5711X3) is most similar to the radical hysterectomy (58210). The survey data show a higher median intra-service time and a higher intra-service intensity ranking for 5711X3. These difference reflect the greater demands on the physician's technical skill entailed in performing 5711X3. The radical complete vaginectomy is more technically challenging than 58210 because previous surgery has destroyed the usual anatomic landmarks and the absence of the uterus and cervix make dissection of the bladder, ureters, rectum, and urethra more difficult. However, 5711X3 does not include a bilateral pelvic lymphadenectomy, while 58210 does. Therefore, the survey median of 27.00 work RVUs seemed appropriate for 5711X3.

FREQUENCY INFORMATION

How was this service previously reported? 57110-22

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? 50

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

December 1997

57112

5711X4

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

CPT Code: 5711X4 Tracking Number: Global Period: 090 Recommended RVW: 29.00

CPT Descriptor: Vaginectomy, complete removal of vaginal wall; with removal of paravaginal tissue (radical vaginectomy) with bilateral total pelvic lymphadenectomy and para-aortic lymph node sampling (biopsy)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 40 year old woman who underwent a hysterectomy 3 years earlier for carcinoma in situ of the cervix was found to have an invasive cancer of the upper and middle 1/3 of the vagina. There was no evidence of extension into the paravaginal tissues, bladder or rectum. Treatment by surgery or radiation therapy was discussed with the patient. She was counseled that in order to achieve satisfactory surgical margins a total radical vaginectomy with bilateral pelvic lymphadenectomy and periaortic lymph node sampling should be performed. The patient is now prepared for surgery. Following the surgical procedure and recovery in the hospital, she receives follow-up care during the 90 day global period.

Description of Pre-Service Work: Pre-service work includes taking a comprehensive history and performing a comprehensive physical examination to determine the patient's current medical status. Indications and alternatives including risks and benefits of the procedure are carefully reviewed with the patient and family members. An informed consent is obtained. The physician will admit the patient to the hospital, dictate an admission history and physical, prepare preoperative orders and coordinate scheduling of surgery with the designated assistant. The physician will be responsible for preparing the hospital records and chart in accordance with hospital policy, will check on the patient, and will review preoperative studies including blood work, x-rays and additional studies as needed. The physician then scrubs for the procedure and waits for induction of anesthesia and surgical preparation of the patient.

Description of Intra-Service Work: The patient is examined under anesthesia to assess her operability. An abdominal skin incision is made and carried by layers until the peritoneal cavity is entered. An exploration of the abdomen, pelvic and retroperitoneal areas is performed. The bladder is dissected off the anterior vaginal wall and the rectum is dissected off the posterior vaginal wall down to the level of the distal vagina. The ureters are dissected from their peritoneal attachments and are untunnelled from the ligamentous tissue adjacent to the vagina. All of the ligamentous support is cut at the level of the pelvic sidewall permitting mobilization of the vagina. All vascular pedicles must be clamped and sutured. Following complete mobility of the vaginal wall, the surgeon makes a separate incision at the vaginal introitus and develops a tissue plane lateral to the vaginal wall with great care being taken to avoid injury to the bladder and rectum. The vaginal incision is extended to meet the incision made previously through the abdominal wall. Once this is accomplished the entire vagina and paravaginal tissues are excised. Following complete hemostasis the surgeon changes the surgical gown and performs a pelvic lymphadenectomy and selected periaortic lymph node sampling through the abdominal incision. The pelvic lymphadenectomy includes skeletonizing the common iliac, external iliac, hypogastric and obturator vessels in order to remove all of the lymph nodes that drain the vagina. The peritoneal cavity is then irrigated and hemostasis is secured with hemostatic agents and electrocautery. Closed suction drains typically are used. The abdomen is closed in layers and local anesthetic is administered to the skin when indicated. The patient is transferred to a stretcher and escorted to the recovery room.

Description of Post-Service Work: Post-service work begins in the operating room following skin closure with the application of sterile dressings. Post-service work includes monitoring the patient's stability in the recovery room, communicating with the family and other health care professionals (including written and oral reports and orders), ordering and reviewing post-operative radiographs and laboratory studies, careful attention to fluid volume and electrolyte status, monitoring and care of the incisions, monitoring maintaining and removing all tubes, drains and catheters, antibiotic and pain medication management, and all other hospital visits and services performed by the surgeon. Discharge management includes the surgeon's final examination of the patient with instructions for continuing care and preparation of discharge records. Additionally all post-discharge visits for this procedure for 90 days after the day of operation are considered part of the post-service work, including

5711X4

removal of sutures, ordering and evaluating periodic imaging and laboratory studies, if needed, obtaining and reviewing all final surgical histopathology results, further coordination of care with referring physician, antibiotic and pain medication adjustments, and referral to specialists such as radiation oncologists when required.

SURVEY DATA:

Specialty: The American College of Ob-Gyn (ACOG)

Sample Size: 119 Response Rate: (%): 23% (28) Initial Median RVW: 29.00 Final Median RVW: 29.00

Type of Sample (Circle One): random, panel convenience. Explanation of sample size: rare procedure

25th Percentile RVW: 27.25 75th Percentile RVW: 32.00 Low: 27.00 High: 37.00

Median Pre-Service Time: 90 Median Intra-Service Time: 270

25th Percentile Intra-Svc Time: 240 75th Percentile Intra-Svc Time: 345 Low: 180 High: 420

Median Post-Service Time:	<u>Total Time</u>	<u>Number of Visits</u>
Day of Procedure:	<u>60</u>	<u> </u>
ICU:	<u>0</u>	<u>0</u>
Other Hospital:	<u>90</u>	<u>6</u>
Office:	<u>60</u>	<u>3</u>

5711X4

CPT Code: 5711X4

KEY REFERENCE SERVICE (S):

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
1)	58210	Radical hysterectomy	28.85
2)	38770	Pelvic lymphadenectomy	13.97
3)			
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.

INTENSITY/COMPLEXITY MEASURES

	<u>CPT Code</u>	<u>Reference Service 1</u>	<u>Reference Service 2</u>
	5711X4	58210	38770
<u>Time Estimates</u>			
Median Pre-Time	90	60	60
Median Intra-Time	270	200	120
Median Post-Time	60	45	30
<u>Mental Effort and Judgment</u>			
The number of possible diagnosis and/or the number of management options that must be considered	5	4	3
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4	4	3
Urgency of medical decision making	4	4	3
<u>Technical Skill/Physical Effort</u>			
Technical skill required	5	5	3
Physical effort required	5	5	3
<u>Psychological Stress</u>			
The risk of significant complications, morbidity and/or mortality	5	5	3
Outcome depends on the skill and judgment of physician	5	5	3

5711X4

Estimated risk of malpractice suit with poor outcome	4	4	3
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INTENSITY/COMPLEXITY MEASURES

CPT Code

Reference Service 1

Reference Service 2

5711X4

58210

38770

Time Segments

Pre-Service intensity/complexity	4.50	4	3
----------------------------------	------	---	---

Intra-Service intensity/complexity	5	4	3
------------------------------------	---	---	---

Post-Service intensity/complexity	4	4	3
-----------------------------------	---	---	---

ADDITIONAL RATIONALE

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

Total physician work is greater for 5711X4 than for 58210 (radical hysterectomy). Survey respondents estimated more intra-service time, a longer hospital stay, and higher levels of mental effort and pre- and intra-service intensity. Intra-service work for 5711X4 is more technically demanding because previous surgery has destroyed the usual anatomic landmarks and the absence of the uterus and cervix make dissection of the bladder, ureters, rectum, and urethra more difficult.

5711X4 includes a bilateral pelvic lymphadenectomy (38770-50). Applying Medicare payment rules for bilateral and multiple procedures, total work RVUs for 5711X4 would be:

27.00 (recommended RVUs for 5711X3)
 +9.92 RVUs [RVUs for 38770-50-51 → (13.23 + 50% x 13.23 = 19.85) x 50%]
 36.92 RVUs.

The survey median of 29.00 seems reasonable for 5711X4.

FREQUENCY INFORMATION

How was this service previously reported? 38770-50, 57110-22-51

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? 50

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

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS
May 1998

Add-On Codes

In 1999, CPT will identify all add-on codes with consistent language within the code (“list separately in addition to code for primary procedure”) and also will list all of these add-on codes in a separate appendix. The RUC reviewed the list and identified one family of codes to be reviewed, codes 67320, 67331-67334, 67340 for all other codes, the RUC does not recommend a change in the work values. The family of add-on codes in the Strabismus Surgery section of CPT were reevaluated as they are currently identified as stand alone codes with a global period of 90 days. Previously, the descriptors for CPT codes 67320, 67331, 67332, 67334 and 67340 included not only the intraservice work described by the code, but also a number of unstated, but implied, services that are associated with pre service and post service work. These codes will now be identified as add-on codes with a global period of ZZZ and the work rvus should be reduced accordingly.

The RUC recommends the following work values: 4.33 (67320); 4.06(67331); 4.49 (67332); 3.98 (66334); 4.93 (67340). The specialty society used an arithmetic adjustment to the work values of these procedural codes. These proposed values were established by reducing the current work values by 50% using rules for multiple surgical procedures performed on the same day. Also, the Harvard data indicates that 59% of the codes were for intra-work, further justifying these proposed work values.

CPT Code (•New)	CPT Descriptor	Global Period	Work RVU Recommendation
67320	Transposition procedure (eg, for paretic extraocular muscle), any extraocular muscle (specify) (<u>List separately in addition to code for primary procedure</u>) (Use 67320 in conjunction with codes 67311-67318)	ZZZ	4.33
67331	Strabismus surgery on patient with previous eye surgery or injury that did not involve the extraocular muscles (<u>List separately in addition to code for primary procedure</u>) (Use 67331 in conjunction with codes 67311-67318)	ZZZ	4.06
67332	Strabismus surgery on patient with scarring of extraocular muscles (eg, prior ocular injury, strabismus or retinal detachment surgery) or restrictive myopathy (eg, dysthyroid ophthalmopathy) (<u>List separately in addition to code for primary procedure</u>) (Use 67332 in conjunction with codes 67311-67318)	ZZZ	4.49
67334	Strabismus surgery by posterior fixation suture technique, with or without muscle recession (<u>List separately in addition to code for primary procedure</u>) (Use 67334 in conjunction with codes 67311-67318)	ZZZ	3.98

CPT Code (•New)	CPT Descriptor	Global Period	Work RVU Recommendation
67335	Placement of adjustable suture(s) during strabismus surgery, including postoperative adjustments(s) of suture(s) (Report <u>List separately</u> in addition to code for specific strabismus surgery) (Use <u>67335</u> only for also <u>code(s)</u> for conventional muscle surgery , 67311-67334, to identify number of muscles involved)	ZZZ	2.49 (No Change)
67340	Strabismus surgery involving exploration and/or repair of detached extraocular muscle(s) (<u>List separately</u> in addition to code for primary procedure) (Use 67340 in conjunction with codes 67311- 67334)	ZZZ	4.93



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April 14, 1998

Ms. Sherry Smith
CPT Research and Development
American Medical Association
515 North State Street
Chicago, IL 60610

RE: Add-on CPT codes 67320 - 67334

Dear Ms. Smith:

The Diagnostic Procedural Terminology and Reimbursement Committee of the American Academy of Ophthalmology is responding the request for re-valuation of the add-on codes in the Strabismus Surgery section of CPT. We have consulted with the American Association for Pediatric Ophthalmology and Strabismus in the preparation of this response.

These add-on codes are used very infrequently in the Medicare beneficiary population, though we believe more often among children, teenagers, and young adults.¹

Part B Claims for Strabismus Add-on Surgical Services – 1995		
CPT[®] Add-on codes[‡]	Brief definition	Number of services
67320	Transposition surgery	212
67331	Previous ocular surgery	207
67332	Scarring of extraocular muscles/thyroid	930
67334	Posterior fixation suture	46

[‡]Add-on codes are reported in addition to the primary procedural code

Further, we did not feel that we could put together a sufficiently knowledgeable panel to survey these procedures in the time available for such a survey. We, therefore, propose

¹ Repka, Michael X.: Strabismus Surgery Among Aged Medicare Beneficiaries. *Journal of the AAPOS* 1997;1:237-241.



that an arithmetic adjustment be made to the work values of these procedural codes. The AMA Physicians' Guide for 1995 included the relative work values for these procedures. This document also includes the ratios for the preservice, intraservice, and post-service work for these procedures (0.1, 0.7, 0.2).

		Current physician work RVU's - 1998
67320	Transposition surgery	8.66
67331	Previous ocular surgery	8.12
67332	Scarring of extraocular muscles/thyroid	8.99
67334	Posterior fixation suture	7.96

These add-on codes differ from most in CPT. Most include only the stated intraservice work. These include not only the intraservice work described by the code, but also a number of unstated, but implied, services associated with the service including an extensive dissection of conjunctiva to reach the extraocular muscle and the greater difficulty in closure.

67320 – The add-on work of this procedure includes the unusually extensive conjunctival dissection, the dissection of Tenon's capsule and intermuscular membranes, and the rotation of a muscle far out of its normal alignment, when compared with standard strabismus surgery. There is also the additional need to surgically expose another extraocular muscle.

67331 – The add-on pre-service work deals with the effect of the prior surgery on the status and potential function of the extra-ocular muscles as well as the effect of prior surgical implants, as might be seen after retinal detachment repairs.

67332 – The add-on pre-service work includes consideration of the effect of the prior surgery or disease effect on the function of the extraocular muscles. These effects will influence the effect and adversely impact the predictability of eye muscle surgery. The intraservice work of this service is the need to add a substantial amount of work to the dissection of scarred conjunctiva. The extraocular muscles will be scarred in unusual locations, associated with scarring, making their identification and isolation difficult. The conjunctival closure is more complicated because of scarring and shrinkage.

67334 – This procedure involves the placement of a permanent suture along a muscle posterior to the equator of the eye. This surgical site is well posterior to the normal location of ophthalmological surgery. Such exposure is substantially more difficult and more dangerous to the patients (scleral and retinal perforation).

We propose that these add-on codes are needed to adjust for the substantially greater work needed for the performance of these procedures, than for standard strabismus



surgery. It is our opinion that values could be calculated by assuming no pre-service or post-service work from the published work ratios. However, we would propose that reasonable work values should be reduced to a greater extent. Therefore, we propose that these values be reduced to one-half of their current work values

		1998 work RVU's	Proposed work RVU's
67320	Transposition surgery	8.66	4.33
67331	Previous ocular surgery	8.12	4.06
67332	Scarring of extraocular muscles/thyroid	8.99	4.49
67334	Posterior fixation suture	7.96	3.98

We thank the Committee for its consideration.

Respectfully submitted,

Michael X. Repka, M.D.

Chairman

Diagnostic Procedural Terminology and Reimbursement Committee
American Academy of Ophthalmology

Correspondence to:

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AMERICAN ACADEMY OF OPHTHALMOLOGY

Federal Affairs Department

16 April 1998

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Sherry Smith
Department Director
Department of Physician Payment Systems
American Medical Association
515 North State Street
Chicago IL 60610

BY FAX

Dear Ms. Smith:

This letter is in response to your request for comments on certain ophthalmic add-on codes. Previously, we submitted a letter making recommendations for codes 67331-334. This letter will apply to CPT codes 67340 [(Strabismus surgery involving exploration and/or repair of detached extraocular muscle(s))] and 67343 [(Release of extensive scar tissue without detaching extraocular muscle (separate procedure)]. It is our opinion that values could be calculated by assuming no pre-service or post-service work from the published work ratios. The AMA Physicians' Guide for 1995 included the relative work values for these procedures as well as the ratios for the preservice, intraservice, and post-service work for these procedures (0.1, 0.7, 0.2 respectively). However, we would propose that reasonable work values should be reduced more.

Therefore, we propose that these values be reduced to one-half of their current work values. After careful review, the American Academy of Ophthalmology recommends that the work value for 67340 be reduced by 50% from a 1998 work value of 9.85 to 4.93 rws. In addition, we do not recommend any change for 67343. This code should not be considered an add-on code, and therefore we advocate that the current work value for this service be unchanged.

We thank the Committee for accepting these recommendations.

Sincerely,

Michael X. Repka, MD
Chair, Diagnostic Procedural and Terminology and Reimbursement
Committee

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS

May 1998

Destruction of a Choroid Lesion

CPT code 67210 *Destruction of localized lesion of retina (eg, macular edema, tumors), one or more sessions; photocoagulation*) was closely analyzed during the Five Year Review. There was considerable concern with CPT code 67210 as there was a bimodal distribution of this procedure since the specific service being performed was for two distinct diagnoses. As a result, 67210 was referred to CPT and split into two codes, the revised 67210 and 67220 *Destruction of localized lesion of choroid (eg, choroidal neovascularization), one or more session, photocoagulation (laser)*.

In order to split the RVWs for 67210 into the two new codes each representing a distinct patient population and requiring different amounts of work while maintaining Medicare Budget neutrality, both survey data and Harvard methodology were used to calculate the recommended RVWs. The following estimates were made to examine the relationship between revised 67210 and 67220: the ratio between 67210 to 67220 previously reported as 67210 is 2.5 to 1.0; revised 67210 will require multiple sessions in approximately 20% of the patients treated; 67220 will require multiple sessions in approximately 50% of the patients treated; and the survey median RVW ratio of 7.0 to 9.0 accurately reflects the differences in work between revised 67210 and 67220 for ONE session

The Harvard methodology was then used to calculate intra-service RVWs by valuing pre-service work and HCFA methodology to value post-service work global E/M work. For the revised 67210, one additional session and one additional office visit equals 4.72 rvus or .92 rvus for a 20% retreatment rate; and for 67220, one additional session and two additional office visits equal 5.64 rvus or 2.82 rvus for a 50% retreatment rate. Adding these calculated rvus for retreatments (0.92 and 2.82) to each code, results in a revised proportion of 7.94 to 11.82 RVWs based on the survey median RVWs of 7.0 and 9.0 for the two codes. These rvus are then multiplied by the estimated frequency for each code, and sum is divided into the 1996 total billed rvus, to arrive at an adjustment factor of 1.11. This adjustment factor is then multiplied by 7.94 and 11.82 to

arrive at a RUC recommended RVW of 8.82 for the revised 67210 and a recommended RVW of 13.13 for 67220. These recommended values maintain budget neutrality.

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
▲67208	FF1	Destruction of localized lesion of retina (eg, maculopathy, choroidopathy, macular edema, small tumors), one or more sessions; cryotherapy, diathermy	090	6.70 (No change)
▲67210	FF3	photocoagulation (laser or xenon arc)	090	8.82
•67220	FF2	Destruction of localized lesion of choroid (eg, choroidal neovascularization), one or more session, photocoagulation (laser)	090	13.13

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

(April 1998)

CPT Code:	67210(FF3)	Global Period:	090	Current RVW:	10.05
				Recommended RVW:	8.82

CPT Descriptor: Destruction of localized lesion of retina (eg, macular edema, tumors), one or more sessions; photocoagulation

Vignette Used in Survey:

A 56-year-old male with long-standing Type 2 diabetes mellitus has noted decreased vision. Clinically significant macular edema is present. Focal photocoagulation is administered to the macula. Recovery is monitored during the postoperative visits. Please complete the survey based on providing only one treatment.

CLINICAL DESCRIPTION OF SERVICE (This work description was NOT provided on the survey.):**Description of Pre-Service Work:**

The patient's vision is measured, pupils are dilated, and anesthesia (topical or retrobulbar) is applied. Fluorescein angiograms are reviewed with stereoscopy and placed in position to be continuously monitored during laser photocoagulation treatment.

Description of Intra-Service Work:

Laser photocoagulation is performed, using projection of fluorescein angiogram as a guide. Each leaking microaneurysm is treated individually, attempting to obtain complete closure with photocoagulation. Attention is directed to position of microaneurysm with respect to papillomacular bundle and foveal avascular zone. After closing each individual microaneurysm demonstrating leaking, attention is directed to areas of capillary dropout and areas of diffuse leakage where photocoagulation is applied in a "grid fashion." For each burn, surgeon assesses the response to patient's motion, anterior segment opacity affecting the intensity of laser reaching lesion, thickness of lesion, and tissue reaction to treatment. Surgeon pauses frequently between burns to ensure continued steadiness of both patient and surgeon.

Description of Post-Service Work:

Follow-up begins immediately following treatment. Surgeon assesses adequacy of treatment and checks for signs of complication such as bleeding, retinal tears, breaks in Bruch's membrane, or physician error. The patient is counseled regarding postoperative care of treated eye. Patient is counseled regarding the fact the treated eye will be blurred for a period of time and great care should be taken in performing various tasks, including driving. Follow-up visits are scheduled generally at six and 12 weeks following treatment, and additional laser therapy is administered in approximately 20 percent of patients during the global period.

CPT/Descriptor: 67210(FF3) Destruction of localized lesion of retina (eg, macular edema, tumors), one or more sessions; photocoagulation

SURVEY DATA BASED ON PROVIDING ONLY ONE TREATMENT

Specialty(s): American Academy of Ophthalmology

Type of Sample: Random

Survey n: 100
 Response: 31
 Rate %: 31%

	RVW	PRE total min	INTRA total min	HOSP total min	OFF total min	Same day total min	ICU		Hosp. - Other		Dischg day total min	Office	
							# visits	total min	# visits	total min		# visits	total min
low	2.53		10										
25th%	4.98		20										
MED	7.00	30	20	5	40	5	0	0	0	0	0	2	40
75th%	9.25		30										
high	12.00		120										

Comparative Time and Visit Data for Surveyed Service and Key Reference Service(s):

CPT Code	Resp n	RVW	PRE total min	INTRA total min	HOSP total min	OFF total min	Exper med
67210(FF3)	30		30	20	5	40	88
65855 (03/98)	18	4.30	15	15	0	30	1
65855 (5-yr)	30		15	15	10	30	
66761 (03/98)	10	4.07	18	10	5	30	4
66761 (Hvd)	15		35	21	19	38	
67036 (03/98)	6	11.89	38	60	18	60	105
67036 (Hvd)	7		46	76	37	91	

KEY REFERENCE SERVICE(S):

1998 RVW	Global	CPT	Descriptor
4.30	090	65855	Trabeculoplasty by laser surgery, one or more sessions (defined treatment series)
4.07	090	66761	Iridotomy/iridectomy by laser surgery (eg, for glaucoma) (one or more sessions)
11.89	090	67036	Vitrectomy, mechanical, pars plana approach;

Mean Intensity/Complexity Measures

	Survey Code	Ref 65855	Ref 66761	Ref 67036
Mental Effort and Judgment				
The number of possible diagnoses and/or the number of management options that must be considered	3.55	2.88	2.44	4.00
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	3.90	2.76	2.30	3.40
Urgency of medical decision making	3.10	2.47	3.60	3.40
Technical Skill/physical Effort				
Technical skill required	4.23	2.82	2.50	4.60
Physical effort required	3.07	2.47	2.60	3.80
Psychological Stress				
The risk of significant complications, morbidity and/or mortality	3.97	2.24	2.50	4.20
Outcome depends on skill and judgment of physician	4.53	3.00	2.80	4.60
Estimated risk of malpractice suit with poor outcome	3.43	2.29	2.70	4.00
Time Segments				
PRE-service intensity/complexity	3.37	2.47	3.00	3.60
INTRA-service intensity complexity	3.90	2.88	3.20	4.20
POST-service intensity complexity	3.03	2.24	2.20	3.40

CPT/Descriptor: 67210(FF3) Destruction of localized lesion of retina (eg, macular edema, tumors),
one or more sessions; photocoagulation

(04/98) Page 3

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

The most frequently cited reference procedure was 65855 (trabeculoplasty by laser surgery), which currently receives 4.30 work RVUs. Other reference services included 66761 (iridotomy/iridectomy) and 67036 (vitrectomy, mechanical, pars plana), which currently receive 4.07 and 11.89 work RVUs, respectively.

This retinal laser procedure requires substantially more preoperative, intraoperative, and postoperative physician time than 65855 or 66761. Although this service requires less physician time than 67036, the intensity and complexity of this service are comparable to the intensity and complexity of code 67036.

Preoperative

The survey results for this code show median preoperative time (30 minutes) approximately half-way between the median preoperative times for 65855 (15 minutes) and 67036 (45 minutes). The preoperative work for this code should be comparable to the most complex ophthalmic procedures due to both the inherently risky nature of the procedure and the difficult circumstances which must be explained to the patient.

Regardless of the underlying diagnosis, retinal laser surgery consists of multiple laser burns near the center of the patient's vision. The procedure itself necessarily creates central scotoma, causing some degree of iatrogenic vision loss in all patients. Moreover, the procedure is generally performed on patients already experiencing severe vision loss. Thus, this procedure presents substantial risks to the fragile remaining vision of those patients. In addition, the procedure also carries a high risk of surgical complications, such as bleeding, inadvertent retinal burns, incomplete treatment, and anesthetic complications, all of which must be reviewed with the patient prior to treatment and retreatment. Physicians must explain the high probability that retreatments will be necessary following the initial procedure. Consequently, this procedure requires unusually time-consuming preoperative counseling with patients and their families, as compared to other ophthalmic surgical procedures. Additionally, this service may be performed on patients with a wide variety of complex, degenerative ophthalmological conditions. Physicians must analyze possible treatment strategies and potential risks in light of the specific disease suffered by a particular patient.

Intra-Operative

For 67210 (FF3), the survey results show that the median intraoperative time is twice the median intraoperative time for code 66761, but one-third of the intraoperative time for code 67036. For 672xx (FF2), the survey results show that the median intraoperative time is more than twice the median intraoperative time for 66761, but one-third of the intra-operative time for 67036. Nonetheless, the intensity of the intraoperative work for codes 67210 and 672xx is, in fact, comparable to that of the most complex ophthalmic surgical procedures.

The procedure is substantially more technically complex than 65855 or 66761, and requires at least one year of post-residency fellowship.

As stated above, procedures 67210 and 672xx carry an unavoidable risk of blindness or severe vision damage in all patients. This risk generates particularly high intensity for physicians because the risk of blindness persists throughout the entire operative period. In many other surgical procedures, the riskiest intraoperative periods occur after considerable, somewhat less intense, time is spent to obtain access to the site (e.g., craniotomy with aneurism). In contrast, retinal laser surgery subjects every patient to the risk of an immediate, substantial loss of vision or blindness during the entire operative period. Since the procedure requires tolerances of as little as one micron (0.000039 inches), the slightest movements by the patient or the physician may result in unintended, but irreparable blindness. Vision loss may also result from adverse tissue response, such as subretinal bleeding or tears of the retinal pigment epithelium.

These risks create a high level of psychological stress for physicians much more similar to code 67036 than either 66761 or 65855.

CPT/Descriptor: 67210(FF3) Destruction of localized lesion of retina (eg, macular edema, tumors),
one or more sessions; photocoagulation

(04/98) Page 4

Post-Operative Work and Retreatments

The survey results show that the median postoperative time for codes 67210(FF3) and 672XX(FF2) is significantly more than for 65855 or 66761, but much less than the postoperative time for code 67036. However, this survey was for an initial laser treatment. The discussion in the next section calculates the additional work for retreatments. Furthermore, the postoperative work for code 67210(FF3) and 672XX(FF2) is comparable in its complexity to the most complex ophthalmic surgical procedures.

Analyses of work for this service have consistently failed to reflect that a substantial portion of patients require one or more surgical retreatments during the 90-day global period. These retreatments are usually more difficult than the original procedure because the area of recurrence is generally closer to the center of vision. The Harvard study failed to reflect these retreatments because many ophthalmologists historically billed each retreatment separately. After the Medicare fee schedule was implemented, HCFA agreed in 1992 to remedy this problem by increasing the work value for code 67210 to account for the additional physician work following the initial laser treatment. 57 Fed. Reg. 55931 (Nov. 25, 1992). Since current HCFA policy provides no additional reimbursement for 67210 retreatments, many physicians continue to identify retreatments within the global period as "post-service" work. However, this survey sought to promote consistency among responses by instructing the respondents to assume that only one laser treatment is performed. Thus, these survey results understate the actual amount of physician work required during the global period.

The high probability of postoperative complications means that the postoperative work is more complex than for most other ophthalmic procedures. Unlike many postoperative visits for other ophthalmic procedures, retinal laser procedures require several visits of long duration where high-level medical decisions are required. Patients are often seen several times during the 90-day post-operative period, although the precise frequency of visits varies by condition. Follow-up examinations are comprehensive and must include monitoring for complications, persistence, recurrence, and development of similar conditions in the untreated eye. Physicians must precisely assess the severity of any such complications in order to determine whether retreatment may be necessary.

In light of the factors described above, it is appropriate that the intensity and complexity of codes 67210(FF3) and 672XX(FF2) are similar to ophthalmic services with significantly higher intraoperative times.

ADDITIONAL RATIONALE:

CPT 67210 was identified as an outlier during the five-year review by an IWP/UT analysis performed by Dr. Dan Dunn, using Harvard data. Research regarding this claim revealed two facts: 1) The Harvard data only included time and visit information for *one* treatment, even though the code is for *one or more* sessions; and 2) There is a bimodal distribution of patients receiving treatment under this code (see CPT proposal for detailed discussion). As a result of the five-year review process, 67210 was referred to CPT and split into two codes FF3 and FF2, each representing a distinct patient population and requiring different amounts of work.

This survey was conducted to determine how the current RVW of 10.05 assigned to 67210 should be split between FF3 and FF2 in order to maintain budget neutrality. It has been estimated that:

1. The ratio of FF3 to FF2 previously reported as 67210 is 2.5 to 1.0;
2. FF3 will require multiple sessions in approximately 20 percent of the patients treated;
3. FF2 will require multiple sessions in approximately 50 percent of the patients treated; and
4. The survey median RVW ratio of 7.00 to 9.00 accurately reflects the difference in work between FF3 and FF2 for ONE session.

Given these estimates and assumptions for the relationship of FF3 to FF2, an RVW of 9.82 is recommended for revised code 67210 (FF3) and an RVW of 13.13 is recommended for new code FF2. These recommendations are based on the following calculations, which result in Medicare budget neutrality:

The 1996 frequency for CPT 67210 was 192,000. Based on a 2.5 to 1.0 frequency split for FF3:FF2, the resultant frequency ratio is 137,143(FF3) to 54,857(FF2).

CPT/Descriptor: 67210(FF3) Destruction of localized lesion of retina (eg, macular edema, tumors),
 one or more sessions; photocoagulation

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The following intra-service RVWs can be calculated using Harvard methodology to value pre-service work and HCFA methodology to value post-service global E/M work (which takes into account HCFA's global RVW adjustments of office visits at less than 100%):

For revised 67210(FF3), one additional session and one additional office visit equals 4.72 rvu's or 0.92 rvu's for a 20% retreatment rate; and for 672XX(FF2), one additional session and two additional office visits equal 5.64 rvu's or 2.82 rvu's for a 50% retreatment rate.

Adding these calculated rvu's for retreatments (0.92 and 2.82) to each code, results in a *revised proportion* of 7.94 to 11.82 RVWs, based on the survey median RVWs of 7.00 and 9.00 for the two codes. These rvu's are then multiplied by the estimated frequency for each code, and the sum is divided into the 1996 total billed rvu's, to arrive at an adjustment factor of 1.11. This adjustment factor is then multiplied by 7.94 and 11.82 to arrive at a recommended RVW of 8.82 for 67210(FF3) and a recommended RVW of 13.13 for 672XX(FF2). These recommended values maintain budget neutrality.

<u>frequency</u>		<u>recommended RVW</u>		<u>rvu's</u>
137,143	x	8.82	=	1,209,425
54,857	x	13.13	=	720,171

1,209,425 + 720,171 = 1,929,596 = budget neutrality (1996 rvu's = 1,929,600)

FREQUENCY INFORMATION

1. How was this service previously reported?

CPT code 67210

2. How often do physicians in your specialty perform this service?

Commonly Sometimes Rarely

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

Of the total number of claims previously reported for CPT 67210, it is estimated that 70% will continue to use revised CPT 67210(FF3) and 30% will use the new code 672XX(FF2), 1996 Medicare NCH data files indicate a total allowed frequency of approximately 192,000 for CPT code 67210.

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

Yes No

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

(April 1998)

CPT Code: 672XX(FF2)

Global Period: 090

Recommended RVW: 13.13

CPT Descriptor: Destruction of localized lesion of choroid (eg, choroidal neovascularization), one or more sessions, photocoagulation (laser)

Vignette Used in Survey:

A 69-year-old patient with a juxtafoveal choroidal neovascular membrane is treated with photocoagulation using a slit lamp biomicroscopic delivery system. The location of treatment applications are guided by reference during the procedure to the results of a preoperative fluorescein angiogram. Recovery and visual acuity are monitored. Please complete the survey based on providing only one treatment.

CLINICAL DESCRIPTION OF SERVICE (This work description was NOT provided on the survey.):**Description of Pre-Service Work:**

Patient's vision is measured, pupils are dilated, and anesthesia (topical or retrobulbar) is applied. Fluorescein angiograms are reviewed with stereoscopy and the extent of the lesion to be treated is determined.

Description of Intra-Service Work:

Laser photocoagulation is performed, using projection of fluorescein angiogram as a guide. The lesion area is subjected to multiple laser burns. For each burn, surgeon assesses and responds to patient's motion, anterior segment opacity affecting the intensity of laser reaching lesion, thickness of lesion, and tissue reaction to treatment. Surgeon pauses frequently between burns to ensure continued steadiness of both patient and surgeon.

Description of Post-Service Work:

Follow-up begins immediately following treatment. Surgeons assesses adequacy of treatment and checks for signs of complication such as bleeding, retinal tears, tears of retinal pigment epithelium, or physician error. Within a few minutes following laser photocoagulation treatment, cornea is washed of contact lens solution and Polaroid® color photographs are taken of treated area. Using documeter, detailed drawings are made of lesion pre-treatment and post-treatment to ensure that all of the choroidal neovascular membrane was adequately covered with treatment, including a 100 micron border. If lesion is judged to be inadequately treated, patient is taken back to laser, and additional laser photocoagulation treatment is applied to inadequately treated area. Follow-up visits are scheduled for every two to three weeks for the next three months. Surgeon evaluates adequacy of treatment using photographs, drawings, and ocular examination. Complications, persistence and recurrence are re-treated as necessary, following additional counseling and cost/benefit assessment. Re-treatment is required approximately 50 percent of the time and requires repeat of all steps performed in initial treatment session.

CPT/Descriptor: 672XX(FF2) Destruction of localized lesion of choroid (eg, choroidal neovascularization), one or more sessions, photocoagulation (laser)

(04/98) Page 2

SURVEY DATA BASED ON PROVIDING ONLY ONE TREATMENT:

Specialty(s): American Academy of Ophthalmology
 Type of Sample: Random

Survey n: 100
 Response: 30
 Rate %: 30%

	RVW	PRE total min	INTRA total min	HOSP total min	OFF total min	Same day total min	ICU		Hosp. - Other		Dischg day total min	Office	
							# visits	total min	# visits	total min		# visits	total min
low	2.15		10										
25th%	6.16		18										
MED	9.00	30	25	8	80	5	0	0	0	0	0	4	80
75th%	10.76		30										
high	13.50		140										

Comparative Time and Visit Data for Surveyed Service and Key Reference Service(s):

CPT Code	Resp n	RVW	PRE total min	INTRA total min	HOSP total min	OFF total min	Exper med
672XX(FF2)	29		30	25	5	80	40
65855 (03/98)	13	4.30	15	15	0	30	0
65855 (5-yr)	30		15	15	10	30	
66761 (03/98)	5	4.07	13	10	5	36	5
66761 (Hvd)	15		35	21	19	38	
67036 (03/98)	9	11.89	45	60	20	60	60
67036 (Hvd)	7		46	76	37	91	

KEY REFERENCE SERVICE(S):

1998 RVW	Global	CPT	Descriptor
4.30	090	65855	Trabeculoplasty by laser surgery, one or more sessions (defined treatment series)
4.07	090	66761	Iridotomy/iridectomy by laser surgery (eg, for glaucoma) (one or more sessions)
11.89	090	67036	Vitrectomy, mechanical, pars plana approach,

Mean

Intensity/Complexity Measures

	Survey Code	Ref 65855	Ref 67036	Ref 66761
Mental Effort and Judgment				
The number of possible diagnoses and/or the number of management options that must be considered	4.00	2.91	3.75	2.25
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	4.26	2.73	3.63	2.33
Urgency of medical decision making	4.61	2.55	3.88	2.50
Technical Skill/physical Effort				
Technical skill required	4.74	2.91	4.83	2.50
Physical effort required	3.41	2.64	4.17	2.25
Psychological Stress				
The risk of significant complications, morbidity and/or mortality	4.71	2.27	4.38	2.25
Outcome depends on skill and judgment of physician	4.75	2.91	4.63	2.25
Estimated risk of malpractice suit with poor outcome	3.79	2.36	3.88	2.50
Time Segments				
PRE-service intensity/complexity	3.93	2.45	3.88	2.00
INTRA-service intensity complexity	4.46	3.09	4.50	2.75
POST-service intensity complexity	3.86	2.45	3.63	2.25

CPT/Descriptor: 672XX(FF2) Destruction of localized lesion of choroid (eg, choroidal neovascularization),
one or more sessions, photocoagulation (laser)

(04/98) Page 3

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

The most frequently cited reference procedure was 65855 (trabeculoplasty by laser surgery), which currently receives 4.30 work RVUs. Other reference services included 66761 (iridotomy/iridectomy) and 67036 (vitrectomy, mechanical, pars plana), which currently receive 4.07 and 11.89 work RVUs, respectively.

This retinal laser procedure requires substantially more preoperative, intraoperative, and postoperative physician time than 65855 or 66761. Although this service requires less physician time than 67036, the intensity and complexity of this service are comparable to the intensity and complexity of code 67036.

Preoperative

The survey results for this code show median preoperative time (30 minutes) approximately half-way between the median preoperative times for 65855 (15 minutes) and 67036 (45 minutes). The preoperative work for this code should be comparable to the most complex ophthalmic procedures due to both the inherently risky nature of the procedure and the difficult circumstances which must be explained to the patient.

Regardless of the underlying diagnosis, retinal laser surgery consists of multiple laser burns near the center of the patient's vision. The procedure itself necessarily creates central scotoma, causing some degree of iatrogenic vision loss in all patients. Moreover, the procedure is generally performed on patients already experiencing severe vision loss. Thus, this procedure presents substantial risks to the fragile remaining vision of those patients. In addition, the procedure also carries a high risk of surgical complications, such as bleeding, inadvertent retinal burns, incomplete treatment, and anesthetic complications, all of which must be reviewed with the patient prior to treatment and retreatment. Physicians must explain the high probability that retreatments will be necessary following the initial procedure. Consequently, this procedure requires unusually time-consuming preoperative counseling with patients and their families, as compared to other ophthalmic surgical procedures. Additionally, this service may be performed on patients with a wide variety of complex, degenerative ophthalmological conditions. Physicians must analyze possible treatment strategies and potential risks in light of the specific disease suffered by a particular patient.

Intra-Operative

For 67210 (FF3), the survey results show that the median intraoperative time is twice the median intraoperative time for code 66761, but one-third of the intraoperative time for code 67036. For 672xx (FF2), the survey results show that the median intraoperative time is more than twice the median intraoperative time for 66761, but one-third of the intra-operative time for 67036. Nonetheless, the intensity of the intraoperative work for codes 67210 and 672xx is, in fact, comparable to that of the most complex ophthalmic surgical procedures.

The procedure is substantially more technically complex than 65855 or 66761, and requires at least one year of post-residency fellowship.

As stated above, procedures 67210 and 672xx carry an unavoidable risk of blindness or severe vision damage in all patients. This risk generates particularly high intensity for physicians because the risk of blindness persists throughout the entire operative period. In many other surgical procedures, the riskiest intraoperative periods occur after considerable, somewhat less intense, time is spent to obtain access to the site (e.g., craniotomy with aneurism). In contrast, retinal laser surgery subjects every patient to the risk of an immediate, substantial loss of vision or blindness during the entire operative period. Since the procedure requires tolerances of as little as one micron (0.000039 inches), the slightest movements by the patient or the physician may result in unintended, but irreparable blindness. Vision loss may also result from adverse tissue response, such as subretinal bleeding or tears of the retinal pigment epithelium.

These risks create a high level of psychological stress for physicians much more similar to code 67036 than either 66761 or 65855.

CPT/Descriptor: 672XX(FF2) Destruction of localized lesion of choroid (eg, choroidal neovascularization), one or more sessions, photocoagulation (laser)

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Post-Operative Work and Retreatments

The survey results show that the median postoperative time for codes 67210(FF3) and 672XX(FF2) is significantly more than for 65855 or 66761, but much less than the postoperative time for code 67036. However, this survey was for an initial laser treatment. The discussion in the next section calculates the additional work for retreatments. Furthermore, the postoperative work for code 67210(FF3) and 672XX(FF2) is comparable in its complexity to the most complex ophthalmic surgical procedures.

Analyses of work for this service have consistently failed to reflect that a substantial portion of patients require one or more surgical retreatments during the 90-day global period. These retreatments are usually more difficult than the original procedure because the area of recurrence is generally closer to the center of vision. The Harvard study failed to reflect these retreatments because many ophthalmologists historically billed each retreatment separately. After the Medicare fee schedule was implemented, HCFA agreed in 1992 to remedy this problem by increasing the work value for code 67210 to account for the additional physician work following the initial laser treatment. 57 Fed. Reg. 55931 (Nov. 25, 1992). Since current HCFA policy provides no additional reimbursement for 67210 retreatments, many physicians continue to identify retreatments within the global period as "post-service" work. However, this survey sought to promote consistency among responses by instructing the respondents to assume that only one laser treatment is performed. Thus, these survey results understate the actual amount of physician work required during the global period.

The high probability of postoperative complications means that the postoperative work is more complex than for most other ophthalmic procedures. Unlike many postoperative visits for other ophthalmic procedures, retinal laser procedures require several visits of long duration where high-level medical decisions are required. Patients are often seen several times during the 90-day post-operative period, although the precise frequency of visits varies by condition. Follow-up examinations are comprehensive and must include monitoring for complications, persistence, recurrence, and development of similar conditions in the untreated eye. Physicians must precisely assess the severity of any such complications in order to determine whether retreatment may be necessary.

In light of the factors described above, it is appropriate that the intensity and complexity of codes 67210(FF3) and 672XX(FF2) are similar to ophthalmic services with significantly higher intraoperative times.

ADDITIONAL RATIONALE:

CPT 67210 was identified as an outlier during the five-year review by an IWPUT analysis performed by Dr. Dan Dunn, using Harvard data. Research regarding this claim revealed two facts: 1) The Harvard data only included time and visit information for *one* treatment, even though the code is for *one or more* sessions; and 2) There is a bimodal distribution of patients receiving treatment under this code (see CPT proposal for detailed discussion). As a result of the five-year review process, 67210 was referred to CPT and split into two codes FF3 and FF2, each representing a distinct patient population and requiring different amounts of work.

This survey was conducted to determine how the current RVW of 10.05 assigned to 67210 should be split between FF3 and FF2 in order to maintain budget neutrality. It has been estimated that:

1. The ratio of FF3 to FF2 previously reported as 67210 is 2.5 to 1.0;
2. FF3 will require multiple sessions in approximately 20 percent of the patients treated;
3. FF2 will require multiple sessions in approximately 50 percent of the patients treated; and
4. The survey median RVW ratio of 7.00 to 9.00 accurately reflects the difference in work between FF3 and FF2 for ONE session.

Given these estimates and assumptions for the relationship of FF3 to FF2, an RVW of 8.82 is recommended for revised code 67210 (FF3) and an RVW of 13.13 is recommended for new code FF2. These recommendations are based on the following calculations, which result in Medicare budget neutrality:

The 1996 frequency for CPT 67210 was 192,000. Based on a 2.5 to 1.0 frequency split for FF3:FF2, the resultant frequency ratio is 137,143(FF3) to 54,857(FF2).

CPT/Descriptor: 672XX(FF2) Destruction of localized lesion of choroid (eg, choroidal neovascularization),
one or more sessions, photocoagulation (laser)

(04/98) Page 5

The following intra-service RVWs can be calculated using Harvard methodology to value pre-service work and HCFA methodology to value post-service global E/M work (which takes into account HCFA's global RVW adjustments of office visits at less than 100%):

For revised 67210(FF3), one additional session and one additional office visit equals 4.72 rvu's or 0.92 rvu's for a 20% retreatment rate; and for 672XX(FF2), one additional session and two additional office visits equal 5.64 rvu's or 2.82 rvu's for a 50% retreatment rate.

Adding these calculated rvu's for retreatments (0.92 and 2.82) to each code, results in a *revised proportion* of 7.94 to 11.82 RVWs, based on the survey median RVWs of 7.00 and 9.00 for the two codes. These rvu's are then multiplied by the estimated frequency for each code, and the sum is divided into the 1996 total billed rvu's, to arrive at an adjustment factor of 1.11. This adjustment factor is then multiplied by 7.94 and 11.82 to arrive at a recommended RVW of 8.82 for 67210(FF3) and a recommended RVW of 13.13 for 672XX(FF2). These recommended values maintain budget neutrality.

<u>frequency</u>		<u>recommended RVW</u>	=	<u>rvu's</u>
137,143	x	8.82	=	1,209,425
54,857	x	13.13	=	720,171

1,209,425 + 720,171 = 1,929,596 = budget neutrality (1996 rvu's = 1,929,600)

FREQUENCY INFORMATION

1. How was this service previously reported?

CPT code 67210

2. How often do physicians in your specialty perform this service?

Commonly Sometimes Rarely

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

Of the total number of claims previously reported for CPT 67210, it is estimated that 70% will continue to use revised CPT 67210(FF3) and 30% will use the new code 672XX(FF2), 1996 Medicare NCH data files indicate a total allowed frequency of approximately 192,000 for CPT code 67210.

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

Yes No

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS
May 1998

Radiological Examination of the Knee

Current CPT codes, 73560 *Radiologic examination, knee; one or two views*, 73562 *Radiological examination, knee; three views* and 73564 *Radiologic examination, knee; complete; four or more views* were revised in 1998 to reflect minor editorial changes. In an effort to confirm that no changes had occurred in the physician work values for these knee X-ray procedures, the specialty society surveyed 30 radiologists. Based on comprehensive survey information, the RUC recommends that no changes be made to the previously determined work RVU's as detailed below.

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
73560	G1	Radiologic examination, knee; anteroposterior and lateral <u>views one or two views</u>	XXX	0.17 (No Change)
73562	G2	Radiologic examination, knee; anteroposterior and lateral, with oblique(s), minimum of three views	XXX	0.18 (No Change)
73564	G3	Radiologic examination, knee; complete, including oblique(s) and tunnel, and/or patellar and/or standing views <u>four or more</u> <u>views</u>	XXX	.22 (No Change)

**AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION
AMERICAN COLLEGE OF RADIOLOGY**

CPT Code: 73560 Tracking Number: G1 Global Period: XXX Recommended RVW: 0.17

CPT Descriptor: Radiologic examination, knee; one or two views

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: Sixty-eight year old female with knee pain and no history of trauma. Rule out arthritis.

Description of Pre-Service Work: *Review clinical history

Description of Intra-Service Work: *Interpret radiograph(s) of knee
*Compare with prior studies, if applicable

Description of Post-Service Work: *Dictate and review written report
*Communicate findings to referring physician(s)

SURVEY DATA:

Specialty: American College of Radiology

Sample Size: 116 Response Rate (%): N=30 25.9% Initial Median RVW: 0.18 Final Median RVW: 0.17

Type of Sample (Circle One): random, panel, convenience.

Explanation of sample size: ACR Committees/Commissions

25th Percentile RVW: 0.17 75th Percentile RVW: 0.19 Low: 0.16 High: 0.75

Median Total-Service Time: 3 Minutes

25th Percentile Total Time: 2 Min. 75th Percentile Total Time: 5 Min. Low: 1 Min. High: 19 Min.

KEY REFERENCE SERVICE(S):

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
1)	73510	Radiologic examination, hip, unilateral; complete minimum of two views	0.21
2)	73560	Radiologic examination, knee; anteroposterior and lateral views	0.17
3)	73600	Radiologic examination ankle; anteroposterior and lateral views	0.16

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.

INTENSITY/COMPLEXITY MEASURES

	<u>CPT Code</u> 73560	<u>Reference</u> <u>Service 1</u> 73560	<u>Reference</u> <u>Service 2</u> 73510	<u>Reference</u> <u>Service 3</u> 73600
<u>Time Estimates (Median)</u>				
Median Total Physician	3	3.0	5.5	3.0
<u>Mental Effort and Judgement (Mean)</u>				
The number of possible diagnosis and/or the number of management options that must be considered	2.1	2.1	2.2	1.8
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	1.9	2.0	2.0	1.6
Urgency of medical decision making	1.9	2.0	2.3	2.0
<u>Technical Skill/Physical Effort (Mean)</u>				
Technical skill required	1.9	1.9	1.5	1.6
Physical effort required	1.4	1.4	1.3	1.2
<u>Psychological Stress (Mean)</u>				
The risk of significant complications, morbidity and/or mortality	1.8	1.7	2.3	1.6
Outcome depends on the skill and judgement of physician	2.4	2.3	3.0	2.3
Estimated risk of malpractice suit with poor outcome	2.2	2.6	2.3	2.1
<u>Time Segments (Mean)</u>				
Total Physician Time	1.9	2.1	2.0	1.6

The number of times respondents performed this procedure over the past year.

<u>Mean</u>	<u>Median</u>
441	250

CPT Code 73560

Did the description of typical patient/service match your typical patient?

Yes

No

28 (93%)

2 (7%)

ADDITIONAL RATIONALE

For example, if recommended RVUs are based on an alternative method instead of the survey results.

The revisions to the descriptions for the knee X-ray codes (73560, 73562, 73564) were done in the belief that they are editorial, thus not affecting the physician work relative values currently assigned to those codes. The results of our survey, in which the median final RVW (0.17) for code 73560 matches its existing RVW (0.17), confirm that the changes were editorial only.

FREQUENCY INFORMATION

How was this service previously reported? 73560

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? 1,547,115 ('96 BMAD)

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

AMERICAN COLLEGE OF RADIOLOGY
 SUMMARY OF RECOMMENDATION
 AMERICAN COLLEGE OF RADIOLOGY

CPT Code: 73562 Tracking Number: G2 Global Period: XXX Recommended RVW: 0.18

CPT Descriptor: Radiologic examination, knee; three views

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: Twenty-seven year old male presenting with trauma to left knee from auto accident.

Description of Pre-Service Work: *Review clinical history

Description of Intra-Service Work: *Interpret radiographs of knee
 *Compare with prior studies, if applicable

Description of Post-Service Work: *Dictate and review written report
 *Communicate findings to referring physician(s)

SURVEY DATA:

Specialty: American College of Radiology

Sample Size: 116 Response Rate (%): N=28 (24%) Median Initial RVW: 0.19 Median Final RVW: 0.19

Type of Sample (Circle One): random, panel, convenience

Explanation of sample size: ACR Committees/Commissions

25th Percentile RVW: 0.18 75th Percentile RVW: 0.21 Low: 0.17 High: 1.0

Median Total-Service Time: 4 Minutes

25th Total Time: 2 Min. 75th Percentile Total Time: 6 Min. Low: 1 Min. High: 12 Min.

KEY REFERENCE SERVICE(S):

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
1)	73510	Radiologic examination, hip, unilateral; complete, minimum of two views	0.21
2)	73560	Radiologic examination, knee; anteroposterior and lateral views	0.17
3)	73600	Radiologic examination, ankle; anteroposterior and lateral views	0.16
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.

INTENSITY/COMPLEXITY MEASURES

CPT Code
73562

Reference
Service 1
73560

Reference
Service 2
73510

Reference
Service 3
73600

Time Estimates

Median Total Time	04	3	6	2
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Mental Effort and Judgement

The number of possible diagnosis and/or the number of management options that must be considered	2.2	1.7	2.3	2
--	-----	-----	-----	---

The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	2.0	1.4	2.2	1.7
--	-----	-----	-----	-----

Urgency of medical decision making	2.3	1.4	2.7	2
------------------------------------	-----	-----	-----	---

Technical Skill/Physical Effort

Technical skill required	1.7	1.6	1.5	1.0
--------------------------	-----	-----	-----	-----

Physical effort required	1.4	1.1	1.3	1.0
--------------------------	-----	-----	-----	-----

Psychological Stress

The risk of significant complications, morbidity and/or mortality	2.1	1.3	2.2	1.0
---	-----	-----	-----	-----

Outcome depends on the skill and judgement of physician	2.5	1.8	3.7	2.3
---	-----	-----	-----	-----

Estimated risk of malpractice suit with poor outcome	2.6	1.4	3.0	2
--	-----	-----	-----	---

Time Segments

Total-Service intensity/complexity	2.0	1.4	2.3	1.7
------------------------------------	-----	-----	-----	-----

The number of times respondents performed the procedure over the past year.

Mean

Median

ACR

ACR

296	100
-----	-----

CPT Code 73562

Did the description of typical patient/service match your typical patient?

YES
ACR

NO
ACR

100%

0%

ADDITIONAL RATIONALE

For example, if recommended RVUs are based on an alternative method instead of the survey results.

The revisions to the descriptions for the knee X-ray codes (73560, 73562, 73564) were done in the belief that they are editorial, thus not affecting the physician work relative values currently assigned to those codes. The results of our survey, in which the median final RVW (0.19) for code 73562 differs from its existing RVW (0.18) by only 0.01 RVW's, confirm that the changes were editorial only.

FREQUENCY INFORMATION

How was this service previously reported? 73562

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? 910,694 ('96 BMAD)

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

**AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION
AMERICAN COLLEGE OF RADIOLOGY**

CPT Code: 73564 Tracking Number: G3 Global Period: XXX Recommended RVW: 0.22

CPT Descriptor: Radiologic examination, knee; four or more views

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: Thirty-two year old female presenting with trauma to right knee from auto accident.

Description of Pre-Service Work: *Review clinical history

Description of Intra-Service Work: *Interpret radiographs of knee
*Compare with prior studies, if applicable

Description of Post-Service Work: *Dictate and review written report
*Communicate findings to referring physician(s)

SURVEY DATA:

Specialty: American College of Radiology

Sample Size: 116 Response Rate (%): N=28 (24%) Median Initial RVW: 0.22 Median Final RVW: 0.22

Type of Sample (Circle One): random, panel, convenience.

Explanation of sample size: ACR Committees/Commissions

25th Percentile RVW: 0.21 75th Percentile RVW: 0.27 Low: 0.18 High: 1.5

Median Total Time: 5 Minutes

25th Percentile Total Time: 2.75 Min. 75th Percentile Total Time: 7 Min. Low: 1 Min. High: 13 Min.

KEY REFERENCE SERVICE(S):

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
1)	70220	Radiologic examination, sinuses, paranasal, complete, minimum of three views	0.25
2)	73510	Radiologic examination, hip, unilateral; complete, minimum of two views	0.21
3)	73560	Radiologic examination, knee; anteroposterior and lateral views	0.17
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.

INTENSITY/COMPLEXITY MEASURES

CPT Code
73564

Reference
Service 1
70220

Reference
Service 2
73510

Reference
Service 3
73560

Time Estimates (Median)

Median Total Physician (Minutes)	5.0	6.0	4.5	3.0
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Mental Effort and Judgement (Mean)

The number of possible diagnosis and/or the number of management options that must be considered	2.4	2.8	2.2	1.8
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The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	2.1	2.5	2.2	1.7
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Urgency of medical decision making	2.4	2.8	2.8	1.8
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Technical Skill/Physical Effort (Mean)

Technical skill required	1.8	2.0	1.5	1.6
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Physical effort required	1.4	1.8	1.3	1.1
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Psychological Stress (Mean)

The risk of significant complications, morbidity and/or mortality	2.2	2.5	2.2	1.9
---	-----	-----	-----	-----

Outcome depends on the skill and judgement of physician	2.7	3.0	3.5	2.1
---	-----	-----	-----	-----

Estimated risk of malpractice suit with poor outcome	2.6	2.8	3.0	1.8
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Time Segments (Mean)

Total-Service intensity/complexity	2.2	2.5	2.3	1.7
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The number of times respondents performed the procedure over the past year.

<u>Mean</u>	<u>Median</u>
237	106

Did the description of typical patient/service match your typical patient?

Yes

No

100%

0%

ADDITIONAL RATIONALE

For example, if recommended RVUs are based on an alternative method instead of the survey results.

The revisions to the descriptions for the knee X-ray codes (73560, 73562, 73564) were done in the belief that they are editorial, thus not affecting the physician work relative values currently assigned to those codes. The results of our survey, in which the Median Final RVW (0.22) for code 73564 matches its existing RVW (0.22), confirm that the changes were editorial only.

FREQUENCY INFORMATION

How was this service previously reported? 73564

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? 608,522

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

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS
May 1998

Radiological Examination Stress Views

A new CPT code 76006 was established to report the physician's work in performing musculoskeletal stress x-ray views. These views require direct physician involvement with manipulation and assessing the films (including all necessary measurements) to determine if they are adequate. This procedure is considered new work that is not previously in the system. Specialists primarily perform this procedure in the x-ray suite and therefore should not be considered an add-on to reading the x-ray. The increased surveyed time for 76006 (10-12 minutes) compared to 73600 *Radiologic examination, ankle; anteroposterior and lateral views* (2.5 minutes) is explained by the physician discussion with the patient and physician manipulation of the injured extremity. In addition, the intensity and complexity of 76006 is also greater than 73600. In comparison to CPT codes 76885 and 76886 (median time 15), the time for 76006 (median time 10), represents one-half to two thirds of the intra-service time. The RUC recommends a work RVW for 76006 which is both the survey median from the radiology survey and the approximately the 25th percentile from the orthopaedic surgeons survey.

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
•76006	W1	Radiologic examination, stress view(s), any joint, stress applied by a physician (includes comparison views)	XXX	.41

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION (April 1998)

CPT Code: 79XXX (W1)

Global Period: XXX

Recommended RVW: 0.41

CPT Descriptor: Radiologic examination, stress view(s), any joint, stress applied by a physician (includes comparison views)

Vignette Used in Survey:

A 21-year-old college tennis player sprains her ankle during a game. She can hardly walk and needs to be helped off the court. The next day she sees her orthopaedist who notes considerable swelling, bruising, and pain about her ankle and foot. She is on crutches. Ankle and subtalar range of motion are reduced due to pain and guarding. She is neurovascularly intact. Clinically, there is a suggestion of anterior translation of the talus on the tibia when pulling her foot forward. Regular x-rays show no fractures. She is treated in a cast for several weeks, and then starts a self-directed exercise and rehabilitation program. But every time she tries to go back to competitive tennis, her ankle feels weak and unstable. Follow-up examinations continue to show anterior instability. **Her orthopaedist does stress x-rays in order to determine if surgery will help.** [Note: This is an "add-on" code. In responding to this survey, please consider ONLY the work related to the stress x-rays applied by the physician.]

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

Description of Pre-Service Work:

Not applicable.

Description of Intra-Service Work:

The physician must explain the nature of the test and that the procedure may be painful when the joint is stressed to the maximum degree. The physician puts on lead protection, including gown and gloves. The physician positions the affected joint and manually applies stress to the involved joint while the x-ray technician takes the film exposure. This requires more than one exposure to properly evaluate the suspected instability. With regard to the ankle as described in the vignette, a minimum of two views must be obtained; AP and lateral views, both with stress applied. Following the processing of the film, the physician assessed the film to assure quality and repeats the study, if needed. Additional work directly related to the application of stress is required in this assessment. Measurements of angles and distance between bony landmarks must be obtained (eg, tibio-talar tilt angle and distance from tip of lateral malleolus to talus and calcaneus on the AP stress view, and millimeters of anterior subluxation of the talus in relation to the tibia on the lateral stress view).

Description of Post-Service Work:

Not applicable.

SURVEY DATA from American Academy of Orthopaedic Surgeons

Type of Sample: Random

Survey n:	124	RVW	PRE total min	INTRA total min	HOSP total min	OFF total min
Response:	36					
Rate %:	29%					
	low	0.25		2		
	25th%	0.47		6		
	MED	0.83		10		
	75th%	1.00		15		
	high	2.00		30		

	Mean Intensity/Complexity Measures		
	79XXX(W1)	76885	76886
<i>Median Total Physician Time (this survey)</i>	10	15	15
		76885	76886
<i>Median Total Physician Time (previous RUC surveys by ACR and AAP 02/97)</i>	n/a	20 n=58	15 n=39
Mental Effort and Judgment	79XXX(W1)	76885	76886
<i>The number of possible diagnosis and/or the number of management options that must be considered</i>	2.77	2.60	2.60
<i>The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed</i>	2.60	2.90	2.60
<i>Urgency of medical decision making</i>	2.11	2.90	2.80
Technical Skill/physical Effort			
<i>Technical skill required</i>	3.03	3.20	2.80
<i>Physical effort required</i>	2.86	2.80	2.60
Psychological Stress			
<i>The risk of significant complications, morbidity and/or mortality</i>	1.53	2.40	2.20
<i>Outcome depends on skill and judgment of physician</i>	3.09	3.50	2.80
<i>Estimated risk of malpractice suit with poor outcome</i>	2.06	3.40	2.80
Time Segments			
<i>PRE-service intensity/complexity</i>	n/a	n/a	n/a
<i>INTRA-service intensity complexity</i>	2.65	2.80	2.40
<i>POST-service intensity complexity</i>	n/a	n/a	n/a

KEY REFERENCE SERVICE(S):

<u>1998 RVW</u>	<u>Global</u>	<u>CPT</u>	<u>Descriptor</u>
0.74	XXX	76885	<i>Echography of infant hips, real time with imaging documentation; dynamic</i>

0.62 XXX 76886 *Echography of infant hips, real time with imaging documentation; limited, static (eg, not requiring manipulation)*
 0.96 000 27648 *Injection procedure for ankle arthrography*

SURVEY DATA from American College of Radiology
Type of Sample: Panel (ACR Committees/Commissions)

Survey n:	116	RWV	PRE total min	INTRA total min	HOSP total min	OFF total min
Response:	26					
Rate %:	22%					
	low	0.11		2		
	25th%	0.29		5		
	MED	0.41		12		
	75th%	0.50		19		
	high	1.50		30		

Mean Intensity/Complexity Measures

	79XXX(W1)	73040	73600
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<i>Median Total Physician Time</i>	12	25	2.5
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Mental Effort and Judgment

<i>The number of possible diagnosis and/or the number of management options that must be considered</i>	2.3	2.8	2.0
<i>The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed</i>	2.6	3.0	2.0
<i>Urgency of medical decision making</i>	2.3	2.4	1.8

Technical Skill/physical Effort

<i>Technical skill required</i>	2.6	3.0	1.3
<i>Physical effort required</i>	2.9	2.2	1.0

Psychological Stress

<i>The risk of significant complications, morbidity and/or mortality</i>	2.2	3.2	1.7
<i>Outcome depends on skill and judgment of physician</i>	2.9	3.4	2.0
<i>Estimated risk of malpractice suit with poor outcome</i>	2.7	3.6	1.8

Time Segments

<i>Total-service intensity complexity</i>	2.8	3.2	1.5
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KEY REFERENCE SERVICE(S):

<i>1998 RVW</i>	<i>Global</i>	<i>CPT</i>	<i>Descriptor</i>
0.54	XXX	73040	<i>Radiologic examination, shoulder arthrography, radiological supervision and interpretation</i>
0.16	XXX	73600	<i>Radiologic examination, ankle; anteroposterior and lateral views</i>

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

The surveyed time for 79XXX (W1) is very similar from both specialties reviewing this code (10 and 12 minutes). In comparison the survey time for 73600 at 2.5 minutes is only a fraction of the time for W1. This is because, with 73600, there is no physician discussion with the patient at the start of the study nor is there any physician manipulation of the injured extremity as occurs with W1. In comparison to CPT codes 76885 and 76886, the time for W1 represents one-half to two-thirds of the intra-service time. Also note that the intra-service time for 76885 and 76886 for this service closely matches the data from a previous RUC survey for these codes.

With respect to intensity and complexity, W1 is greater than 73600 for all measured variables. Again, this is because of the necessity for direct physician verbal and physical interaction with the patient. In comparison to 76885/76886, W1 requires similar technical skill and physical effort. The overall intra-service intensity for W1 falls between 76885 and 76886.

An RVW of 0.41 is recommended for 79XXX(W1). This is the radiology survey median and approximately the 25th percentile for the orthopaedic survey.

ADDITIONAL RATIONALE:

*An additional comparison can be made to office evaluation and management services. Given the direct physician involvement with manipulation and assessing the films (including all necessary measurements) to determine if they are adequate, W1 most closely approximates the intra-service work for the evaluation and management code 99213 (RVW=0.67). Although W1 is an "add-on" code, there is some additional work necessary before and after the manipulation and x-ray exposure that is **directly** related to the application of stress and that would **not** be necessary if stress were not applied. For this reason, it is fair to say that W1 is worth more than 50% of 99213. Although verbal communication is necessary, written documentation falls under the primary x-ray code. For this reason, it is fair to say that W1 is worth less than 100% of 99213. Using this rationale, the recommended value of 0.41, which falls between 50% and 100% of 99213 is justified.*

FREQUENCY INFORMATION**1. How was this service previously reported?**

76499

2. How often do physicians in your specialty perform this service?

Commonly Sometimes Rarely

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

This code will be most often used in conjunction with ankle x-rays, but it is estimated that the rate will be less than 0.2% of all ankle x-rays. This code may also be used in conjunction with other joint x-rays, but at a markedly less frequent rate.

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

Yes No

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS
May 1998

Thyroid Carcinoma Metastases Uptake

A new code, 78020, was developed as an add-on for a thyroid carcinoma metastases uptake procedure. As indicated, code 78020 *Thyroid carcinoma metastases uptake (List separately in addition to code for primary procedure)* is intended for use in reporting of services with code 78018.

Thyroid cancer therapy with I-131 may result in pulmonary fibrosis in patients with lung metastases. Dosimetric estimates may be derived from the whole body I-131 imaging that are routinely performed prior to treatment, by measurement of the lung uptake and calculation of the percentage of the administered dose that is resident within the lung. Code 780X1 represents the resources that are employed to derive that uptake measurement. Further calculation of uptake outside of the lung permits selective modification of doses I-131 given to patients with bone lymph node metastases, with greater therapeutic effect.

Prior to development of 78020, there was no reporting mechanism for "uptake" with CPT 78018 *Thyroid carcinoma metastases imaging; whole body* (work RVU = .95). CPT 78016 *Thyroid carcinoma metastases imaging; with additional studies (eg urinary recovery)* (work RVU = .82) does not reflect the resources used in 78018 plus calculation of the metastases uptake. Again, the code 78020 was not designed for reporting in conjunction with 78015 or 78016.

The physician involvement for the procedure is focused on the review of the calculations, including decay factors used for the dose measurement, and the accuracy of the regions of interest used for the areas of metastases and/or lung. Physician review of data may result in recalculation by the physician, which occurs 20% of the time. The report of the result is included in the main body of the imaging data report.

The RUC recommends an RVW of .67. The recommendation represents the weighted average of the societies' median final RVW's. The RVW is appropriate given the number of sites calculated, the frequent need for recalculations, and that the data are instrumental in planning therapy for the patient.

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
78015		Thyroid carcinoma metastases imaging; limited area (eg, neck and chest only)	XXX	0.67 (No Change)
78017		—multiple areas <u>(78017 has been deleted. To report, see 78018)</u>	XXX	0.87 (No Change)
•78020	HH1	Thyroid carcinoma metastases uptake (List separately in addition to code for primary procedure) (Use 78020 in conjunction with 78018)	XXX	0.67

**AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION
AMERICAN COLLEGE OF RADIOLOGY/AMERICAN ROENTGEN RAY SOCIETY
SOCIETY OF NUCLEAR MEDICINE**

CPT Code: 7801X Tracking Number: HH1 Global Period: XXX Recommended RVW: 0.67

CPT Descriptor: Thyroid carcinoma metastases uptake (add-on code) List separately in addition to code for primary procedure

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 27 year old woman with follicular carcinoma two years following initial diagnosis and surgery and i-131 ablative treatment, now has known pulmonary metastases by chest x-ray; she is referred for whole body metastatic thyroid cancer study and calculation of pulmonary and other metastatic uptake.

Description of Pre-Service Work:

Description of Intra-Service Work: *Review of the calculations and the accuracy of the regions of interest used for the areas of metastases and/or lung
 *Recalculation of 20% of cases
 *Dictate findings and add to report

Description of Post-Service Work:

SURVEY DATA:

Specialty: American College of Radiology/American Roentgen Ray Society

Sample Size: 116 Response Rate (%): N=26(22%) Initial Median RVW: 0.75 Final Median RVW 0.75

Type of sample (Circle One): random, panel, convenience

Explanation of sample size: ACR Committees/Commissions

25th Percentile RVW: 0.52 75th Percentile RVW: 0.99 Low: 0.27 High: 1.90

Median Total-Service Time: 15 Minutes

25th Percentile Total-Svc Time: 10 Min. 75th Percentile Total-Svc Time: 25 Min. Low: 2 Min. High: 60 Min.

Specialty: Society of Nuclear Medicine

Sample Size: 33 Response Rate (%): N=33 (35%) Median Initial RVW: 0.60 Median Final RVW: 0.60

Type of sample (Circle One): random, panel, convenience

Explanation of sample size: SNM House of Delegates, Commission on Health Care Policy and Practice

25th Percentile RVW: 0.40 75th Percentile RVW: 0.94 Low: 0.03 High 2.20

Median Total-Service Time: 21 Minutes

25th Percentile Total-Svc Time: 15 Min. 75th Percentile Total-Svc Time: 30 Min. Low: 2 Min. High: 70 Min.

CPT Code: 7801X

KEY REFERENCE SERVICE(S):

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
1)	78006 (ACR/SNM)	Thyroid imaging, with uptake; single determination	0.49
2)	78018 (ACR)	Thyroid carcinoma metastases imaging; whole body	0.95
3)	78802 (SNM)	Radiopharmaceutical localization of tumor; whole body	0.86

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.**

INTENSITY/COMPLEXITY MEASURES

	<u>CPT Code</u> 7801X		<u>Reference Service 1</u> 78006		<u>Reference Service 2</u> 78018		<u>Reference Service 3</u> 78802	
	ACR	SNM	ACR	SNM	ACR	SNM	ACR	SNM
<u>Time Estimates</u>								
Median Total Physician Time (Minutes)	15	21	10	20	15			22.5
<u>Mental Effort and Judgement (Mean)</u>								
	ACR	SNM	ACR	SNM	ACR			SNM
The number of possible diagnosis and/or the number of management options that must be considered	3.08	2.91	2.8	2.89	3			3.0
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.46	3.18	3.2	3.17	3.4			3.5
Urgency of medical decision making	3.08	2.97	2.5	2.44	3.4			2.67
<u>Technical Skill/Physical Effort (Mean)</u>								
	ACR	SNM	ACR	SNM	ACR			SNM
Technical skill required	3.5	3.45	2.7	2.89	2.6			3.0
Physical effort required	1.92	2.30	1.7	2.17	1.6			2.0
<u>Psychological Stress (Mean)</u>								
	ACR	SNM	ACR	SNM	ACR			SNM
The risk of significant complications, morbidity and/or mortality	2.58	3.18	2.2	2.50	2.6			3.0
Outcome depends on the skill and judgement of physician	3.69	3.79	3.3	3.06	1.6			3.33
Estimated risk of malpractice suit with poor	3.11	3.15	2.7	2.72	3.3			3.17

CPT Code: 7801X

INTENSITY/COMPLEXITY MEASURES

CPT Code
7801X

Reference
Service 1
78006

Reference
Service 2
78018

Reference
Service 3
78802

Time Segments(Mean)

	ACR	SNM	ACR	SNM	ACR	SNM
Total-Service intensity/complexity	3.52	3.12	3.2	2.83	3.3	3.33

The number of times the respondents performed procedure over the past year.

<u>Mean</u>		<u>Median</u>	
ACR	SNM	ACR	SNM
10	12	3	3

Did the description of typical patient/service match your typical patient?

<u>Yes</u>		<u>No</u>	
ACR	SNM	ACR	SNM
88.5%	83%	11.5%	17%

ADDITIONAL RATIONALE

For example, if recommended RVUs are based on an alternative method instead of the survey results.

The recommended RVW (0.67) represents the weighted average of the SNM's and ACR's median final RVWs and the number of respondents to their respective surveys. The recommended RVW is appropriate given the number of sites calculated, the frequent need for recalculations, and that the results are used to plan therapy.

FREQUENCY INFORMATION

How was this service previously reported? 78099

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 % when used with codes 78015, 78016, or 78018

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

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS
May 1998

Liver Imaging (SPECT)

A new CPT code 78206 *Liver imaging (SPECT); with vascular flow* was established to report a hepatic hemangioma study which requires two phases, the initial flow and images, and a later delayed set of images. This procedure is specifically performed to diagnose a hepatic hemangioma. Although there are several methods to diagnose a hepatic hemangioma, this particular procedure is unique from other liver imaging in that it requires multiple phases and as opposed to most tumors, a hepatic hemangioma perfuses slowly which is seen as absent flow and uptake initially and increased uptake of intravascular tracer on later images.

In the absence of a specific code, this procedure was most commonly reported as CPT 78445 *Non-cardiac vascular flow imaging (ie, angiography, venography)* (work RVU = .49) which does not reflect the prolonged planar imaging and flow evaluation required. The work involved in 78206 is very similar to the combination of two CPT codes, 78205 *Liver imaging (SPECT)* (work RVU = .71) and CPT Code 78455 [$.71 + .49 \times 50\% = .96$]. The RUC accepted the specialty society recommendation of .96 for CPT 78206.

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
78205	II1	Liver imaging (SPECT);	XXX	.71 (No Change)
•78206	II2	with vascular flow	XXX	0.96

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

**AMIA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION
AMERICAN COLLEGE OF RADIOLOGY/AMERICAN ROENTGEN RAY SOCIETY
SOCIETY OF NUCLEAR MEDICINE**

CPT Code: 78206 Tracking Number: 112 Global Period: XXX Recommended RVW: 0.96

CPT Descriptor: Liver imaging (SPECT); with vascular flow

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 59 year old man with recently-diagnosed lung tumor is referred for evaluation of hepatic lesion found on ultrasound examination, that may be either a metastatic lesion or a hemangioma.

Description of Pre-Service Work:	<ul style="list-style-type: none"> *Review history and physical exam. *Discuss procedure with patient. *Review prior imaging studies. *Order radiopharmaceuticals. *Include the work of injecting the radio pharmaceutical if you perform the injection. Otherwise, include the work of supervising the injection.
Description of Intra-Service Work:	<ul style="list-style-type: none"> *Monitor the procedure. *Reanalyze data if necessary. *Interpret results of the study. *Compare results in relation to current diagnosis and future treatment, if appropriate.
Description of Post-Service Work:	<ul style="list-style-type: none"> *Dictate, correct and sign report. *Discuss and communicate report/findings with referring physician(s) and patient.

SURVEY DATA:

Specialty: American College of Radiology/American Roentgen Ray Society

Sample Size: 116 Response Rate (%): N=27 (23%) Median Initial RVW: 0.84 Median Final RVW: 0.90

Type of Sample (Circle One): random, panel, convenience.

Explanation of sample size: ACR Committees/Commissions

25th Percentile RVW: 0.76 75th Percentile RVW: 1.0 Low: 0.65 High: 1.95

Median Total-Service Time: 20 Minutes

25th Percentile Total-Svc Time: 12 Min. 75th Percentile Total-Svc Time: 27.5 Min. Low: 5 Min. High: 120 Min.

CPT Code 78206

Specialty: Society of Nuclear Medicine

Sample Size: 93 Response Rate (%): N=37 (40%) Median Initial RVW: 1.00 Median Final RVW: 1.00

Type of Sample (Circle One): random, panel, convenience.

Explanation of sample size: SNM House of Delegates, Commission on Health Care Policy and Practice

25th Percentile RVW: 0.86 75th Percentile RVW: 1.10 Low: 0.71 High: 1.50

Median Total-Service Time: 30 Minutes

25th Percentile Total-Svc Time: 20 Min. 75th Percentile Total-Svc Time: 40 Min. Low: 10 Min. High: 100 Min.

KEY REFERENCE SERVICE(S):

	<u>CPT Code</u>		<u>CPT Descriptor</u>	<u>RVW</u>
1)	78205	(SNM/ACR)	Liver imaging (SPECT)	0.71
2)	78803	(SNM)	Tomographic (SPECT); radiopharmaceutical localization of tumor	1.09
3)	78202	(ACR)	Liver imaging; with vascular flow	0.51

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.

INTENSITY/COMPLEXITY MEASURES

CPT Code
78206

Reference
Service 1
78205

Reference
Service 2
78803

Reference
Service 3
78202

Time Estimates

	ACR	SNM	ACR	SNM	SNM	ACR
Median Total Physician (Minutes)	20	30	15	20	40	10

Mental Effort and Judgement (Mean)

	ACR	SNM	ACR	SNM	SNM	ACR
The number of possible diagnosis and/or the number of management options that must be considered	3.26	3.3	2.8	2.96	3.92	2.8

The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.3	3.68	2.8	2.96	4.08	2.6
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Urgency of medical decision making	3.6	3.05	2.3	2.70	3.54	2.6
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Technical Skill/Physical Effort

	ACR	SNM	ACR	SNM	SNM	ACR
Technical skill required	2.9	3.76	2.7	3.04	3.92	2.4

Physical effort required	3.3	2.43	1.8	2.04	2.62	1.8
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CPT Code 78206

INTENSITY/COMPLEXITY MEASURES

CPT Code
78206

Reference
Service 1
78205

Reference
Service 2
78803

Reference
Service 3
78202

Psychological Stress (Mean)

	ACR	SNM	ACR	SNM	SNM	ACR
The risk of significant complications, morbidity and/or mortality	2.1	2.92	1.8	2.26	3.31	1.8
Outcome depends on the skill and judgement of physician	3.7	3.76	3.3	3.35	4.23	2.6
Estimated risk of malpractice suit with poor outcome	3.0	3.19	2.6	2.65	3.62	2.4

Time Segments

	ACR	SNM	ACR	SNM	SNM	ACR
Total-Service intensity/complexity	3.2	3.38	2.6	2.78	3.77	2.6

The number of times the respondents performed the procedure over the past year.

Mean

Median

ACR	SNM	ACR	SNM
20	18	16	10

Did the description of typical patient/service match your typical patient?

Yes

No

ACR	SNM	ACR	SNM
93%	92%	7%	8%

ADDITIONAL RATIONALE

For example, if recommended RVUs are based on an alternative method instead of the survey results.

The recommended RVW (0.96) represents a weighted average of the SNM's and ACR's median final RVWs and their respective number of respondents. This value is considered appropriate given the prolonged planar imaging and flow evaluation required. Alternatively, the recommended RVW (0.96) can be found by adding 50% of the non-cardiac vascular flow study's RVW (Code 78445, RVW=0.49) to the base SPECT study (Code 78205; RVW=0.71).

FREQUENCY INFORMATION

How was this service previously reported? 78299

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? unable to quantify

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

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS
May 1998

Cardiac Blood Pool Imaging

CPT code 78472 *Cardiac blood pool imaging, gated equilibrium; planar, single study at rest or stress (exercise and/or pharmacologic), wall motion study plus ejection fraction, with or without additional quantitative processing* (work RVU = .98) was recently revised through the CPT process. However, the change was limited to an editorial addition in language, which did not constitute a change in the physician work RVU.

Newly developed codes 78494 *Cardiac blood pool imaging, gated equilibrium, SPECT, at rest, wall motion study plus ejection fraction, with or without quantitative processing* and 78496 *Cardiac blood pool imaging, gated equilibrium; single study, at rest, with right ventricular ejection fraction by first pass technique (List separately in addition to code for primary procedure)* were developed to provide for the reporting of various cardiac blood pool imaging processes. For 78494, the procedure is the same as that for CPT 78472, (*Cardiac blood pool imaging, gated equilibrium* RVU = .98), except that in addition, right ventricular function is studied more precisely by imaging the bolus of the radionuclide as it passes through the right ventricle. The physician services include review of the clinical record for indication for the procedure, supervision or performance of the injection, quality review of the processing of the data, visual review of the reformatted cine data, analysis and interpretation of regional and global right ventricular function, and incorporation of the results into the final consultation.

The RUC recommends a work RVU of 1.19 for code 78494. This recommendation is based on the work RVU for 78472 (.98) as a base, and the addition of the .21 as a value for the incremental physician work performed for this procedure. The recommended value also represents the median final value RVW weighted by the number of respondents from specialties.

Code 78496 is very similar to code 78481 *Cardiac blood pool imaging, (planar), first pass technique; single study, at rest or with stress (exercise and/or pharmacologic), wall motion study plus ejection fraction with or without quantification* (work RVU = .98). The primary difference between these two codes is the technique by which the services are performed. In addition, physicians are required to review multiple gated flow images. In determining a value for add-on code 78496, the

RUC split the work RVU for 78481, and also divided the 78496 survey median (.98) for consistency. The work values for other add-on codes were additionally considered. It was the consensus that the work value was in between .49 and .62. Participants agreed that the survey median, .50, was appropriate, and accordingly, RUC recommends a work RVU of .50 for code 78496. The specialty has noted that this code will be rarely used as there are limited indications for this procedure (e.g. right ventricular dysfunction).

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
▲78472		Cardiac blood pool imaging, gated equilibrium; <u>planar</u> , single study at rest or stress (exercise and/or pharmacologic), wall motion study plus ejection fraction, with or without additional quantitative processing (For ventricular ejection fraction by first pass technique, see 78496)	XXX	.98 (No Change)
•78494	KK1	Cardiac blood pool imaging, gated equilibrium, SPECT, at rest, wall motion study plus ejection fraction, with or without quantitative processing	XXX	1.19
•78496	KK2	Cardiac blood pool imaging, gated equilibrium; single study, at rest, with right ventricular ejection fraction by first pass technique (List separately in addition to code for primary procedure) (Use 78496 in conjunction with code 78472)	XXX	0.50

AMERICAN COLLEGE OF RADIOLOGY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION
AMERICAN COLLEGE OF RADIOLOGY/AMERICAN ROENTGEN RAY SOCIETY
SOCIETY OF NUCLEAR MEDICINE
AMERICAN COLLEGE OF CARDIOLOGY

CPT Code: 784XX Tracking Number: KK1 Global Period: XXX Recommended RVW: 1.19

CPT Descriptor: Cardiac blood pool imaging, gated equilibrium; SPECT, at rest, wall motion study plus ejection fraction, with or without quantitative processing

CLINICAL DESCRIPTION OF SERVICE:

Vignette: Used in Survey: A patient is referred for assessment of regional and global cardiac function because of dyspnea, chest pain, and a prior myocardial infarction. The differential diagnoses include left versus right ventricular dysfunction; left ventricular aneurysm; left ventricular pseudoaneurysm; and extent of abnormal regional ventricular function.

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:

Specialty: American College of Radiology/American Roentgen Ray Society

Sample Size: 116 Response Rate (%): N=27 (23%) Median Initial RVW: 1.1 Median Final RVW: 1.1

Type of Sample (Circle One): random, panel, convenience.

Explanation of sample size: ACR Committees/Commissions

25th Percentile RVW: 0.99 75th Percentile RVW: 1.2 Low: 0.5 High: 2.0

Median Total Time: 20 Minutes

25th Percentile Total Time: 12 Min. 75th Percentile Total Time: 25.5 Min. Low: 3 Min. High: 45 Min.

CPT Code: 784XXSpecialty: Society of Nuclear MedicineSample Size: 93 Response Rate (%): N=33 (35%) Initial Median RVW: 1.23 Final Median RVW: 1.23Type of Sample (Circle One): random, panel, convenience.Explanation of sample size: SNM House of Delegates/Commission on Health Care Policy and Practice/Cardiovascular Council Board of Directors25th Percentile RVW: 1.10 75th Percentile RVW: 1.30 Low: 0.80 High: 1.73Median Total-Service Time: 35 Minutes25th Percentile Total Time: 22 Min. 75th Percentile Total Time: 60 Min. Low: 12 Min. High: 140 Min.Specialty: American College of CardiologySample Size: 150 Response Rate (%): N=41 (27.3%) Median Initial RVW: 1.23 Median Final RVW: 1.22Type of Sample (Circle One): random, panel, convenience.Explanation of sample size: Random sample of ACC members who perform nuclear cardiology25th Percentile RVW: 1.10 75th Percentile RVW: 1.40 Low: 0.75 High: 2.00Median Pre-Service Time: 10 minutes Median Intra-Service Time: 15 minutes25th Percentile Intra Time: 10 min. 75th Percentile Intra Time: 23 min. Low Intra: 0 High Intra: 63 min.**KEY REFERENCE SERVICE(S):**

	<u>CPT Code</u>		<u>CPT Descriptor</u>	<u>RVW</u>
1)	<u>78465</u>	<u>(ACR, SNM, ACC)</u>	<u>Myocardial perfusion imaging; tomographic(SPECT) multiple studies, at rest and/or stress (exercise and/or pharmacologic) and redistribution and/or rest injection, with or without quantification</u>	<u>1.46</u>
2)	<u>78481</u>	<u>(ACR/SNM)</u>	<u>Cardiac blood pool imaging, (planar), first pass technique; single study, at rest or with stress (exercise and/or pharmacologic), wall motion study plus ejection fraction, with or without quantification</u>	<u>0.98</u>
3)	<u>78472</u>	<u>(SNM, ACC)</u>	<u>Cardiac blood imaging, gated equilibrium; single study at rest or stress (exercise and/or pharmacologic), wall motion study plus ejection fraction, with or without additional quantitative processing</u>	<u>0.98</u>

CPT Code 784XX

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.**

INTENSITY/COMPLEXITY MEASURES

CPT Code
784XX

Reference
Service 1
78465

Reference
Service 2
78481

Reference
Service 3
78472

Time Estimates (Median)

	ACR	SNM	ACC	ACR	SNM	ACC	ACR	SNM	SNM	ACC
Median Total Physician	20	35	35	25	35	41	15	26	30	30

Mental Effort and Judgement (Mean)

	ACR	SNM	ACC*	ACR	SNM	ACC*	ACR	SNM	SNM	ACC*
The number of possible diagnosis and/or the number of management options that must be considered	3.4	3.82	4	3.5	4.15	4	3.2	3.54	3.11	3
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.4	3.67	3	3.5	4.31	3.5	3.1	3.46	3.37	3
Urgency of medical decision making	3.4	3.33	3	3.5	4	4	3.4	3.46	3.21	3

Technical Skill/Physical Effort (Mean)

	ACR	SNM	ACC*	ACR	SNM	ACC*	ACR	SNM	SNM	ACC*
Technical skill required	3.6	4.27	4	3.7	4.38	4	3.1	3.46	3.21	4
Physical effort required	2.1	2.64	2	2.0	2.62	2	1.9	2.54	2.32	2

Psychological Stress (Mean)

	ACR	SNM	ACC*	ACR	SNM	ACC*	ACR	SNM	SNM	ACC*
The risk of significant complications, morbidity and/or mortality	2.3	2.94	2	3.0	4	3	2.1	2.92	2.89	2
Outcome depends on the skill and judgement of physician	3.7	4.0	4	4.2	4.38	5	3.7	3.69	3.37	4
Estimated risk of malpractice suit with poor outcome	2.8	2.85	3	3.0	3.69	4	3.1	2.77	2.63	3

Time Segments

	ACR	SNM	ACC*	ACR	SNM	ACC*	ACR	SNM	SNM	ACC*
Total-Service intensity/complexity	3.4	3.76	4	3.5	4.23	4	3.1	3.31	3.26	3

***ACC Values are Medians**

CPT Code 784XX

The number of times respondents performed procedure over the past year.

<u>Mean</u>			<u>Median</u>		
ACR	SNM	ACC	ACR	SNM	ACC
84	92	145	28	10	30

Did the description of typical patient/service match your typical patient?

<u>Yes</u>			<u>No</u>		
ACR	SNM	ACC	ACR	SNM	ACC
93%	93%		7%	7%	

ADDITIONAL RATIONALE

For example, if recommended RVUs are based on an alternative method instead of the survey results.

The recommended RVW (1.19) represents the median final RVW weighed by the number of respondents from the ACR, ACC, and SNM, respectively.

FREQUENCY INFORMATION

How was this service previously reported? 78499

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? Unable to quantify

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

SUMMARY OF RECOMMENDATION
 AMERICAN COLLEGE OF RADIOLOGY/AMERICAN ROENTGEN RAY SOCIETY
 AMERICAN COLLEGE OF CARDIOLOGY
 SOCIETY OF NUCLEAR MEDICINE

CPT Code: 7847X Tracking Number: KK2 Global Period: XXX Recommended RVW: 0.62

CPT Descriptor: Cardiac blood pool imaging, gated equilibrium; single study, rest, with right ventricular ejection fraction by first pass technique (List separately in addition to code for primary procedure) ^{at}

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 55-year-old female with progressive exertional dyspnea and a history of hypertension is referred for this procedure. The resting ECG is abnormal, suggesting a possible remote myocardial infarction. There is peripheral edema.

Description of Pre-Service Work:

Description of Intra-Service Work:

- *Quality review of processing of the data.
- *Visual review of reformatted cine data.
- *Reanalyze ejection fraction computation if indicated.
- *Analyze and interprets (function) results of study.
- *Compare results in relation to current diagnosis and future treatment, if appropriate.
- *Dictate findings and add to report.

Description of Post-Service Work:

SURVEY DATA:

Specialty: American College of Radiology/American Roentgen Ray Society

Sample Size: 116 Response Rate (%): N=25 (22.%) Initial Median RVW: 0.99 Final Median RVW: 0.98

Type of Sample (Circle One): random, panel, convenience.

Explanation of sample size: ACR Committees/Commissions

25th Percentile RVW: 0.5 75th Percentile RVW: 1.1 Low: 0.2 High: 1.3

Median Total-Service Time: 16 Minutes

25th Percentile Total Time: 6 Min. 75th Percentile Total Time: 20 Min. Low: 5 Min. High: 33 Min.

Specialty: Society of Nuclear Medicine

Sample Size: 93 Response Rate (%): N=33 (35%) Initial Median RVW: 0.50 Final Median RVW: 0.50

Type of Sample (Circle One): random, panel, convenience.

Explanation of sample size: SNM House of Delegates, Commission on Health Care Policy and Practice/ Cardiovascular Council Board of Directors

25th Percentile RVW: 0.35 75th Percentile RVW: 0.63 Low: 0.09 High: 1.15

Median Total-Service Time: 16 Minutes

25th Percentile Total Time: 10 Min. 75th Percentile Total Time: 40 Min. Low: 2 Min. High: 60 Min.

CPT Code: 7847X

Specialty: American College of Cardiology

Sample Size: 150 Response Rate (%): N=32 (21.3%) Initial Median RVW: 1.13 Final Median RVW: 1.10

Type of Sample (Circle One): random, panel, convenience.

Explanation of sample size: Random sample of ACC membership who perform nuclear cardiology

25th Percentile RVW: 0.99 75th Percentile RVW: 1.30 Low: 0.45 High: 1.60

Median Total-Service Time: 25 Minutes

25th Percentile Total Time: 15 Min. 75th Percentile Total Time: 43 Min. Low: 8 Min. High: 135 Min.

KEY REFERENCE SERVICE(S):

	<u>CPT Code</u>		<u>CPT Descriptor</u>	<u>RVW</u>
1)	78472	(ACC/SNM)	Cardiac blood imaging, gated equilibrium; single study at rest or stress (exercise and/or pharmacologic), wall motion study plus ejection fraction, with or without additional quantitative processing	0.98
2)	78481	(ACR/SNM)	Cardiac blood pool imaging, (planar), first pass technique; single study, at rest or with stress (exercise and/or pharmacologic), wall motion study plus ejection fraction, with or without quantification	0.98
3)	78465	(ACC)	Myocardial perfusion imaging; tomographic(SPECT) multiple studies, at rest and/or stress (exercise and/or pharmacologic) and redistribution and/or rest injection, with or without quantification	1.46

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.**

INTENSITY/COMPLEXITY MEASURES

	<u>CPT Code</u> 7847X			<u>Reference</u> <u>Service 1</u> 78472		<u>Reference</u> <u>Service 2</u> 78481		<u>Reference</u> <u>Service 3</u> 78465
	ACR	SNM	ACC	SNM	ACC	ACR	SNM	ACC
<u>Time Estimates</u> Median Total Physician Time (Minutes)	16	16	25	30	23	20	35	30

CPT Code 7847X

INTENSITY/COMPLEXITY MEASURES

CPT Code
7847X

Reference
Service 1
78472

Reference
Service 2
78481

Reference
Service 3
78465

Mental Effort and Judgement (Mean)

	ACR	SNM	ACC*	SNM	ACC*	ACR	SNM	ACC*
The number of possible diagnosis and/or the number of management options that must be Considered	3.2	3.09	3	3.24	3	3.4	3.63	3.0
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.1	3.06	3	3.29	3	2.9	3.58	4
Urgency of medical decision making	3.1	3.03	3	3.29	3	3.4	3.42	4

Technical Skill/Physical Effort (Mean)

	ACR	SNM	ACC*	SNM	ACC*	ACR	SNM	ACC*
Technical skill required	3.5	3.76	4	3.24	4	3.4	3.84	4
Physical effort required	2.1	2.39	2	2.29	3	2.2	2.63	2

Psychological Stress (Mean)

	ACR	SNM	ACC*	SNM	ACC*	ACR	SNM	ACC*
The risk of significant complications, morbidity and/or mortality	2.0	2.76	2	3.06	2	2.1	2.95	3
Outcome depends on the skill and judgement of physician.	3.5	3.58	4	3.65	4	3.6	3.89	5
Estimate risk of malpractice suit with poor outcome	2.6	2.58	3	3.0	3	2.9	2.84	5

Time Segments (Mean)

	ACR	SNM	ACC	SNM	ACC*	ACR	SNM	ACC*
Total-Service intensity/complexity	2.9	2.97	3.3	3.29	3	3.2	3.68	4

***ACC values are medians**

The number of times respondents performed procedure over the past year.

<u>Mean</u>			<u>Median</u>		
ACR	SNM	ACC	ACR	SNM	ACC
78	99	72.5	20	15	12

CPT Code 7847X

Did the description of typical patient/service match your typical patient?

<u>Yes</u>			<u>No</u>		
ACR	SNM	ACC	ACR	SNM	ACC
87%	77%		13%	23%	

ADDITIONAL RATIONALE

For example, if recommended RVUs are based on an alternative method instead of the survey results.

Code 7847X was judged to be comparable to the other cardiovascular nuclear medicine add-on procedures (e.g. 7847, 78498, RVW=0.62; 78480, RVW=0.62).

FREQUENCY INFORMATION

How was this service previously reported? _____

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? _____

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

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS
May 1998

Pulmonary Perfusion Imaging

A new CPT code was established to report pulmonary perfusion imaging with ventilation. The new code 78588 *Pulmonary perfusion imaging, particulate, with ventilation imaging, aerosol, one or multiple projections* was previously reported with CPT codes, 78580 *Pulmonary perfusion imaging, particulate* (work RVU = .74) and 78587 *Pulmonary ventilation imaging, aerosol; multiple projections (eg, anterior, posterior, lateral views)* (work RVU = .49) for a total RVU of 1.23. 78588 is most similar to reference code 78585 *Pulmonary perfusion imaging, particulate with ventilation; rebreathing and washout, with or without single breath* (work RVU = 1.09). The RUC accepted the specialty recommendation of 1.09 RVUs for this procedure which is the 25th percentile of the survey results.

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
•78588	LL1	Pulmonary perfusion imaging, particulate, with ventilation imaging, aerosol, one or multiple projections	XXX	1.09

AMERICAN COLLEGE OF RADIOLOGY/AMERICAN ROENTGEN RAY SOCIETY
SUMMARY OF RECOMMENDATION
AMERICAN COLLEGE OF RADIOLOGY/AMERICAN ROENTGEN RAY SOCIETY
SOCIETY OF NUCLEAR MEDICINE

CPT Code: 7858X Tracking Number: LL1 Global Period: XXX Recommended RVW: 1.09

CPT Descriptor: Pulmonary perfusion imaging, particulate, with ventilation imaging, aerosol, one or multiple projections

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 55 year old woman was referred from the emergency room for a lung study because of chest pain and shortness of breath and a history of estrogen replacement and varicose veins. Doppler ultrasound of the legs did not identify a thrombus. The request for the study indicated that the study should be done as soon as possible because of the concern for a pulmonary embolus.

Description of Pre-Service Work:	<ul style="list-style-type: none"> *Review history and physical exam. *Discuss procedure with patient. *Review prior imaging studies. *Order the radiopharmaceuticals. *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:	<ul style="list-style-type: none"> *Monitor and interpret results of study. *Compare results in relation to current diagnosis and future treatment, if appropriate.
Description of Post-Service Work:	<ul style="list-style-type: none"> Dictate, correct and sign report. *Discuss and communicate report/findings with referring physician(s) and patient.

SURVEY DATA:

Specialty: American College of Radiology/American Roentgen Ray Society

Sample Size: 116 Response Rate (%): N=28 (24%) Median Initial RVW: 0.96 Median Final RVW: 0.99

Type of Sample (Circle One): random, panel, convenience.

Explanation of sample size: ACR Committees/Commissions

25th Percentile RVW: 0.79 75th Percentile RVW: 1.12 Low: 0.49 High: 1.6

Median Total-Service Time: 17.5 minutes

25th Percentile Total-Svc Time: 9.75 Min. 75th Percentile Total-Svc Time: 25 Min. Low: 2 Min. High: 60 Min.

CPT Code 7858X

Specialty: Society of Nuclear Medicine

Sample Size: 93 Response Rate (%): N=33 (35%) Median Initial RVW: 1.10 Median Final RVW: 1.10

Type of Sample (Circle One) random, panel, convenience

Explanation of sample size: SNM House of Delegates/Commission Health Care Policy and Practice

25th Percentile RVW: 1.09 75th Percentile RVW: 1.20 Low: 0.80 High: 1.50

Median Total-Service Time: 30 minutes

25th Percentile Total-Svc Time: 20 min. 75th Percentile Total-Svc Time: 45 min. Low: 6 min. High: 90 min.

KEY REFERENCE SERVICE(S):

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
1)	78585 (SNM)	Rebreathing and washout, with or without single breath	1.09
2)	78587 (ACR)(SNM)	Pulmonary ventilation imaging, aerosol; multiple (projections (e.g. anterior, posterior, lateral views)	0.49
3)			
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.**

INTENSITY/COMPLEXITY MEASURES

CPT Code
7858X

Reference
Service 1
78585

Reference
Service 2
78587

Time Estimates

	ACR	SNM	SNM	ACR	SNM
Median Total Physician (Minutes)	17.5	30	30	15	12.5

Mental Effort and Judgement (Mean)

	ACR	SNM	SNM	ACR	SNM
The number of possible diagnosis and/or the number of management options that must be considered	3.7	3.55	3.64	3.1	2.5
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.5	3.52	3.56	3.4	2.88
Urgency of medical decision making	4.6	4.79	4.72	3.8	4

CPT Code: 7858X

FREQUENCY INFORMATION

How was this service previously reported? 78580 + 78587

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? unable to quantify

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

CPT Code 7858X

INTENSITY/COMPLEXITY MEASURES

CPT Code
7858X

Reference
Service 1
78585

Reference
Service 2
78587

Technical Skill/Physical Effort (Mean)

	ACR	SNM	SNM	ACR	SNM
Technical skill required	3.1	3.76	3.68	3.2	3.25
Physical effort required	2.0	2.64	2.64	1.9	2.13

Psychological Stress (Mean)

	ACR	SNM	SNM	ACR	SNM
The risk of significant complications, morbidity and/or mortality	2.9	3.76	3.88	2.5	2.25
Outcome depends on the skill and judgement of physician	4.1	4.30	4.24	3.5	3.13
Estimated risk of malpractice suit with poor outcome	3.8	4.15	4.12	3.1	3.13

Time Segments (Mean)

	ACR	SNM	SNM	ACR	SNM
Total-Service intensity/complexity	3.6	3.88	3.96	2.7	2.75

The number of times respondents performed procedure over the past year.

<u>Mean</u>		<u>Median</u>	
ACR	SNM	ACR	SNM
172	212	150	100

Did the description of typical patient/service match your typical patient?

<u>YES</u>		<u>NO</u>	
ACR	SNM	ACR	SNM
93%	94%	7%	6%

ADDITIONAL RATIONALE

For example, if recommended RVUs are based on an alternative method instead of the survey results.

Code 7858X was judged to be comparable to code 78585 (RVW=1.09).

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS
May 1998

Helicobacter Pylori Breath Test

Two new CPT codes, 83013 *Helicobacter pylori, breath test analysis*; and 83014, *Helicobacter pylori, breath test analysis; drug administration and sample collection*, were recently developed to reflect helicobacter breath test procedures. The RUC reviewed the CPT proposal and related information on the codes and decided that 83013 will be paid based on the Clinical Lab Payment Schedule. In addition, the RUC considered comments from various specialties who stated that both the drug administration and sample collection for the H pylori breath test are performed by nursing staff in the physician's office. Again, based on these remarks, the RUC concluded that no physician work was involved in these services, and therefore, does not recommend any Work RVU's. The specialty society did indicate that the nurse time is approximately 1 hour.

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
•83013	PP1	Helicobacter pylori, breath test analysis;	XXX	Reimbursed on Clinical Lab Payment Schedule
•83014	PP2	drug administration and sample collection	XXX	No physician work

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
83019		<p>Helicobacter pylori, breath test (including drug and breath sample collection kit)</p> <p>(For drug administration and breath sample collection provided in a physician's office, see Evaluation and Management Services)</p> <p>(83019 has been deleted. To report, see 83013,83014)</p>	XXX	N/A

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS

February 1998

Cytogenetic Studies

A new CPT code 88291 was established to describe the work involved in chromosome analysis, which can be used for both acquired disease testing and constitutional disease testing. This procedure requires a physician to review microscopic images of chromosomes and use his or her expertise and to determine if the chromosomes are normal in structure and number. If an abnormality is identified, the physician's expertise is called into play to determine if the abnormality is pathological or a benign variant. If the abnormality is pathological, the physician will determine either from his/her experience and knowledge, or from literature review, what the implications of the abnormality are for the patient and the genetic implications for family members. A report must be prepared enumerating the physician's assessment and recommendations. The work involved in this procedure is similar to the reference services 83912 *Molecular Diagnostics; interpretation and report* (work RVU = .37) and 88104 *Cytopathology; fluids, washings or brushings, except cervical or vaginal; smears with interpretation* (work RVU = .56). Based on a survey median of 21 physicians, the RUC recommended an RVU of .52 for this service.

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
•88291	L1	Cytogenetics and molecular cytogenetics, interpretation and report	XXX	0.52

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code: 8829X Tracking Number: L1 Global Period: XXX Recommended RVW: .52

CPT Descriptor Cytogenetics and Molecular Cytogenetics; Interpretation and Report

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: Typical Patient/Service: Chromosome analysis can be used for both acquired disease testing and constitutional disease testing. Results can range from normal and simple to abnormal and highly complex. The scenario described below is for a service considered to fall into the average range of result reporting time and work.

“A pregnant 27-year-old female in the 16th week of gestation presents with anomalies (intrauterine growth retardation, dysmorphism, and a heart defect) identified by [in utero] ultrasound. Cytogenetic analysis of amniotic fluid cells demonstrates an abnormal chromosome 5 short arm. Parentalkaryotypes reveal a translocation between chromosome 5 and 7 in the father.”

Description of Work: The physician reviews microscopic images of chromosomes and uses expertise and experience to determine if the chromosomes are normal in structure and number. When an abnormality is identified, the physician's expertise is called into play in order to determine if the abnormality is pathological, or a benign variant. If the abnormality is pathological, the physician will determine either from her/his experience and knowledge, or from literature review, what the implications of the abnormality are for the patient, and the genetic implications for family members. A report is prepared enumerating the physician's assessment and recommendations.

SURVEY DATA:

Specialty: Medical Genetics - American College of Medical Genetics

Sample Size: 21 Response Rate (%): 42 (50 sent, 21 returned) Final Median RVW: .52

25th Percentile RVW: .43 75th Percentile RVW: .65 Low: .4 High: 2.3

Median Total Time: 20

25th Percentile Total Time: 18.5 75th Percentile Total Time: 30 Low: 10 High: 90

Median Post-Service Time: N/A Total Time Number of Visits

Day of Procedure:	_____	_____
ICU:	_____	_____
Other Hospital:	_____	_____
Office:	_____	_____

KEY REFERENCE SERVICE(S):

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
1)	83912	Molecular Diagnostics; Interpretation and report	.37
2)	88104	Cytopathology; Fluids, washings or brushings, except cervical or vaginal; Smears with interpretation	.56
3)			
4)			

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

Compare the pre-, intra-, and post-service time and the intensity (mental effort and judgement; technical skill & physical effort; and psychological stress) of the service you are rating to the key reference services listed above.

CPT Code	Median Total-Time	Median Pre-Time	Median Post-Time	Median Mental Effort & Judgement	Median Technical Skill & Physical Effort	Median Psychological Stress
8829X	20	N/A	N/A	4.3	4	4.6
83912	15	N/A	N/A	3.8	4	4
88104	20	N/A	N/A	4	4	4

ADDITIONAL RATIONALE

For example, if recommended RVUs are based on an alternative method instead of the survey results.

FREQUENCY INFORMATION

How was this service previously reported? New code.

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? Respondents indicated approximate volume of 1000 per lab performing the test.

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

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS
May 1998

Confocal Scanning Laser Polimetry

A new CPT code, 92135, *Scanning computerized ophthalmic diagnostic imaging (e.g. scanning laser) with interpretation and report, unilateral* was developed to report the physician work involved in confocal scanning laser polimetry. Confocal scanning laser polimetry is an objective method for quantitatively determining the thickness of the retinal nerve fiber layer and analyzing change over time in the nerve fiber layer. Retinal nerve fiber layer assessment has long been known to be an early indicator of glaucomatous damage, with nerve fiber abnormalities appearing years before the visual field loss can be detected. Code 92135 represents an entirely new ophthalmological diagnostic modality not previously captured in CPT. Although similar to CPT 92225 (Ophthalmoscopy, extended) and code 92250 (fundus, photography), these codes fail to capture nerve fiber layer thickness measurement and unique nerve fiber polarimetry and its diagnostic value.

In determining the work RVU, respondents considered many existing CPT codes. Many physicians stated that 92135 (a unilateral code) was very similar to 92083 *Visual field examination, unilateral or bilateral with interpretation and report; extended examination*. Code 92083, a bilateral/unilateral code, describes comprehensive field vision services (work RVU=.50). Physicians agreed that the work involved in 92135 for one eye was greater than the work for 92083 when it is performed on one eye. It was also the consensus that, in general, 92135 was greater work than 92083. Code 92083 is almost always performed bilaterally making the unilateral work RVU=.25. In addition, 92135 requires more physician rather than technician input, and is more difficult to perform and interpret due to the volume of data.

Physicians also stated that the number of data points and physician work involved in 92135 were most closely approximated to that for 92235 *Fluorescein angiography (includes muliframe imaging) with interpretation and report* (work RVU=.81). However, the risk associated with 92135 is less than that of the fluorescein angiography reported under 92235. Finally, the physician work is less than for ophthalmic contact B scan currently valued at .66.

In view of these comparisons, the RUC recommends an acceptance of the specialty society proposed work RVU of .35 for code 92135.

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
•92135	VV1	Scanning computerized ophthalmic diagnostic imaging (eg, scanning laser) with interpretation and report, unilateral	XXX	0.35

Median Post-Service Time:

Total Time

Number of Visits

Day of Procedure:

5

ICU:

Other Hospital:

Office:

~~30~~



KEY REFERENCE SERVICE (S):

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
1)	92235	Fluorescein angiography (includes multiframe imaging with interpretation and report	0.81
2)	99213	Office or other outpatient visit for the evaluation and management of an established patient	0.67
3)	99203	Office or other outpatient visit for the evaluation and management of a new patient.	1.34
4)			

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

Many of the survey respondents were stymied by the few number of the diagnostic codes on the AAO reference list. The most common code that they felt this code should be compared to is 92083, the comprehensive quantitative visual field code. Most of the respondents felt that the work involved in 9209X for one eye was greater than the work for 92083 when it is performed in one eye. The medical decision-making and time was less than 99213. However, 92083 is not included in the Reference List. Most felt that the number of data points examined and the physician work involved most closely approximated that of the fluorescein angiogram, 92235, which also is a unilateral code.

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.**

INTENSITY/COMPLEXITY MEASURES**CPT Code**Reference
Service 1
92235Reference
Service 2
99213**Time Estimates**

Median Pre-Time	10	13	6
Median Intra-Time	11	15	15
Median Post-Time	35	5	4

Mental Effort and Judgement

The number of possible diagnosis and/or the number of management options that must be considered	3	3	3
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3	3	3
Urgency of medical decision making	3	3	3

Technical Skill/Physical Effort

Technical skill required	3	3	3
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Physical effort required	2	3	3
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Psychological Stress

The risk of significant complications, morbidity and/or mortality	3	3	2
---	---	---	---

Outcome depends on the skill and judgement of physician	4	4	4
---	---	---	---

Estimated risk of malpractice suit with poor outcome	3	3	4
--	---	---	---

INTENSITY/COMPLEXITY MEASURES

CPT Code

Reference Service 1

Reference Service 2

Time Segments

Pre-Service intensity/complexity	2	2	2
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Intra-Service intensity/complexity	3	3	3
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Post-Service intensity/complexity	2	3	2
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RATIONALE:

In light of the fact that this is new technology not widely used, the AAO surveyed 50 glaucoma specialists. It was felt that the general membership would have no knowledge of the procedure or work involved. The AAO Diagnosis & Procedural Terminology and Reimbursement (DPT&R) Committee reviewed the survey results and had a great deal of difficulty in interpreting the vignette, which was not written by the AAO. We felt that the survey respondents misinterpreted the data so the DPT&R committee lowered the value for the reason explained.

ADDITIONAL RATIONALE

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

The AAO/DPT&R Committee recognized that there was confusion among the respondents as to what work was performed for the service. The CPT submission approved by AMA CPT, the vignettes and the description of the pre-, intra- and post-service work were all done by one individual and was not submitted by the AAO DPT&R Committee. The inclusion of the complete eye exam in the vignette was inappropriate but those surveyed who were asked said they only valued the work of 9209X. Again, most of the survey respondents assumed that 92083 was a unilateral/bilateral code whereas 9209X is a unilateral code and most survey respondents assumed that 92083 was a unilateral code like 9209X. " Many of the survey respondents assumed that 92083 was a unilateral code like 9209X. However, 92083 is a unilateral or bilateral code. All felt that 9209x was more work 92083. 92083 is almost always done bilaterally so the unilateral value would be .25wrvu. 9209x takes more physician, rather than technician input, is technically harder to do and interpret, and there is more data is evaluate. The risk is less than fluorescein angiography with a value of 0.81wrvu. The physician work is less than for ophthalmic contact B scan with a value of 0.66wrvu. For these reason the AAO DPT/RUC Committee recommends a value of 0.35 wrvu for the new code 9209x

With this understanding, the AAO DPT&R Committee recommends a value of .35 WRVUs for 9209X rather than the median survey value of 0.8 WRVUs. 9209X is almost always done bilaterally so the estimated unilateral value would be .25 WRVU. 9209X however takes more physician rather than technical input, is technically harder to do, and there is more data to interpret. The risk is less than fluorescein angiography with a value of 0.81 WRVUs. The physician work is less than for ophthalmic contact B scan with a value of 0.66.

FREQUENCY INFORMATION

How was this service previously reported? Unspecified procedure

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? Not known. This is new technology and its penetration into clinical practice has not been estimated. If it becomes widely accepted, it may replace 92083 (extended visual field examination).

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

April 1998

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS

May 1998

Intravascular Distal Blood Flow Velocity Measurements

Two new codes were established to report intravascular doppler velocity with pharmaceutical intervention, one or more vessels. The codes 93571 *Intravascular doppler velocity and/or pressure derived coronary flow reserve measurement (coronary vessel or graft) during coronary angiography including pharmacologically induced stress; initial vessel (List separately in addition to code for primary procedure)* and 93572 *each additional vessel (List separately in addition to code for primary procedure)*. The RUC identified flaws in the survey data from the specialty society and has requested that a new survey be conducted for the September 1998 RUC meeting. The RUC recommends interim values based upon a building block methodology.

The relative values of two CPT codes that were recently reviewed by the RUC were also examined, 92978 *Intravascular ultrasound (coronary vessel or graft) during therapeutic intervention including imaging supervision, interpretation and report; initial vessel (List separately in addition to code for primary procedure)* (work RVU=1.80) and 92979 *Intravascular ultrasound (coronary vessel or graft) during therapeutic intervention including imaging supervision, interpretation and report; each additional vessel (List separately in addition to code for primary procedure)* (work RVU=1.44). CPT codes 93571 and 93572 require more work than the intravascular ultrasound codes. For 93571, a catheter is placed in a normal vessel with baseline readings derived. The catheter is then moved to a pathological vessel. To determine the hemodynamic significance of the lesion, the doppler wire is passed across the lesion and baseline flow is measured. After adenosine intra-coronary injection, repeat flow and reserve measurements suggest that the lesion is not hemodynamically significant.

Accordingly, the RUC recommends a work value of 2.99 for 93571 which was calculated as follows:

92978 Intravascular ultrasound	1.80
(eg, internal mammary), whether native or used for bypass	.40*
Normal vessel/ baseline determinations (2.20/2=1.10- 93931 .31)	.79
	<u>2.99</u>

*This value includes injection of radiopharmaceutical and added risk of injection of an antiarrhythmic agent (adenosine)

The RUC recommends a work value of 1.70 for 93572 each additional vessel, which was calculated as follows:

92978 Intravascular ultrasound	1.80
Normal vessel/ baseline determinations (2.20/2=1.10- 93931 .31)	.79
	<u>2.59</u>
	x50%
	<u>1.30</u>

93539 Injection procedure during cardiac catheterization; for selective opacification of arterial conduits (eg, internal mammary), whether native or used for bypass	.40*
	<u>1.70</u>

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
•93571	U1	Intravascular doppler velocity and/or pressure derived coronary flow reserve measurement (coronary vessel or graft) during coronary angiography including pharmacologically induced stress; initial vessel (List separately in addition to code for primary procedure)	ZZZ	2.99 (Interim)
•93572	U2	each additional vessel (List separately in addition to code for primary procedure) <u>(Intravascular distal coronary blood flow velocity measurements include all Doppler transducer manipulations and repositioning within the specific vessel being examined, during coronary angiography or therapeutic intervention (eg, angioplasty)</u>	ZZZ	1.70 (Interim)

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

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code: 9357X Tracking Number: U1 Global Period: ZZZ Recommended RVW: 6.35

CPT Descriptor:

Intravascular Doppler velocity and/or pressure derived coronary flow reserve measurement (coronary vessel or graft) during coronary angiography including pharmacologically induced stress; initial vessel (List separately in addition to code for primary procedure).

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey:

A 55 year old female presents with a three week history of progressive chest discomfort at rest and with mild exertion. Her physician decides that exercise testing is dangerous because of the patient's unstable symptoms, and recommends cardiac catheterization. At cardiac catheterization, there is 60-70% stenosis of the mid left anterior descending artery. The cardiologist suspects that this is the culprit, but can't be sure because the lesion appears less severe than would be expected from the patient's symptoms. To determine the hemodynamic significance of the lesion, the cardiologist passes the Doppler wire down the artery across the lesion and measures baseline flow. After adenosine intra-coronary injection, repeat flow reserve measurements suggest that the lesion is NOT hemodynamically significant. Results of the Doppler flow reserve study are included in the cardiac catheterization report.

Description of Pre-Service Work:

- ▶ Review history and physical exam.
- ▶ Review prior imaging studies
- ▶ Discuss procedure with patient.
- ▶ Order the radiopharmaceutical

Description of Intra-Service Work:

- ▶ With use of specialized guide wire, insure that signal is appropriate by inspection of waveform and comparison with fluoroscopic images.
- ▶ Position wire distally to segment in question
- ▶ Record baseline blood flow.
- ▶ Administer pharmacologic agent (either as bolus or 2-3 minute infusion).
- ▶ Record hyperemic blood flow .
- ▶ Calculate coronary flow reserve.
- ▶ Reposition wire to an uninvolved artery.
- ▶ Repeat previous steps, insuring that flow measurements are within respected variability (repeat steps again, if necessary).
- ▶ Compare the coronary flow reserve measurements that were made distal to the lesion with the measurements that were made in the uninvolved vessel.
- ▶ Make clinical decision for patient's treatment.

Description of Post-Service Work:

- ▶ Dictate report
- ▶ Discuss and communicate report/findings with referring physician(s) and patient.

CPT Code: 9357X**SURVEY DATA:**Specialty: CardiologySample Size: 150 Response Rate (%): 16 Initial Median RVW: 4.00 Final Median RVW: 4.50Type of Sample (choose one) random X, panel _____, convenience _____.

Explanation of sample size: Random selection of ACC membership who perform interventional cardiovascular procedures.

25th Percentile RVW: 2.0 75th Percentile RVW: 9.25 Low: 0.75 High: 14.00Median Pre-Service Time: 10 min Median Intra-Service Time: 20 min25th Percentile Intra-Svc Time: 15 75th Percentile Intra-Svc Time: 40 Low: 5 High: 110

Median Post-Service Time:

Total TimeNumber of Visits

Day of Procedure:

15 min

ICU:

Other Hospital:

Office:

KEY REFERENCE SERVICE(S):

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
1)	35450	Transluminal balloon angioplasty, open; renal Or other visceral artery	10.07
2)	33010	Pericardiocentesis; initial	2.24
3)	35474	Transluminal balloon angioplasty, percutaneous; Femoral-popliteal	7.36
4)	93015	Cardiovascular stress test using maximum or submaximal treadmill or bicycle exercise, continuous electrocardiogram monitoring, and/or pharmacological stress; with physician supervision, with interpretation and report.	0.75

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.

CPT Code: 9357X

INTENSITY/COMPLEXITY MEASURES

	<u>CPT Code</u> 9357X	<u>Reference Service 1</u> 35450	<u>Reference Service 2</u> 33010
<u>Time Estimates (Median)</u>			
Median Pre-Time	10	30	15
Median Intra-Time	20	37.5	30
Median Post-Time	15	12.5	15
<u>Mental Effort & Judgement (Mean)</u>			
The number of possible diagnosis and/or the number of management options that must be considered	4	4	3
The amount and/or complexity of medical records, diagnostic tests and/or information that must be reviewed and analyzed	3	4	3
Urgency of medical decision making	4	5	4
<u>Technical Skill/Physical Effort (Mean)</u>			
Technical skill required	4	4	4
Physical effort required	3	4	4
<u>Psychological Stress (Mean)</u>			
The risk of significant complications, morbidity and/or mortality	4	3	4
Outcomes depends on the skill and judgement of physician	5	4	4
Estimated risk of malpractice suit with poor outcome	4	4	4

INTENSITY/COMPLEXITY MEASURES

	<u>CPT Code</u> 9357X	<u>Reference Service 1</u> 35450	<u>Reference Service 2</u> 33010
<u>Time Segments (Mean)</u> (total for pre-, intra-, and post-)	4		
Pre-Service Intensity/complexity			
Intra-Service Intensity/complexity			
Post-Service Intensity/complexity			

ADDITIONAL RATIONALE

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

Survey results were discussed and final RVU recommendations reached via consensus of a technical advisory panel.

FREQUENCY INFORMATION

How was this service previously reported? N/A. New Code

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? 2500

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

March 1998

120301

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

CPT Code: 9357X2 Tracking Number: U2 Global Period: ZZZ Recommended RVW: 2.50

CPT Descriptor:

Each additional vessel (List separately in addition to code for primary procedure).

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey:

A 55 year old female presents with a three week history of progressive chest discomfort at rest and with mild exertion. Her physician decides that exercise testing is dangerous because of the patient's unstable symptoms, and recommends cardiac catheterization. At cardiac catheterization, there is 60-70% stenosis of the mid left anterior descending artery. The cardiologist suspects that this is the culprit, but can't be sure because the lesion appears less severe than would be expected from the patient's symptoms. To determine the hemodynamic significance of the lesion, the cardiologist passes the Doppler wire down the artery across the lesion and measures baseline flow. After adenosine intra-coronary injection, repeat flow reserve measurements suggest that the lesion is NOT hemodynamically significant. Results of the Doppler flow reserve study are included in the cardiac catheterization report.

Description of Pre-Service Work:

None

Description of Intra-Service Work:

- ▶ With use of specialized guide wire, insure that signal is appropriate by inspection of waveform and comparison with fluoroscopic images.
- ▶ Position wire distally to segment in question
- ▶ Record baseline blood flow.
- ▶ Administer pharmacologic agent (either as bolus or 2-3 minute infusion).
- ▶ Record hyperemic blood flow .
- ▶ Calculate coronary flow reserve.
- ▶ Reposition wire proximal to lesion in question or to an uninvolved artery.
- ▶ Repeat previous steps, insuring that flow measurements are within respected variability (repeat steps again, if necessary).
- ▶ Compare the coronary flow reserve measurements that were made distal to the lesion with the measurements that were made proximal to the lesion (or the uninvolved vessel.)
- ▶ Make clinical decision for patient's treatment.

Description of Post-Service Work:

None

CPT Code: 9357X 2

SURVEY DATA:

Specialty: Cardiology

Sample Size: 150 Response Rate (%): 10.7 Initial Median RVW: 3.00 Final Median RVW: 3.00

Type of Sample (choose one) random X, panel , convenience .

Explanation of sample size: Random selection of ACC membership who perform interventional cardiovascular procedures

25th Percentile RVW: 1.10 75th Percentile RVW: 10.0 Low: 0.05 High: 10.00

Median Pre-Service Time: Median Intra-Service Time: 15 min

25th Percentile Intra-Svc Time: 15 75th Percentile Intra-Svc Time: 25 Low: 10 High: 30

Median Post-Service Time:	<u>Total Time</u>	<u>Number of Visits</u>
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Day of Procedure:	<u> </u>	<u> </u>
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ICU:	<u> </u>	<u> </u>
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Other Hospital:	<u> </u>	<u> </u>
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Office:	<u> </u>	<u> </u>
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CPT Code: 9357X 2**KEY REFERENCE SERVICE(S):**

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
1)	35450	Transluminal balloon angioplasty, open; renal Or other visceral artery	10.07
2)	35474	Transluminal balloon angioplasty, percutaneous; Femoral-popliteal	7.36
3)	93015	Cardiovascular stress test using maximum or submaximal treadmill or bicycle exercise, continuous electrocardiogram monitoring, and/or pharmacological stress; with physician supervision, with interpretation and report.	0.75
4)	33010	Pericardiocentesis; initial	2.24

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.

INTENSITY/COMPLEXITY MEASURES

	<u>CPT Code</u>	<u>Reference Service 1</u>	<u>Reference Service 2</u>
	9357X2-U2	35450	35474
<u>Time Estimates (Median)</u>			
Median Pre-Time			
Median Intra-Time	15	30	30
Median Post-Time			
<u>Mental Effort & Judgement (Mean)</u>			
The number of possible diagnosis and/or the number of management options that must be considered	4	4	4
The amount and/or complexity of medical records, diagnostic tests and/or information that must be reviewed and analyzed	3	4	4
Urgency of medical decision making	4	5	5
<u>Technical Skill/Physical Effort (Mean)</u>			
Technical skill required	4	4	4
Physical effort required	3	4	4
<u>Psychological Stress (Mean)</u>			
The risk of significant complications, morbidity and/or mortality	4	3	3
Outcomes depends on the skill and judgement of physician	5	3	3
Estimated risk of malpractice suit with poor outcome	4	3	3

INTENSITY/COMPLEXITY MEASURES

	<u>CPT Code</u>	<u>Reference Service 1</u>	<u>Reference Service 2</u>
	9357X	35450	33474
<u>Time Segments (Mean)</u> (Total for pre-, intra-, and post-)	3		

Pre-Service Intensity/complexity

Intra-Service Intensity/complexity

Post-Service Intensity/complexity

ADDITIONAL RATIONALE

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

Survey results were discussed and final RVU recommendations reached via consensus of a technical advisory panel.

FREQUENCY INFORMATIONHow was this service previously reported? N/A New CodeHow 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? <2500Is this service performed by many physicians across the United States? Yes No

March 1998

120330

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS

May 1998

Pulmonary Function Procedures

Code 94060 *Bronchospasm evaluation: spirometry as in 94010, before and after bronchodilator (aerosol or parenteral)*(work RVU=.31) was revised for CPT 1999. The deletion of language in the later part of the description was editorial and did not result in a modified work RVU. As such, the RVU for 94060 should remain at .31.

CPT code 94620 *Pulmonary stress testing; simple eg, prolonged exercise test for bronchospasm with pre- and post spirometry* (work RVU= .88) was also revised during this year's CPT process. After a comprehensive review, the RUC concluded that additional information was needed prior to establishing a valid work value for the modified procedure. The code will be resurveyed in upcoming months. The RUC will provide a recommendation after consideration at the September 1998 RUC meeting.

Newly developed code 94621 *Pulmonary stress testing; complex (including measurement of CO2 production, O2 uptake, and electrocardiographic recordings)* will also be resurveyed along with 94620. Again, it was the RUC's opinion that further data should be collected prior to the development of a valid physician work value. As such, the code is withdrawn from reconsideration during this cycle and will be presented at the September 1998 RUC meeting.

CPT code 94015 *Patient initiated spirometric recording per 30 day period of time; recording (includes hook- up reinforced education, data transmission, data capture, trend analysis, and periodic recalibration)* was developed this year. The RUC analyzed the procedure description and corresponding information and concluded that no physician work was included in this service.

For newly created CPT codes numbered 94014 and 94016, the RUC developed interim values of .52 for both procedures. These codes describe patient initiated spirometric recordings per a 30-day period of time and the subsequent physician review and interpretation of the recordings. In determining the physician work values for 94014 *Patient initiated spirometric recording per 30 day period of time; includes reinforced education, transmission of spirometric tracing, data capture, analysis*

of transmitted data, periodic recalibration and physician review and interpretation and for code 94016 Patient initiated spirometric recording per 30 day period of time; physician review and interpretation only, CPT code 93272 Patient demand single or multiple event recording with presymptom memory loop, per 30 day period of time; physician review and interpretation only (work RVU= .52) was closely reviewed and considered to be an appropriate reference service. Although the survey median was .54 for both newly created codes 94014 and 94016, the RUC supports an interim value recommendation of .52 for both procedures. The recommended interim value represents the comparison to code 93272.

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
▲94060	WW6	Bronchospasm evaluation: spirometry as in 94010, before and after bronchodilator (aerosol or parenteral) or exercise <u>(For prolonged exercise test for bronchospasm with pre and post spirometry, see 94620)</u>	XXX	.31 (No Change)
▲94070	WW7	Prolonged postexposure evaluation of bronchospasm with multiple spirometric determinations after test dose of bronchodilator (aerosol only) antigen, exercise , cold air, methacholine or other chemical agent, with <u>spirometry as in 94010 subsequent spirometrics</u>	XXX	.60 (No Change)
▲94620	WW1	Pulmonary stress testing; simple <u>(eg, prolonged exercise test bronchospasm with pre- and post spirometry)</u> or complex	XXX	No recommendation at this time.
•94621	WW2	complex (including measurements of CO ₂ production, O ₂ uptake, and electrocardiographic recordings)	XXX	No recommendation at this time.
•94014	WW3	Patient initiated spirometric recording per 30 day period of time; includes reinforced education, transmission of spirometric tracing, data capture, analysis of transmitted data, periodic recalibration and physician review and interpretation	XXX	.52 (Interim Value)

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
•94015	WW4	recording (includes hook-up, reinforced education, data transmission, data capture, trend analysis, and periodic recalibration)	XXX	No physician work.
•94016	WW5	physician review and interpretation only	XXX	.52 (Interim Value)

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code: 9462x4 Tracking Number: WW5 Global Period: xxx Recommended RVW: .54

CPT Descriptor: Patient initiated spirometric recordings per 30 day period of time; physician review and interpretation only

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 50 year -old man is discharged from the hospital following a successful lung transplantation. Shortly before discharge, he is shown the spirometer that has a computer attached and given detailed instructions as to how to perform the test, capture the test results, and transmit the test result correctly. After successful repeat demonstrations, the patient performs the procedure daily in his home. The test results are trended and analyzed. In addition, the physician analyzes the data at least once a week (and more often if necessary) and makes an interpretation so that complications/problems are recognized at a far earlier stage. The machine is recalibrated at least once every three months in the first year, every six months in the second year, and then yearly thereafter. Note that this code can only be reported once in a 30 day period.

Description of Pre-Service Work:

Instruct patient and answer questions about the device and how to send data

Description of Intra-Service Work:

Analyzing, calculating the data and making up a report

Description of Post-Service Work:

Informing the patient about the data findings, answering questions and making changes in therapy when necessary or initiating new diagnostic tests

SURVEY DATA:

Specialty: American College of Chest Physicians (ACCP) and American Thoracic Society (ATS)

Sample Size: 190 Response Rate: (%) 9/190 .047% Initial Median RVW: .52 Final Median RVW: .54

Type of Sample (Circle One): random, panel, convenience. Explanation of sample size: Very low response rate

25th Percentile RVW: .5 75th Percentile RVW: .75 Low: .3 High: 1.3

Median Pre-Service Time: 2 Median Intra-Service Time: 20

25th Percentile Intra-Svc Time: 15 75th Percentile Intra-Svc Time: 20 Low: .2 High: .25

Median Post-Service Time:	<u>Total Time</u>	<u>Number of Visits</u>
Day of Procedure:	<u>0</u>	<u>0</u>
ICU:	<u>0</u>	<u>0</u>
Other Hospital:	<u>0</u>	<u>0</u>
Office:	<u>0</u>	<u>0</u>

KEY REFERENCE SERVICE(S):

	<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	52
2)	99231	Subsequent hospital care, per day, for the evaluation and management of a patient, which requires at least two of these three key components: a problem focused interval history - a problem focused examination - medical decision making that is straightforward or of low complexity. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and/or family's needs. Usually, the patient is stable, recovering or improving. Physicians typically spend 15 minutes at the bedside and on the patient's hospital floor or unit.	.64

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.

INTENSITY/COMPLEXITY MEASURES

	<u>CPT Code</u> 9462x4	<u>Reference Service 1</u> 93272	<u>Reference Service 2</u> 99231
<u>Time Estimates</u>			
Median Pre-Time	2	5	5
Median Intra-Time	20	20	15
Median Post-Time	10	10	10
<u>Mental Effort and Judgement</u>			
The number of possible diagnosis and/or the number of management options that must be considered	2	2	3
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	2	2	3
Urgency of medical decision making	3	2	3
<u>Technical Skill/Physical Effort</u>			
Technical skill required	1	2	3
Physical effort required	1	2	2
<u>Psychological Stress</u>			
The risk of significant complications, morbidity and/or mortality	2	2	2
Outcome depends on the skill and judgement of physician	2	2	3
Estimated risk of malpractice suit with poor outcome	2	2	3

INTENSITY/ COMPLEXITY MEASURES

	<u>CPT Code</u> 9462x4	<u>Reference Service 1</u> 93272	<u>Reference Service 2</u> 99231
<u>Time Segments</u>			
Pre-Service intensity/complexity	1	1	1
Intra-Service intensity/complexity	3	2	2
Post-Service intensity/complexity	2	2	2

ADDITIONAL RATIONALE

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

Using the survey data available. This new code is very similar to the work involved in the review and interpretation of 93272, however it does involve a little more work than the RVW of .52 and thus the recommendation of an RVW of .54 for the new code 9462x4.

FREQUENCY INFORMATION

How was this service previously reported? This is a new code for a procedure for which physicians were previously unable to submit a bill.

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?

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

December 1997

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS
May 1998

Neurostimulator Analysis and Programming

A series of CPT codes, 95970 through 95975, was developed for neurostimulator analysis and programming.

Code 95970

Code 95940 *Electronic analysis of implanted neurostimulator pulse generator system (eg, rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); simple or complex neurostimulator pulse generator, without reprogramming* will replace deleted code 63690 *Electronic analysis of implanted neurostimulator pulse generator system (may include rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); without reprogramming of pulse generator*. The work value should remain the same at .45.

Code 95971

Newly developed 95971 was developed to report *Electronic analysis of implanted neurostimulator pulse generator system (eg, rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); simple neurostimulator pulse generator, with intraoperative or subsequent programming*. This code was previously reported under CPT code 63691 *Electronic analysis of implanted neurostimulator pulse generator system (may include rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); with reprogramming of pulse generator* (work RVU = .65). CPT code 63691 is a programming and analysis code for neurostimulation that dates back to 1990. Code 63691 was designed to refer to the programming of existing implanted generators clinically available at that time. The generators used during this time allowed for the programming of only two

electrode contacts. Thus, there were only two possible combinations of electrode polarity; one of them positive and one of them negative. Consequently, the generators allowed for only very limited changes in pulse width and and frequency.

Today the most simple generator or receiver system for neurostimulation allows for the programming of a minimum of four electrode contacts. This results in approximately 64 possible electrode combinations. In addition, the available range for pulse width and frequency has increased significantly since the early 1990's.

Based on this information, it was evident that code 63691 did not adequately describe the work being performed, and as such, new codes were recently established through the CPT process. (Code 63961 was subsequently deleted.) In developing the work RVU, the survey median was .78.. The survey median time for 95971 (20 minutes) is greater than that for 63691 (15 minutes). In general, the survey median of .78 is 20% greater than 63691, a difference that is clearly explained by the increased time and complexity of the generators that are available today. The RUC supports this data and recommends .78 as the work RVU for 95971.

Codes 95972 and 95973

Code 95972 Electronic analysis of implanted neurostimulator pulse generator system (eg, rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); complex brain or spinal cord neurostimulator pulse generator/transmitter, with intraoperative subsequent programming, first hour and 95973 Electronic analysis of implanted neurostimulator pulse generator system (eg, rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); complex brain or spinal cord neurostimulator pulse generator/transmitter, with intraoperative subsequent programming, each additional 30 minutes after first hour (List separately in addition to code for primary procedure) fall within the same family of codes. However 95972 and 95973 are very different from both deleted code 63691 and the new code 95971.

Newly created 95972 and 95973 are used for programming with a “complex” spinal/brain nuerostimulation system. In essence, such a system consists of: two “four-contact” leads (thus, eight total electrical contacts); or a single “eight-contact” lead; or two “eight contact” leads (thus 16 total electrical contacts). The number of possible electrode combinations for polarity and use ranges from over 100,000 to about 60 million, depending upon which of these three systems are used.

Furthermore, many of the FDA approved “complex” systems allow three to four different combinations to be used at the same time thus increasing the possible stimulation settings by a factor of three to 10 times.

It was the consensus that a stepwise progression of RVW’s based on their relationship to each other and 63691 was important. The stepwise progression consisted of reviewing the value for deleted code 69631 (for limited 1-lead, 2 contact systems), then 95971 (for limited 1-lead, 4 contact systems), then 95973 (for thirty minutes of additional work with complex 2-lead, 4 contact or 1 –2 lead, 8-contact systems), and finally, 95972 (for the first 60 minutes of work with complex 2-lead, 4 contact or 1- or 2 lead, 8-contact systems).

Code 95972 refers to the initial 60 minutes of programming for a complex neurostimulation system. The relationship of 95972 and 95973, however, is not a straightforward time difference. As more programming ensues, the difficulty and complexity increases. It was agreed that the work RVU for 95972 should be less than twice the work RVU for 95973. The survey median for 95972 was 1.50 and is supported by the RUC. This work RVU recommendation is only 1.6 times the value for 95973 (even though the time is 2.0 times greater) and takes into account the increased time and complexity for each additional 30 minutes after the first hour. Again, the RUC supports a work RVU of 1.50 for code 95972.

Code 95973 refers to an additional 30 minutes of programming for a complex neurostimulation system. The intra-service intensity for 95972 and 95973 is 4.6, as compared to 2.9 for code 95971. Considering the time difference and considerably higher intensity, the survey median of .92 for code 95973 is recommended. The recommendation is conservative as an 18% increase over the recommendation of .78 for 95971.

Codes 95974 and 95975

Codes 95974 *Electronic analysis of implanted neurostimulator pulse generator system (eg, rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); complex cranial nerve neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming, with or without nerve interface testing, first hour* and 95975 *Electronic analysis of implanted neurostimulator pulse generator system (eg, rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); complex cranial nerve neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming, each additional 30 minutes after*

first hour (List separately in addition to code for primary procedure) are similar to codes 95971 through 95973, but differ greatly in their difficulty and complexity. Whereas 95971 through 95973 deal primarily with modulation of sensory function as an endpoint, the activities associated with 95974 and 95975 have multiple endpoints, including anticipated seizure outcome and a wide variety of clinically significant adverse events. The latter result from the many functions of vagus nerve, which has intimate interactions with brain, heart, gastrointestinal system and laryngeal musculature. Since antiepileptic efficacy and adverse effects are directly associated with increases in vagal stimulation, the clinician must repeatedly balance the effects against each other to optimize therapy.

Code 95974 broadly describes the vagus nerve stimulator programming and is used primarily for both: 1) Intra-operative programming; and 2) Outpatient programming, which by nature utilizes interactive sessions with the patient on a single clinical visit. The intra-operative programming covers pre-operative planning, intra-operative manipulation, and post-operative management. During interactive programming, the physician must repeatedly “ramp-up” the stimulation parameters to push the patient to the limits of tolerance. When tolerance to the induced pain occurs, usually over 1-2 hours, the current is increased further until no further increases may be performed. At each step, the physician must clinically monitor the patient for pain, respiratory compromise (due to laryngeal constriction), cardiac and gastrointestinal symptoms. In summary, code 95974 covers 60 minutes of intra-operative work, and subsequent to outpatient work, the later involving the programming and “ramping up” with the patient and device. The RUC recommends an RVU of 3.00 for code 95974.

Code 95975 is an extension of 95974 for an additional 30 minutes of complex programming with the neurostimulator as outlined above, the programming is complex because it involves titrating the therapy both against anticipated clinical response and acute adverse events. The RUC supports a work RVU of 1.7 for code 95975.

CPT Code (•New)	Tracking Number	CPT DescriptorCodes	Global Period	Work RVU Recommendation
63690		Electronic analysis of implanted neurostimulator pulse generator system (may include rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); without reprogramming of pulse generator	XXX	N/A
63691		— with reprogramming of pulse generator (63690, 63691 have been deleted. To report, see 95970, 95971)	XXX	N/A
95920		Intraoperative neurophysiology testing, per hour (Use code 95920 in addition to conjunction with the evoked potential study performed, 92585, 95925, 95926, 95927, 95930, motor study performed 95933, 95934, 95936, 95937)	XXX	2.11 (No Change)
<p><u>Neurostimulators, Analysis-Programming</u></p> <p><u>A simple neurostimulator pulse generator/transmitter (95970, 95971) is one capable of affecting 3 or less of the following: pulse amplitude, pulse duration, pulse frequency, 8 or more electrode contacts, cycling, stimulation train duration, train spacing, number of programs, number of channels, phase angle, alternating electrode polarities, configuration of wave form, more than 1 clinical feature (eg, rigidity, dyskinesia, tremor).</u></p> <p><u>A complex neurostimulator pulse generator/transmitter (95970, 95972, 95973, 95974, 95975) is one capable of affecting more than 3 of the above.</u></p> <p><u>(For insertion of neurostimulator pulse generator, see 61885, 63685, 63688,64590)</u></p> <p><u>(For revision or removal of neurostimulator pulse generator or receiver, see 61888, 63688, 64595)</u></p> <p><u>(For implantation of neurostimulator electrodes, see 61850-61875, 63650-63655, 64553-64580. For revision or removal of neurostimulator electrodes, see 61880, 63660, 64585)</u></p>				

CPT Code (•New)	Tracking Number	CPT DescriptorCodes	Global Period	Work RVU Recommendation
•95970	XX1	Electronic analysis of implanted neurostimulator pulse generator system (eg, rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); simple or complex neurostimulator pulse generator, without reprogramming	XXX	.45 (Replaces deleted code 63690)
•95971	XX2	simple neurostimulator pulse generator, with intraoperative or subsequent programming	XXX	0.78
•95972	XX3	complex brain or spinal cord neurostimulator pulse generator/transmitter, with intraoperative subsequent programming, first hour	XXX	1.50
•95973	XX4	complex brain or spinal cord neurostimulator pulse generator/transmitter, with intraoperative subsequent programming, each additional 30 minutes after first hour (List separately in addition to code for primary procedure) <u>(Use 95973 in conjunction with code 95972)</u>	XXX	0.92
•95974	XX5	complex cranial nerve neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming, with or without nerve interface testing, first hour	XXX	3.0
•95975	XX6	complex cranial nerve neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming, each additional 30 minutes after first hour (List separately in addition to code for primary procedure) <u>(Use 95975 in conjunction with code 95974)</u>	XXX	1.7

CPT Code (•New)	Tracking Number	CPT DescriptorCodes	Global Period	Work RVU Recommendation
61850		Twist drill or burr hole(s) for implantation of neurostimulator electrodes; cortical	090	12.39 (No Change)
61855		Subcortica	090	13.39 (No Change)
63650		Percutaneous implantation of neurostimulator electrodes; epidural	090	6.74 (No Change)
64550		Application of surface (transcutaneous neurostimulator	000	.18 (No Change)
64553		Percutaneous implantation of neurostimulator electrodes; cranial	010	2.31 (No Change)

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

(April 1998)

CPT Code: 9594X2(XX2) ⁹⁵⁹⁷¹ Global Period: XXX Recommended RVW: 0.78

CPT Descriptor: Electronic analysis of implanted neurostimulator pulse generator system (e.g., rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); simple neurostimulator pulse generator, with intraoperative or subsequent programming

Vignette Used in Survey:

A 53-year-old male requires intraoperative electronic analysis and programming of an implanted neurostimulator pulse generator/transmitter. His history includes intractable right leg pain (rated 8/10) in an L5 distribution despite a lumbar discectomy and a laminectomy, oral narcotic and non-narcotic medications, physical therapy, back brace trial, and various injection blocks. *At operation*, electronic analysis and programming of an implanted permanent single array electrode system and subcutaneous generator/transmitter is performed. The programming system is checked to insure proper functioning, the physician tests *limited* combinations of the implant parameters, while assessing the degree of symptom and side effect improvement or worsening after each programming change. After the patient's device is programmed to achieve maximal comfortable stimulation, the physician provides the patient and family members with detailed instructions regarding stimulator operations and precautions." [In responding to the questions on this survey, please consider only the work you perform with respect to the limited electronic analysis and programming of the neurostimulator that take LESS THAN ONE HOUR. The operative work to implant the electrode is separately billable by surgeon.]

CLINICAL DESCRIPTION OF SERVICE (This work description was NOT provided on the survey.):**Description of Pre-Service Work:**

Intraoperative or Subsequent: Review of patient medical chart. Check programming system to ensure proper functioning.

Description of Intra-Service Work:

Intraoperative or Subsequent: Electronic analysis and programming of an implanted permanent single array electrode system and subcutaneous generator/transmitter is performed. With this system, there is one lead and four contacts. The physician tests *limited* combinations of the implant parameters, while assessing the degree of symptom and side effect improvement or worsening after each programming change.

Description of Post-Service Work:

Intraoperative or Subsequent: Communication with the patient, family, and other health care professionals (including written and telephone reports and orders) on the day of the analysis are considered part of the postoperative work for this procedure. It is important to carefully document in patient's medical record all adjustments made to the stimulation parameters and ongoing device operation.

CPT/Descriptor: 9594X2(XX2) Electronic analysis of implanted neurostimulator pulse generator system (e.g., rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); simple neurostimulator pulse generator, with intraoperative or subsequent programming

(04/98) Page 2

SURVEY DATA

Specialty(s): American Association of Neurological Surgeons; American Academy of Pain Medicine; American Society of Anesthesiologists
 Type of Survey: Convenience and Random

Survey n:	57													
Response:	41													
Rate %:	72%													
		RVW	PRE total min	INTRA total min	HOSP total min	OFF total min	Same day total min	ICU		Hosp. - Other		Dischg day total min	Office	
								# visits	total min	# visits	total min		# visits	total min
	low	0.39		12										
	25th%	0.76		15										
	MED	0.78	3	20	4	n/a	3	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	75th%	0.90		30										
	high	3.00		80										

KEY REFERENCE SERVICE(S):

1998 RVW	Global	CPT	Descriptor
0.65	XXX	63691	Electronic analysis of implanted neurostimulator pulse generator system (may include rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); with reprogramming of pulse generator
0.74	XXX	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

Time Estimates (Median)	Mean Intensity/Complexity Measures		
	954X2(XX2)	63691	93735
PRE-service	3	3	3
INTRA-service	20	15	15
POST-service	3	3	3
Mental Effort and Judgment			
The number of possible diagnosis and/or the number of management options that must be considered	3.20	2.14	2.39
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	1.78	1.34	1.39
Urgency of medical decision making	1.54	1.11	1.26
Technical Skill/physical Effort			
Technical skill required	1.90	1.40	1.35
Physical effort required	1.34	1.14	1.22
Psychological Stress			
The risk of significant complications, morbidity and/or mortality	1.61	1.20	2.04
Outcome depends on skill and judgment of physician	3.61	2.43	2.35
Estimated risk of malpractice suit with poor outcome	2.95	2.69	3.17
Time Segments			
PRE-service intensity/complexity	1.27	1.06	1.13
INTRA-service intensity complexity	2.90	1.66	1.39
POST-service intensity complexity	1.54	1.14	1.17

CPT/Descriptor: 9594X2(XX2) Electronic analysis of implanted neurostimulator pulse generator system (e.g., rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); simple neurostimulator pulse generator, with intraoperative or subsequent programming

(04/98) Page 3

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

A brief background of the reference service 63691 is important before comparisons can be discussed. CPT 63691 is a programming and analysis code for neurostimulation that dates to 1990. The AMA Nomenclature Staff researched information about this code and found the proposal very limited. The code was meant to refer to the programming of existing implanted generators, clinically available at that time. The only neurostimulation generator available in 1990 was the Itrel I from Medtronic, Inc. This generator allowed programming of only two electrode contacts. Thus there were only two possible combinations of electrode polarity; one of them positive, and one of them negative. It also allowed only very limited changes in pulse width and pulse frequency. The present RVW for 63691 could only be based upon Harvard data for this type of system.

Today, however, the most simple generator or receiver system for neurostimulation allows programming of a minimum of four electrode contacts. This results in about 64 possible electrode combinations. Also, the available range for pulse width and frequency has increased significantly from 1990.

Based on this background, it is very clear that the code 63691 does NOT adequately describe the present work involved in programming of the most simple neurostimulator system. Additionally, the survey data for XX2 and 63691 bear out this difference in work. The survey median time for XX2 (20 min) is greater than that for 63691 at 15 minutes. The intensity and complexity measures were all higher for XX2 compared with 63691.

The survey median RVW of 0.78 is recommended for XX2. This value is 20% greater than 63691, a difference that is clearly explained by the increased time and complexity of the generators that are available today.

ADDITIONAL RATIONALE

None

FREQUENCY INFORMATION

1. How was this service previously reported?

63691

2. How often do physicians in your specialty perform this service?

Commonly Sometimes Rarely

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

The rate of simple SCS system implants should remain relatively stable at about 3,000 per year through these same time periods. Programming of these systems should average three per patient per year. Therefore, the estimated frequency for XX2 is 9,000 to 10,000 annually

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

Yes No

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

(April 1998)

CPT Code: 9594X3(XX3) **Global Period:** XXX **Recommended RVW:** 1.50**CPT Descriptor:** Electronic analysis of implanted neurostimulator pulse generator system (e.g., rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); complex brain or spinal cord neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming, first hour

Vignette Used in Survey:

Intraoperative: A 45-year-old male requires intra-operative electronic analysis of an implanted neurostimulator pulse generator. His history includes intractable chronic low back pain and right leg pain (rated 8/10) despite a laminectomy and a lumbar spine fusion, oral narcotic and non-narcotic medications, physical therapy, back brace trial, and various injection blocks. **At operation,** electronic analysis and programming of an implanted permanent multiple array electrode system and subcutaneous generator/transmitter is performed. After the patient's device is programmed to achieve maximal comfortable stimulation, the physician provides the patient and family members with detailed instructions regarding stimulator operations and precautions. *[In responding to the questions on this survey, please consider only the work you perform with respect to the electronic analysis and programming of the neurostimulator FOR THE FIRST HOUR. The operative work to implant the electrode is separately billable by surgeon.]* **Subsequent:** A 45-year-old male presents for **follow-up** programming of an implanted permanent spinal cord multiple array electrode system and subcutaneous generator/transmitter. At the visit, the programming system is checked to insure proper functioning, the physician tests multiple combinations of the implant parameters, while assessing the degree of symptom and side effect improvement or worsening after each programming change. After the patient's device is programmed to achieve maximal comfortable stimulation, the physician provides the patient and family members with detailed instructions regarding stimulator operations and precautions. *[In responding to the questions on this survey, please consider only the work you perform with respect to the electronic analysis and programming of the neurostimulator FOR THE FIRST HOUR of the visit.]*

CLINICAL DESCRIPTION OF SERVICE (This work description was NOT provided on the survey.):**Description of Pre-Service Work:**

Intraoperative or Subsequent: Review of patient medical chart. Check programming system to ensure proper functioning.

Description of Intra-Service Work:

Intraoperative: The actual programming is a cognitive type of service: high levels of analytic and interpretation skills are used in addition to the physical work of making each programming change. Of the 60 million or more combinations of the different parameters for an individual patient, the physician tests 30-60 of these combinations in a typical session. Much of the complexity of the programming comes from deciding which 30-60 combinations to test. Extensive patient feedback is utilized by the physician for this programming. Assessing the degree of symptom improvement or worsening after a single programming change can be complex. The physician will interact with the patient to determine whether the most recent change has reduced the patient's pain rating from a value of 8 (where 10 is the worst pain imaginable and 0 is no pain), for example, to perhaps a 6. This would be only a modest reduction but suggestive that the parameter change is on the "right track." In addition to pain, the physician also evaluates the stimulation pattern and stimulation side effects such as motor changes (spasm, weakness) with each change and works to program the patient's device to achieve adequate, comfortable stimulation. During this time, the physician adjusts the electrode combinations, amplitude, pulse width, rate, one or multiple stimulation channels, multiple programs, phase angle, and pattern of alternating polarities.

CPT/Descriptor: 9594X3(XX3) Electronic analysis of implanted neurostimulator pulse generator system (e.g., rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); complex brain or spinal cord neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming, first hour

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The physician will typically begin the programming session by making changes, one at a time, in four to five of the parameters. This is done to discover which one or two parameters are the key, at least for that patient at that time. This discovery process can typically take 30-40 minutes of programming and much complexity to begin to find the right parameters to pursue further for the best programming result. The physician assesses symptom (e.g., degree of pain) modification, based on experience with the type of patient and all the different parameters (e.g., phase angle). For example, based upon 12 very similar previous patients where multiple programs seemed to provide the most powerful improvements in symptom relief, the physician would pursue in more detail changes in phase angle in this specific patient. After each change in any parameter, it will typically take 30-60 seconds to see symptom (e.g., pain) relief or worsening. Thus, it typically will take one to two minutes per change. There may be 50 or more changes per session when programming a complex neurostimulator. The process typically requires one programming session for about 60-90 minutes. The physician also provides the patient and family members with detailed instructions regarding stimulator operations and limited modifications of stimulation parameters (pulse width and amplitude) at home.

Subsequent: Re-program patient's device to achieve adequate, comfortable stimulation. During this time, the physician adjusts the electrode combinations, amplitude, pulse width, rate, one or multiple stimulation channels, multiple programs, phase angle, and pattern of alternating polarities. The physician will typically begin the programming session by making changes, one at a time, in four to five of the parameters. This is done to discover which one or two parameters are the key, at least for that patient at that time. This discovery process can typically take 30-40 minutes of programming and much complexity to begin to find the right parameters to pursue further for the best programming result. The physician assesses symptom (e.g., degree of pain) modification, based on experience with the type of patient and all the different parameters (e.g., phase angle). For example, based upon 12 very similar previous patients where multiple programs seemed to provide the most powerful improvements in symptom relief, the physician would pursue in more detail changes in phase angle in this specific patient. After each change in any parameter, it will typically take 30-60 seconds to see symptom (e.g., pain) relief or worsening. Thus, it typically will take one to two minutes per change. There may be 50 or more changes per session when programming a complex neurostimulator. The process typically requires one programming session for about 60-90 minutes. The physician also provides the patient and family members with detailed instructions regarding stimulator operations and limited modifications of stimulation parameters (pulse width and amplitude) at home.

Description of Post-Service Work:

Intraoperative or Subsequent: Communication the patient, family, and other health care professionals (including written and telephone reports and orders) on the day of the analysis are considered part of the postoperative work for this procedure. It is important to carefully document in patient's medical record all adjustments made to the stimulation parameters and ongoing device operation.

CPT/Descriptor 9594X3(XX3) Electronic analysis of implanted neurostimulator pulse generator system (e.g., rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); complex brain or spinal cord neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming, first hour

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SURVEY DATA:

Specialty(s): American Association of Neurological Surgeons; American Academy of Pain Medicine; American Society of Anesthesiologists

Type of Survey: Convenience and Random

Survey n:	57				
Response:	41				
Rate %:	72%				
		RVW	PRE total min	INTRA total min	HOSP total min
low	0.72			20	
25th%	0.95			60	
MED	1.50		3	60	5
75th%	1.92			60	
high	5.00			90	

KEY REFERENCE SERVICE(S):

1998 RVW	Global	CPT	Descriptor
0.65	XXX	63691	Electronic analysis of implanted neurostimulator pulse generator system (may include rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); with reprogramming of pulse generator
0.92	XXX	93738	Electronic analysis of cardioverter/defibrillator only (interrogation, evaluation of pulse generator status); with reprogramming

Time Estimates (Median)	Mean Intensity/Complexity Measures		
	9594X3	63691	93738
PRE-service	3	3	3
INTRA-service	60	15	30
POST-service	5	5	5
Mental Effort and Judgment			
The number of possible diagnosis and/or the number of management options that must be considered	4.51	4.70	3.83
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	1.85	1.78	1.21
Urgency of medical decision making	1.64	1.44	1.29
Technical Skill/physical Effort			
Technical skill required	2.62	2.22	1.62
Physical effort required	1.52	1.39	1.04
Psychological Stress			
The risk of significant complications, morbidity and/or mortality	1.83	1.58	2.75
Outcome depends on skill and judgment of physician	4.67	4.81	3.21
Estimated risk of malpractice suit with poor outcome	3.17	3.22	3.38
Time Segments			
PRE-service intensity/complexity	1.35	1.22	1.13
INTRA-service intensity complexity	4.65	4.78	3.63
POST-service intensity complexity	1.73	1.50	1.13

CPT/Descriptor: 9594X3(XX3) Electronic analysis of implanted neurostimulator pulse generator system (e.g., rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); complex brain or spinal cord neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming, first hour (04/98) Page 4

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S): Compare the pre-, intra-, and post-service time and the intensity (mental effort and judgment; technical skill & physical effort; and psychological stress) of the service you are rating to the key reference services listed above.

XX3 and XX4 are very different than 63691 and new code 9594X2 (XX2).

XX3 and XX4 are used for programming with a "complex" spinal/brain neurostimulation system. In essence, such a system consists of two "four-contact" leads (thus eight total electrical contacts) OR a single "eight-contact" lead OR two "eight-contact" leads (thus 16 total electrical contacts). The number of possible electrode combinations for polarity and use ranges from over 100,000 to about 60 million, depending upon which of these three systems are used. Furthermore, many of the FDA-approved "complex" systems allow three to four different combinations to be used at the same time thus increasing the possible stimulation settings by a factor of three to 10 times.

ADDITIONAL RATIONALE

The codes XX2, XX3, and XX4 fall within the same family. The advisory committee feels that a stepwise progression of RVWs based on there relationship to each other and to the old code 63691 is important this stepwise progression would look at the value for the old code 69631 (for limited 1-lead, 2-contact systems), then XX2 (for limited 1-lead, 4-contact systems), then XX4 (for 30 minutes of additional work with complex 2-lead, 4-contact or 1- or 2-lead, 8-contact systems), and finally XX3 (for the first 60 minutes of work with complex 2-lead, 4-contact or 1- or 2-lead, 8-contact systems).

In presenting recommendations based on this stepwise methodology, the recommended RVW of 0.78 for XX2 is discussed elsewhere.

Code XX4 refers to an additional 30 minutes of programming for a complex neurostimulation system. The intra-service intensity for XX3 and XX4 is 4.6 as compared to 2.9 for code XX2. Considering the time difference and considerably higher intensity, the survey median RVW for XX4 of 0.92 is recommended. This recommendation is conservative as an 18% increase over the recommendation of 0.78 rvu's for XX2.

Code XX3 refers to the initial 60 minutes of programming for a complex neurostimulation system. The relationship of XX3 and XX4, however, is not a straightforward time difference. As more programming ensues, the difficulty and complexity increases. Therefore the RVW for XX3 should be less than twice the RVW for XX4. The survey median RVW of 1.50 is recommended for XX3. This recommendation is only 1.6 times the value for XX4 (even though the time is 2.0 times greater) and takes into account the increased intensity and complexity for each additional 30 minutes after the first hour.

FREQUENCY INFORMATION

1. How was this service previously reported?

E & M Evaluation and Management AND 63690 OR 63691 WITH or WITHOUT
99090 Analysis of information data stored in computers (e.g., ECGs, blood pressures, hematologic data)

2. How often do physicians in your specialty perform this service?

- Commonly
- Sometimes
- Rarely

CPT/Descriptor: 9594X3(XX3) Electronic analysis of implanted neurostimulator pulse generator system (e.g., rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); complex brain or spinal cord neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming, first hour

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

Currently, it is estimated that 40% of present SCS implants involve complex SCS systems. Based upon the above numbers, it is estimated that the yearly rate of complex system implants in the U.S. will increase from 1,500 now to 2,000 in 1999 and then to about 3,000 complex implants by 2002. This will be a result of continued complex SCS technology improvements with better efficacy in new indications. Programming of these systems should average three per patient per year. Therefore, the estimated frequency for XX3 is 4,500 to 6,000 annually.

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

Yes No

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

(April 1998)

CPT Code: 9594X4(XX4)

Global Period: XXX

Recommended RVW: 0.92

CPT Descriptor: Electronic analysis of implanted neurostimulator pulse generator system (e.g., rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling impedance and patient compliance measurements); complex brain or spinal cord neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming, each additional 30 minutes after first hour (List separately in addition to code for primary procedure) (use X4 in conjunction with code X3)

Vignette Used in Survey:

Intraoperative: A 45-year-old male requires intraoperative electronic analysis of an implanted neurostimulator pulse generator. His history includes intractable chronic low back pain and right leg pain (rated 8/10) despite a laminectomy and a lumbar spine fusion, oral narcotic and non-narcotic medications, physical therapy, back brace trial, and various injection blocks. ***At operation,*** electronic analysis and programming of an implanted permanent multiple array electrode system and subcutaneous generator/transmitter is performed. After the patient's device is programmed to achieve maximal comfortable stimulation, the physician provides the patient and family members with detailed instructions regarding stimulator operations and precautions. [*In responding to the questions on this survey, please consider only the work you perform with respect to the electronic analysis and programming of the neurostimulator FOR AN ADDITIONAL 30 MINUTES AFTER THE FIRST HOUR. The operative work to implant the electrode is separately billable by surgeon.*]

Subsequent: A 45-year-old male presents for ***follow-up*** programming and monitoring of an implanted permanent spinal cord multiple array electrode system and subcutaneous generator/transmitter. At the visit, the programming system is checked to insure proper functioning, the physician tests multiple combinations of the implant parameters, while assessing the degree of symptom and side effect improvement or worsening after each programming change. After the patient's device is programmed to achieve maximal comfortable stimulation, the physician provides the patient and family members with detailed instructions regarding stimulator operations and precautions. [*In responding to the questions on this survey, please consider only the work you perform with respect to the electronic analysis and programming of the neurostimulator FOR AN ADDITIONAL 30 MINUTES AFTER THE FIRST HOUR of the visit.*]

CLINICAL DESCRIPTION OF SERVICE (This work description was NOT provided on the survey.):**Description of Pre-Service Work:**

Please see description for primary code 9594X3(XX3)

Description of Intra-Service Work:

Please see description for primary code 9594X3(XX3)

Description of Post-Service Work:

Please see description for primary code 9594X3(XX3)

CPT/Descriptor: 9594X4(XX4) Electronic analysis of implanted neurostimulator pulse generator system (e.g., rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); complex brain or spinal cord neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming, each additional 30 minutes after first hour (List separately in addition to code for primary procedure)

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SURVEY DATA:

Specialty(s): American Association of Neurological Surgeons; American Academy of Pain Medicine; American Society of Anesthesiologists

Type of Survey: Convenience and Random

Survey n:	57				
Response:	41				
Rate %:	72%				
		RVW	PRE total min	INTRA total min	HOSP total min
					OFF total min
	low	0.58		10	
	25th%	0.90		30	
	MED	0.92	0	30	0
	75th%	1.00		30	
	high	3.00		60	

KEY REFERENCE SERVICE(S):

<u>1998 RVW</u>	<u>Global</u>	<u>CPT</u>	<u>Descriptor</u>
0.65	XXX	63691	Electronic analysis of implanted neurostimulator pulse generator system (may include rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); with reprogramming of pulse generator
0.92	XXX	93738	Electronic analysis of cardioverter/defibrillator only (interrogation, evaluation of pulse generator status); with reprogramming

Time Estimates (Median)	Mean Intensity/Complexity Measures		
	9594X4	63691	93738
PRE-service	0	3	3
INTRA-service	30	15	30
POST-service	0	5	5
Mental Effort and Judgment			
The number of possible diagnosis and/or the number of management options that must be considered	4.39	4.70	3.83
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	1.82	1.78	1.21
Urgency of medical decision making	1.60	1.44	1.29
Technical Skill/physical Effort			
Technical skill required	2.26	2.22	1.62
Physical effort required	1.41	1.39	1.04
Psychological Stress			
The risk of significant complications, morbidity and/or mortality	1.74	1.58	2.75
Outcome depends on skill and judgment of physician	4.58	4.81	3.21
Estimated risk of malpractice suit with poor outcome	3.18	3.22	3.38
Time Segments			
PRE-service intensity/complexity	1.35	1.22	1.13
INTRA-service intensity complexity	4.59	4.78	3.63
POST-service intensity complexity	1.81	1.50	1.13

CPT/Descriptor: 9594X4(XX4) Electronic analysis of implanted neurostimulator pulse generator system (e.g., rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); complex brain or spinal cord neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming, each additional 30 minutes after first hour (List separately in addition to code for primary procedure)

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

XX3 and XX4 are very different than 63691 and new code 9594X2(XX2).

XX3 and XX4 are used for programming with a "complex" spinal/brain neurostimulation system. In essence, such a system consists of two "four-contact" leads (thus eight total electrical contacts) OR a single "eight-contact" lead OR two "eight-contact" leads (thus 16 total electrical contacts). The number of possible electrode combinations for polarity and use ranges from over 100,000 to about 60 million, depending upon which of these three systems are used. Furthermore, many of the FDA-approved "complex" systems allow three to four different combinations to be used at the same time thus increasing the possible stimulation settings by a factor of three to 10 times.

ADDITIONAL RATIONALE

The codes XX2, XX3, and XX4 fall within the same family. The advisory committee feels that a stepwise progression of RVWs based on their relationship to each other and to the old code 63691 is important. This stepwise progression would look at the value for the old code 63691 (for limited 1-lead, 2-contact systems), then XX2 (for limited 1-lead, 4-contact systems), then XX4 (for 30 minutes of additional work with complex 2-lead, 4-contact or 1- or 2-lead, 8-contact systems), and finally XX3 (for the first 60 minutes of work with complex 2-lead, 4-contact or 1- or 2-lead, 8-contact systems).

In presenting recommendations based on this stepwise methodology, the recommended RVW of 0.78 for XX2 is discussed elsewhere.

Code XX4 refers to an additional 30 minutes of programming for a complex neurostimulation system. The intra-service intensity for XX3 and XX4 is 4.6 as compared to 2.9 for code XX2. Considering the time difference and considerably higher intensity, the survey median RVW for XX4 of 0.92 is recommended. This recommendation is conservative as an 18% increase over the recommendation of 0.78 rvu's for XX2.

Code XX3 refers to the initial 60 minutes of programming for a complex neurostimulation system. The relationship of XX3 and XX4, however, is not a straightforward time difference. As more programming ensues, the difficulty and complexity increases. Therefore the RVW for XX3 should be less than twice the RVW for XX4. The survey median RVW of 1.50 is recommended for XX3. This recommendation is only 1.6 times the value for XX4 (even though the time is 2.0 times greater) and takes into account the increased intensity and complexity for each additional 30 minutes after the first hour.

FREQUENCY INFORMATION

1. How was this service previously reported?

E & M Evaluation and Management AND 63690 OR 63691 WITH or WITHOUT
99090 Analysis of information data stored in computers (e.g., ECGs, blood pressures, hematologic data)

2. How often do physicians in your specialty perform this service?

Commonly Sometimes Rarely

CPT/Descriptor: 9594X4(XX4) Electronic analysis of implanted neurostimulator pulse generator system (e.g., rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); complex brain or spinal cord neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming, each additional 30 minutes after first hour (List separately in addition to code for primary procedure)

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

The estimated frequency for XX4 is approximately 20% of XX3 or 900 to 1,200 annually.

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

Yes No

CPT/Descriptor: 9594X5(XX5) Electronic analysis of implanted neurostimulator pulse generator system, complex cranial nerve neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming, with or without nerve interface testing, first hour

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AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

(April 1998)

CPT Code: 9594X5(XX5) Global Period: XXX Recommended RVW: 3.00

CPT Descriptor: Electronic analysis of implanted neurostimulator pulse generator system (e.g., rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); complex cranial nerve neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming, with or without nerve interface testing, first hour

Vignette Used in Survey: A 27-year-old male with complex partial seizures since age 13 that have been resistant to multiple antiepileptic drugs who has been video EEG monitored and found to not be a candidate for a straight temporal lobectomy, but appears to have multi-focal onset in both frontal lobes, is being implanted with the vagal nerve stimulator. An initial hour of complex programming is performed and coded using 9594X5. He continues to have 7-12 seizures per month and appears to be an appropriate candidate for cranial nerve (vagus nerve stimulation). During implantation, a physician performs electrophysiologic procedures, including the interrogation of the device before the package is opened, performing pre-implant diagnostics, including assessing the integrity of the device before implantation. This includes poling and diagnostic testing of the device against a known load prior to implantation, testing of nerve electrode impedance following electrode placement and providing feedback when placement needs to be changed. The proper stimulation parameters, once the device and leads are in place just prior to closure, are verified and an initial therapeutic stimulation setting is programmed. This involves staying in the operating room during the procedure while the surgeon implants the device, the setting of the initial therapeutic stimulation including multiple parameter adjustments including current pulse and frequency train duration, interval between trains, magnetic activation of current, pulse width modulation, frequency and train duration as well. After the device is turned on, the patient is observed for changes in vital signs during stimulation, both in the operating room and in the post-anesthesia recovery room. Additional hours are coded as appropriate for physician time.

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

Description of Pre-Service Work:

Review of patient medical chart. Check programming system to ensure proper functioning.

Description of Intra-Service Work:

During the operating room procedure, the neurologist begins the following sequence of services: Performs initial device diagnostic testing and electronically codes the device with the patient's identifiers; Tests device performance against a known impedance (resistor); Tests nerve-electrode interface after lead attachment but prior to device implantation; Retests nerve-electrode interface and device function after implantation; and set initial stimulation parameters for treating epilepsy.

Approximately 7 to 10 days after undergoing device and lead implantation, the patient sees the physician for the initial ramp-up and setting of device parameters. In order for the patient to achieve optimal therapeutic stimulation of the vagus nerve, the current, frequency, pulse width, and train durations must be increased in small increments to the maximal tolerated amount, as limited by pain, respiratory or swallowing problems. This usually consists of four programming/clinical monitoring sessions conducted over one day. Each programming and monitoring session includes the following services: Interrogate device; Perform device and lead diagnostic testing, as needed; Increase output current (in 0.25 to 0.5mA increments), frequency, pulse width, or train duration; Monitor patient for adverse events for typically 30 min; and Modify parameters if stimulation is not tolerated. The physician repeats these steps every 2-3 hours until maximally tolerated stimulation current is attained for the day (usually about 1.0 mA).

During subsequent patient visits, the physician performs a limited set of device and lead evaluations. This may involve adjusting the output current, the stimulation signal frequency, the pulse duration and the

CPT/Descriptor: 9594X5(XX5) Electronic analysis of implanted neurostimulator pulse generator system; complex cranial nerve neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming, with or without nerve interface testing, first hour

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ON/OFF time duty cycle for the programmed stimulation parameters. The on-demand or magnet activated stimulation parameters are independently adjusted for output current, pulse duration and on time associated with the extra stimulation. Following any adjustment, the patient remains in the office under the physician's care and receives three to five programmed stimulation cycles.

Description of Post-Service Work:

Communication with the patient, family, and other health care professionals (including written and telephone reports and orders) on the day of the analysis are considered part of the postoperative work for this procedure. It is important to carefully document in patient's medical record all adjustments made to the stimulation parameters and ongoing device operation.

CPT/Descriptor: 9594X5(XXX) Electronic analysis of implanted neurostimulator pulse generator system; complex cranial nerve neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming, with or without nerve interface testing, first hour

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SURVEY DATA

Specialty(s): American Academy of Neurology
Type of Survey: Random

Survey n:	41	RWV	PRE total min	INTRA total min	HOSP total min	OFF total min	Same day total min	ICU		Hosp. - Other		Dischg day total min	Office	
								# visits	total min	# visits	total min		# visits	total min
Response:	26													
Rate %:	63%													
low	2.50			30										
25th%	3.00			53										
MED	3.21	30	60	20	n/a	20	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
75th%	6.00			90										
high	10.00			120										

KEY REFERENCE SERVICE(S):

1998 RVW	Global	CPT	Descriptor
3.21	XXX	95962	Functional cortical mapping by stimulation of electrodes on brain surface, or of depth electrodes, to provoke seizures or identify vital cortex; each additional hour of physician attendance
6.21	XXX	95829	Electrocorticogram at surgery (separate procedure)

Time Estimates (Median)	Mean Intensity/Complexity Measures		
	XX5	95962	95829
PRE-service	30	30	60
INTRA-service	60	60	60
POST-service	20	15	15
Mental Effort and Judgment			
The number of possible diagnosis and/or the number of management options that must be considered	4.04	4.53	4.45
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	4.23	4.53	4.45
Urgency of medical decision making	4.04	4.47	4.55
Technical Skill/physical Effort			
Technical skill required	4.19	4.82	4.55
Physical effort required	2.92	3.18	2.82
Psychological Stress			
The risk of significant complications, morbidity and/or mortality	3.62	4.35	3.82
Outcome depends on skill and judgment of physician	3.85	4.71	4.64
Estimated risk of malpractice suit with poor outcome	3.81	4.12	3.73
Time Segments			
PRE-service intensity/complexity	3.72	3.87	3.73
INTRA-service intensity complexity	4.00	4.71	4.27
POST-service intensity complexity	3.52	2.93	2.80

CPT/Descriptor: 9594X5(XX5) Electronic analysis of implanted neurostimulator pulse generator system; complex cranial nerve neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming, with or without nerve interface testing, first hour

(04/98) Page 4

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

XX5 and XX6 are for programming the neurostimulator for the cranial nerve. The new generation neurostimulator is more complex, with a minimum of six features that require a wide amplitude of settings. Combinations of settings and permissible programmings under current FDA guidelines further multiplies the possible settings/programmings. The reference service most often used by survey respondents was 95829, electrocorticogram at surgery, or 95962, functional cortical mapping by stimulating the brain surface.

RATIONALE

XX5 code is for 60 minutes of programming with both intra-operative and interative responsibility in programming a complex neurostimulator. It is evident from survey responses that physicians do not find easily find a frame of reference for this procedure, and that certain series of codes do not related well to each other. There is also an element of polarity in the responses, indicating that respondents were not comfortable with a frame of reference services.

The median RVW from this survey was 3.21 for XX5. We understand that this is a new procedure and that a select number of physicians were able to participate, based on their experience and familiarity. In light of the limited number survey responses, a realistic RVW would be set at the 25th percentile of responses. An RVW of 3.00 is recommended for XX5.

ADDITIONAL RATIONALE

Codes XX 5 and XX6— These codes are familiar with codes XX2-XX4 surveyed by the American Academy of Neurosurgeons, but differ greatly in their difficulty and complexity. Whereas XX2-XX4 deal primarily with modulation of sensory function as an endpoint, the activities associated with XX5 and XX6 have multiple endpoints, including anticipated seizure outcome and a wide variety of clinically significant adverse events. The latter result from the many functions of vagus nerve, which has intimate interactions with brain, heart, gastrointestinal system and laryngeal musculature. Since antiepileptic efficacy and adverse effects are directly associated with increases vagal stimulation, the clinician must repeatedly balance the effects against each other to optimize therapy.

Code XX5 involves two former proposed codes that were collapsed appropriately into this one new code, XX5, because of the same overall work effort. Thus, the XX5, which broadly describes vagus nerve stimulator programming, is used primarily for both 1) intra-operative programming and 2) outpatient programming, which by nature utilizes iterative sessions with the patient on a single clinic visit. The intra-operative programming covers pre-operative planning, intra-operative manipulation, and post-operative management as described by the vignette submitted. During iterative programming, the physician must repeatedly "ramp-up" the stimulation parameters to push the patient to the limits of tolerance. When tolerance to the induced pain occurs, usually over 1 - 2 hours, the current is increased further until no further increases may be performed. At each step, the physician must clinically monitor the patient for pain, respiratory compromise (due to laryngeal constriction), cardiac and gastrointestinal symptoms. In summary, this code covers 60 minutes of intra-operative work, and subsequent outpatient work, the latter involving the programming and "ramping-up" with the patient and device. The RVW recommended for XX5 is 3.00.

FREQUENCY INFORMATION

1. How was this service previously reported?

95920 Intraoperative Clinical Neurophysiology testing along with
63691 (electronic testing of implanted neurostimulator pulse generator).
95999 - Other neurologic procedure.

CPT/Descriptor: 9594X5(XX5) Electronic analysis of implanted neurostimulator pulse generator system; complex cranial nerve neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming, with or without nerve interface testing, first hour

(04/98) Page 5

2. How often do physicians in your specialty perform this service?

Commonly Sometimes Rarely

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

2,500

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

Yes No

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

(April 1998)

CPT Code: 9594X6(XX6)

Global Period: XXX

Recommended RVW: 1.7

CPT Descriptor: Electronic analysis of implanted neurostimulator pulse generator system (e.g., rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); complex cranial nerve neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming, each additional 30 minutes after first hour (List separately in addition to code for primary procedure)(use XX6 in conjunction with code XX5)

Vignette Used in Survey:

A 26-year-old female with medically refractory complex partial and secondarily generalized tonic-clonic seizures with frequency of six per month who has a hypothalamic hematoma returns after implantation of cranial nerve stimulator for her first outpatient visit. One-half hour of complex programming is performed and coded using 9594X6 involving interrogation of the device, recording generator-type, serial number, lead type, total implantation time, total on-time for the device. A lead diagnostic test is then performed. The device is then placed in program mode. Parameters including current, pulse width, frequency, train duration and train interval are reviewed and modified, changing one variable at a time while observing the patient for acute side-effects associated with the increase in stimulation, including hoarseness, swallowing difficulties, dyspnea, bradycardia, pain and coughing. Multiple sessions are utilized within one day in order to titrate the stimulation parameters to maximum. These parameters are determined by the physician after review of data from previous clinical evaluation, which included efficacy and side-effects. The patient is maintained in the clinic area during this entire time, so the physician can immediately adjust the parameters as needed if adverse effects are observed. Additional 30-minute units are used as appropriate.

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

Description of Pre-Service Work:

Please see description for primary code 9594X5(XX5)

Description of Intra-Service Work:

Please see description for primary code 9594X5(XX5)

Description of Post-Service Work:

Please see description for primary code 9594X5(XX5)

CPT/Descriptor: 9594X6 (XX6) Electronic analysis of implanted neurostimulator pulse generator system; complex cranial nerve neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming, each additional 30 minutes after first hour

SURVEY DATA

Specialty(s): American Academy of Neurology
 Type of Survey: Random

Survey n:	41	RWV	PRE total min	INTRA total min	HOSP total min	OFF total min	Same day total min	ICU		Hosp. - Other		Dischg day total min		Office	
Response:	25							# visits	total min	# visits	total min		# visits	total min	
Rate %:	61%														
	low	0.45		10											
	25th%	1.50		30											
	MED	2.10	10	30	10	n/a	10	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	75th%	3.00		45											
	high	8.00		180											

KEY REFERENCE SERVICE(S).

1998 RVW	Global	CPT	Descriptor
1.54	XXX	95861	Needle electromyography, two extremities and related paraspinal areas
3.21	XXX	95962	Functional cortical mapping by stimulation of electrodes on brain surface, or of depth electrodes, to provoke seizures or identify vital cortex; each additional hour of physician attendance

Time Estimates (Median)	Mean Intensity/Complexity Measures		
	XX6	95962	95861
PRE-service	10	30	10
INTRA-service	30	60	30
POST-service	10	15	3
Mental Effort and Judgment			
The number of possible diagnosis and/or the number of management options that must be considered	3.84	4.53	3.60
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	3.80	4.53	3.20
Urgency of medical decision making	3.56	4.47	3.00
Technical Skill/physical Effort			
Technical skill required	4.00	4.82	4.20
Physical effort required	2.76	3.18	2.80
Psychological Stress			
The risk of significant complications, morbidity and/or mortality	3.48	4.35	2.20
Outcome depends on skill and judgment of physician	3.96	4.71	4.00
Estimated risk of malpractice suit with poor outcome	3.48	4.12	2.20
Time Segments			
PRE-service intensity/complexity	3.17	3.87	3.20
INTRA-service intensity complexity	3.96	4.71	3.80
POST-service intensity complexity	3.29	2.93	2.75

CPT/Descriptor: 9594X6 (XX6) Electronic analysis of implanted neurostimulator pulse generator system; complex cranial nerve neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming, each additional 30 minutes after first hour

(04/98) Page 3

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

Those responding to the survey were not comfortable with the reference services provided. There was polarity in their responses, which also underscores that this is a service which does not relate well to many other codes with which these physicians are familiar.

RATIONALE

Code XX6 is for 30 minutes of programming coding. The physician's role is to titrate the stimulation patterns for the maximum effect with the patient and their comfort. The median RVW from this survey was 2.10. Key reference services of respondents were 95962, functional cortical mapping by stimulating the brain surface. This has an RVW of 3.21. The other frame of reference was needle electromyography, 95861, testing two extremities and related paraspinal areas. The RVW for this service is 1.54. The recommended RVW for XX6 is 1.7.

ADDITIONAL RATIONALE

Code XX6 is an extension of XX5 for an additional 30 minutes of complex programming with the neurostimulator. As outlined above, the programming is complex because it involves titrating the therapy both against anticipated clinical response and acute adverse events. The recommended RVW for XX6 is 1.7.

The number of survey responses for codes XX5 and XX6 was 26. While this was a disappointing result, those who responded to the survey clearly understood the complexity and difficulty of these codes in their responses. This understanding was further evidenced in their frequent identification or "cross-walk" of XX5 with code 95829, electrocorticogram at surgery (which involves mapping the brain for epilepsy surgery), with an RVW of 6.21. XX6 was "cross-walked" with 95962, with an RVW of 3.21, which is cortical mapping of the brain with surface electrode stimulation. We propose to use the 2nd percentile value to recommend the above RVW amounts. These proposed values are very conservative recommendations, based both on the complexity of these procedures and on the cross-walk codes of highest familiarity and experience

FREQUENCY INFORMATION

1. How was this service previously reported?

95999 - Unlisted procedure
95920 (intraoperative evoked potential) with 63691 (neurostimulator)

2. How often do physicians in your specialty perform this service?

Commonly Sometimes Rarely

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

7,500

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

Yes No

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS
May 1998

Fourth Level Neonatal Intensive Care

A new CPT code, 99298, *Subsequent neonatal intensive care, per day, for the evaluation and management of the recovering very low birth weight infant (less than 1500 grams)* was developed to describe the physician work involved in Fourth Level neonatal intensive care. CPT 99298 is an Evaluation and Management service provided by pediatricians, neonatologists, pediatric surgeons, and pediatric critical care physicians in a newborn or pediatric intensive care unit. This service is similar to the key reference services in that it represents E/M work “per day.” The service is global (24 hours) and bundled. Unlike 99232 *Subsequent hospital care, Level II Visit* (work RVU=1.06), 99233 *Subsequent hospital care* (work RVU =1.51) and 99222 *Initial hospital care* (work RVU= 2.14), this service is provided to a seriously ill neonate requiring intensive monitoring, observations, and therapeutic interventions which exceed the capacity of standard medical surgical units and requires specialized medical training. Also, while very similar to the 99297 *Subsequent neonatal critical care* (work RVU=4.00) code, 99297 is reserved for critically ill neonates. The 99233 code is utilized for stable children on medical surgical pediatric floors. The services performed and reported under 99298 would be appropriate for the premature infant (weighing less than 1500 grams) who is recovering from the critical phase of their illness.

Code 99298 bridges the gap between 99297 and 99233. In valuing the physician work, over 145 physicians responded with survey information. The survey median was 2.75 and is recommended by the RUC. The value, which falls midway between the RVUs for CPT 99297 (4.00) and CPT 99233 (1.51), reflects the differences in intensity and complexity of a very low birth weight neonate, who is not critically ill, but also who is not stable and requires intensive care.

The RUC supports this rationale and recommends a work RVU of 2.75.

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
•99298	ZZ1	<p>Subsequent neonatal intensive care, per day, for the evaluation and management of the recovering very low birth weight infant (less than 1500 grams)</p> <p><u>Very low birth weight neonates who are no longer critically ill continue to require intensive cardiac and respiratory monitoring, continuous and/or frequent vital sign monitoring, heat maintenance, enteral and/or parenteral nutritional adjustments, laboratory and oxygen monitoring and constant observation by the health care team under direct physician supervision. Neonates of this level of care would be expected to require infrequent changes in respiratory, cardiovascular and/or fluid and electrolyte therapy as those induced under 99296 or 99297.</u></p> <p><u>This code encompasses intensive care provided on days subsequent to the admission date</u></p>	XXX	2.75

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

(April 1998)

CPT Code: 9929X(ZZ1)

Global Period: XXX

Recommended RVW: 2.75

CPT Descriptor: Subsequent neonatal intensive care, per day, for the evaluation and management of the recovering very low birth weight infant (less than 1500 grams) Very low birth weight neonates who are no longer critically ill continue to require intensive cardiac and respiratory monitoring, continuous and/or frequent vital sign monitoring, heat maintenance, enteral and/or parenteral nutritional adjustments, laboratory and oxygen monitoring and constant observation by the health care team under direct physician supervision. Neonates of this level of care would be expected to require infrequent changes in respiratory, cardiovascular and/or fluid and electrolyte therapy as those induced under 99296 or 99297. This code encompasses intensive care provided on days subsequent to the admission date.

Vignette Used in Survey:

A 1100 gram, 30-week preterm infant is now three weeks of age and weighs 1200 grams. The child was ventilated from birth and received two doses of surfactant. By seven days of age, the neonate was extubated and is now on a nasal cannula of one-fourth liter of oxygen. His umbilical venous and arterial catheter were removed at 10 days of age. A percutaneous central venous line was then placed for total parenteral nutrition. Feedings were began at 10 days of age and he is now receiving 75% of his total caloric requirement by the enteral route. He has been moved from a radiant warmer to an isolette for continued heat maintenance. He was started and maintained on antibiotics for the first seven days. All cultures were subsequently negative. His initial ultrasound examination on day three detected a grade one subependymal bleed; a repeat study on day seven showed progression into the ventricles with dilation on the right side. His most recent chest radiograph is compatible with mild chronic lung disease. He has completed a single short course of steroids. His first eye examination demonstrated Grade I ROP. The infant continues with recurrent episodes of apnea and was placed on caffeine therapy. His family lives 60 miles from the NICU and visits two to three times weekly. A review of the child's flow sheet, discussion with the nursing staff, a complete physical examination, review of laboratory and medical imaging data and conversations with the family occur daily. The referring physician is updated by telephone twice a week.

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

Description of Pre-Service Work:

Preparing to see the patient includes: obtaining and reviewing the results of any lab work and/or radiologic studies; reviewing the intensive care flow sheet and discussing the patient's status with the bedside nurse; and communicating with other professionals, as appropriate.

Description of Intra-Service Work:

A complete examination of the head, eyes, nose, mouth, chest, lungs, heart, abdomen, genitals, rectum, joints, spine, extremities, and a neurologic appraisal of movement, reflexes, cranial nerves, and degree of arousal and reactivity. All attached monitors and tubes are checked for secure placement and proper function.

Description of Post-Service Work:

Post-service work includes all coordination of care, documentation, and telephone calls with the patient, family members or other health professionals including; writing the daily TPN orders after recovery and or writing new feeding orders; ordering daily laboratory and imaging studies, as necessary; documenting care changes in the patient's chart and verbally with the nursing staff; speaking with the family in person or by telephone; and updating the referring physician.

CPT/Descriptor: 9929X(ZZ1) Subsequent neonatal intensive care, per day, for the evaluation and management of the recovering very low birth weight infant (less than 1500 grams)

(04/98) Page 2

SURVEY DATA: Specialty(s): American Academy of Pediatrics; American Pediatric Surgical Association

Survey n:	425		PRE	INTRA	POST
Response:	145		total	total	total
Rate %:	34%	RVW	min	min	min
	low	0.80		5	
	25th%	2.00		20	
	MED	2.75	10	30	20
	75th%	3.40		35	
	high	17.40		210	

Comparative Time and Visit Data for Surveyed Service and Key Reference Service(s):

CPT Code	Resp n	RVW	PRE total min	INTRA total min	POST total min	Exper
						med
9929X	145	2.75	10	30	20	250
99222	36	2.14	15	30	15	60
99232	50	1.06	5	15	15	201
99254	27	2.64	10	40	33	89
99297	77	4.00	15	30	30	300

KEY REFERENCE SERVICE(S):

1998 RVW	Global	CPT	Descriptor
2.14	XXX	99222	Initial hospital care, per day, for the evaluation and management of a 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 patient's and/or family's needs. Usually, the problem(s) requiring admission are of moderate severity. Physicians typically spend 50 minutes at the bedside and on the patient's hospital floor or unit.
1.06	XXX	99232	Subsequent hospital care, per day, for the evaluation and management of a patient, which requires at least two of these three key components: an expanded problem focused interval history -- an expanded problem focused examination -- 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 patient's and/or family's needs. Usually, the patient is responding inadequately to therapy or has developed a minor complication. Physicians typically spend 25 minutes at the bedside and on the patient's hospital floor or unit.
1.51	XXX	99233	Subsequent hospital care, per day, for the evaluation and management of a patient, which requires at least two of these three key components: a detailed interval history -- a detailed examination -- medical decision making of high complexity. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the patient is unstable or has developed a significant complication or a significant new problem. Physicians typically spend 35 minutes at the bedside and on the patient's hospital floor or unit.
2.64	XXX	99254	Initial inpatient consultation for a new or established patient, which requires 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 patient's and/or family's needs. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 80 minutes at the bedside and on the patient's hospital floor or unit.
4.00	XXX	99297	Subsequent neonatal intensive care, per day, for the evaluation and management of a critically ill though stable neonate or infant.

CPT/Descriptor: 9929X(ZZ1) Subsequent neonatal intensive care, per day, for the evaluation and management of the recovering very low birth weight infant (less than 1500 grams)

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	Mean Intensity/Complexity Measures						
	9929X total	9929X AAP	9929X APSA	99297	99232	99222	99254
Mental Effort and Judgment							
The number of possible diagnosis and/or the number of management options that must be considered	3.80	3.71	3.70	4.25	2.87	3.63	3.65
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	3.74	3.64	3.64	4.20	2.67	3.60	3.65
Urgency of medical decision making	3.42	3.38	3.39	4.01	2.40	3.57	3.38
Technical Skill/physical Effort							
Technical skill required	3.40	3.49	3.48	3.90	2.50	3.20	3.28
Physical effort required	3.12	3.18	3.19	3.71	2.35	3.20	3.12
Psychological Stress							
The risk of significant complications, morbidity and/or mortality	3.83	3.86	3.84	4.24	2.59	3.51	3.32
Outcome depends on skill and judgment of physician	3.94	3.90	3.87	4.40	2.98	3.65	3.72
Estimated risk of malpractice suit with poor outcome	3.93	3.91	3.89	4.06	2.85	3.60	3.35
Time Segments							
PRE-service intensity/complexity	3.19	3.10	3.13	3.64	2.41	3.34	2.82
INTRA-service intensity complexity	3.76	3.72	3.72	4.10	2.62	3.74	3.85
POST-service intensity complexity	3.19	3.12	3.12	3.45	2.41	3.11	3.04

RELATIONSHIP OF CODE BEING REVIEWED TO KEY REFERENCE SERVICE(S): Compare the pre-, intra-, and post-service time and the intensity (mental effort and judgment, technical skill & physical effort; and psychological stress) of the service you are rating to the key reference services listed above.

CPT 9929X(ZZ1) is an evaluation and management service provided by pediatricians, neonatologists, pediatric surgeons, and pediatric critical care physicians in a newborn or pediatric intensive care unit. This service is similar to the key reference services in that it represents E/M work "per day." However, in contrast to 99232, 99233, and 99222, this service is provided to a seriously ill neonate requiring intensive monitoring, observation and therapeutic interventions, which exceed the capacity of standard medical surgical units and requires specialized medical training.

The intensive monitoring, observation, and therapeutic interventions required of CPT 9929X(ZZ1) is most similar to CPT 99297, however the neonate is not "critically" ill by accepted medical terminology. The critical care codes are, as stated, reserved for critically ill patients. The most difficult group of infants to classify into critical care or subsequent routine hospital care groupings have been the small premature infant recovering from the critical phase of their illness. Though not meeting commonly held definitions of "critically ill," they are still not healthy "feeding and growing" infants. It is this group of patients that would appropriately be included under new code 9929X(ZZ1), a code which bridges the gap between 99297 and 99233.

The survey median RVW of 2.75 is recommended. This value, which falls midway between the RVWs for CPT 99297 (4.00) and CPT 99233 (1.51), reflects the differences in intensity and complexity of the very low birth weight neonate, who is not critically ill, but also who is not stable and requires intensive care.

ADDITIONAL RATIONALE (eg, if recommended RVUs are based on an alternative method instead of the survey results):
None.

CPT/Descriptor: 9929X(ZZ1) Subsequent neonatal intensive care, per day, for the evaluation and management of the recovering very low birth weight infant (less than 1500 grams)

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FREQUENCY INFORMATION

1. How was this service previously reported?

99297 or 99233

2. How often do physicians in your specialty perform this service?

Commonly Sometimes Rarely

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

There are 4 million deliveries in the United States each year. Of this total, an estimated 10% will require some level of intensive care, with 0.8% classified as very low birth weight (less than 1500 grams). The neonatal critical care/seriously ill codes (99295-99297) are commonly applicable until the newborn reaches 34 weeks of gestation. LOS for this population is dependent upon gestational age at birth. Therefore, the number of days new code 9929X may be applicable is difficult to determine. This code will replace some percentage of frequency for both 99297 and 99233.

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

Yes No

RUC/HCPAC Review Board
SUMMARY OF RECOMMENDATIONS
May 1998

Physical Medicine and Rehabilitation

A CPT code was established to describe Manual Therapy Techniques, including mobilization and manipulation. The primary users of the new code are expected to be physical and occupational therapists who are often restricted in the use of Osteopathic and Chiropractic Manipulative Technique codes (989XX series of codes). Additionally, the code is a better way to describe the services that cover a spectrum of manual techniques used by physical and occupational therapists. The new code is 97140 *Manual therapy techniques (eg, mobilization/manipulation, manual lymphatic drainage, manual traction), or one or more regions, each 15 minutes*. The use of each 15 minutes allows the service to remain consistent with other therapeutic procedure codes in the Physical Medicine and Rehabilitation section of CPT 1998 [97110 *Therapeutic procedure, one or more areas, each 15 minutes; therapeutic exercises to develop strength and endurance, range of motion and flexibility*, and 97116 *Therapeutic procedure, one or more areas, each 15 minutes; gait training (includes stair climbing)*]. The new code 97140, which will replace five codes currently in use [97122,97250,97260,97261,97265] was developed after two years of discussion of the Manual Manipulative Techniques Workgroup who recommended distinct coding nomenclature for OMT, CMT and manual therapy techniques performed by physical therapists and occupational therapists.

The HCPAC Review Board questioned the cross specialty relativity of the proposed RVU of 0.50 compared to the Chiropractic Manipulative Techniques and Osteopathic Manipulative Technique codes, although they understood the recommendation was related to the family of Physical Medicine and Rehabilitation CPT codes. It was noted that the primary reference codes CPT 97110, 97250 *Myofascial release/soft tissue mobilization, one or more regions*, and 97265 *Joint mobilization, one or more areas (peripheral or spinal)* have work values of 0.45. This was also the 25th percentile of the survey, which had a sample size of 97 physical and occupational therapists. The HCPAC Review Board agreed that a work value of 0.45 was an appropriate recommendation for 97140 as it allowed appropriate rank order to be maintained in the 97000 series of codes.

CPT Code (•New)	CPT Descriptor	Global Period	Work RVU Recommendation
97110	Therapeutic procedure, one or more areas, each 15 minutes; therapeutic exercises to develop strength and endurance, range of motion and flexibility	XXX	.45 (no change)
97122	— traction, manual (97122 has been deleted. To report, see 97140)	XXX	N/A
97250	Myofascial release/soft tissue mobilization, one or more regions (972550 has been deleted. To report, see 97140)	XXX	N/A
97260	Manipulation (cervical, thoracic, lumbosacral, sacroiliac, hand, wrist) (separate procedure), performed by physician; one area	XXX	N/A
97261	— each additional area (97260, 97261 have been deleted. To report, see 97140)	XXX	N/A
97265	Joint mobilization, one or more areas (peripheral or spinal) (97265 have been deleted. To report, see 97140)	XXX	N/A
•97140	Manual therapy techniques (eg, mobilization/manipulation, manual lymphatic drainage, manual traction), one or more regions, each 15 minutes	XXX	.45

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

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

CPT Code: 97XX1 Tracking Number: YY1 Global Period: XXX Recommended RVW: 0.50

CPT Descriptor: Manual therapy techniques (eg, mobilization/manipulation, manual lymphatic drainage, manual traction), one or more regions, each 15 minutes

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 36 year old male presents with neck, shoulder, and upper back pain, severe muscle guarding with limited range of motion which has developed gradually over the past 2 months, but became more severe recently after lifting his child. Testing identified segmental hypomobilities at the facet joints of C4-5, C5-6 and C7-T1, and anterior glenohumeral joint with hypomobility of inferior glide of the glenohumeral joint, along with myofascial trigger points palpated along the left cervical paraspinal region, upper trapezius, levator scapula and infraspinatus muscles

Description of Pre-Service Work: Review medical records for prior treatment, preparation of treatment area and patient, communication with other health care professional team members, discussion with family, contact with physician for an exchange of information.

Description of Intra-Service Work: Therapist places patient in a supine position, followed by passive testing of soft tissue extensibility, gross and segmental range of motion, capsular restrictions, level of muscle guarding and level of pain in the lower cervical, upper thoracic and glenohumeral regions. Level and type of restrictions are identified. Therapist initiates treatment incorporating isolated spinal and peripheral manual joint and soft tissue techniques to the cervical, scapular and shoulder areas. This includes myofascial release, muscle energy and passive stretch; manual traction, passive intervertebral mobilization/manipulation, glenohumeral inferior glide, as well as capsular oscillations and stretch. The goal of this intervention is to active pain free lower cervical/upper thoracic range of motion, increase extensibility of the myofascial tissue of the cervical and upper quarter region and facilitate the return to functional activities.

Description of Post-Service Work: Documentation of treatment including the components of the care provided, any changes in the patient's status and future plan of care, contact with physicians on patient's progress, contact with other health care professionals and family.

SURVEY DATA:

Organization: American Physical Therapy Association and American Occupational Therapy Association

Sample Size: 574 Response Rate: (%): 97 (17%) Initial Median RVW: 0.45 Final Median RVW: 0.50

Type of Sample (Circle One): random panel convenience. Explanation of sample size: n/a

25th Percentile RVW: 0.45 75th Percentile RVW: 0.60 Low: 0.30 High: 4.72

Median Pre-Service Time: 5 minutes Median Intra-Service Time: 19 minutes

25th Percentile Intra-Svc Time: 15 min 75th Percentile Intra-Svc Time: 30 min Low: 0.3 min High: 65 min

Median Post-Service Time:	<u>Total Time</u>	<u>Number of Visits</u>
Day of Procedure:	<u>5 min</u>	<u> </u>
ICU:	<u> </u>	<u> </u>
Other Hospital:	<u> </u>	<u> </u>
Office:	<u> </u>	<u> </u>

KEY REFERENCE SERVICE (S):

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
1)	97250	Myofascial release/soft tissue mobilization, one or more regions	0.45
2)	97265	Joint mobilization, one or more areas (peripheral or spinal)	0.45
3)	97110	Therapeutic procedure, one or more areas, each 15 minutes; therapeutic exercise to develop strength and endurance, range of motion and flexibility	0.45

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.

INTENSITY/COMPLEXITY MEASURES

	<u>CPT Code</u>	<u>Reference Service 1</u>	<u>Reference Service 2</u>
	97XX1	97250	97265
<u>Time Estimates (Median)</u>			
Median Pre-Time	5	5	5
Median Intra-Time	19	15	15
Median Post-Time	5	5	5
<u>Mental Effort and Judgement (Mean)</u>			
The number of possible diagnosis and/or the number of management options that must be considered	5	4	4.5
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4	3	4
Urgency of medical decision making	3	3	3
<u>Technical Skill/Physical Effort (Mean)</u>			
Technical skill required	5	5	5
Physical effort required	4	4	4
<u>Psychological Stress (Mean)</u>			
The risk of significant complications, morbidity and/or mortality	4	3	4
Outcome depends on the skill and judgement of provider	5	5	5

Estimated risk of malpractice suit with poor outcome	4	3	4
--	---	---	---

INTENSITY/COMPLEXITY MEASURES

CPT Code

Reference Service 1

Reference Service 2

Time Segments (Mean)

Pre-Service intensity/complexity	4	3	3
Intra-Service intensity/complexity	5	4	5
Post-Service intensity/complexity	3	3	3

ADDITIONAL RATIONALE

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

FREQUENCY INFORMATION

How was this service previously reported? Using CPT codes 97122, 97250, 97260, 97261, and 97265

How often do providers in your organization perform this service? Commonly Sometimes Rarely

Estimate the number of times this service might be provided nationally in a one-year period? 536,000 (1995 Bess)

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

March 1998

American Medical Association

Physicians dedicated to the health of America



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

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February 23, 1998

Barbara Wynn
Health Care Financing Administration
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Dear Ms. Wynn:

The RUC has recently completed its February meeting where, among other issues, it considered work relative values for psychotherapy services. As you recall, the RUC's comments on the October 31, 1997 Final Rule stated that the new HCFA psychotherapy codes would be reviewed by the RUC in February of 1998, and that we would like to reserve the ability to comment on these services at that time. We are now pleased to submit recommendations for the 24 psychotherapy codes. These recommendations are based on the cooperative efforts of the American Academy of Child and Adolescent Psychiatry (AACAP), The American Nurses Association (ANA), the American Psychiatric Association (APA), the American Psychological Association (ApA), and the National Association of Social Workers (NASW).

Codes 90804 – 90829 have replaced HCPCS codes G0071 – G0094 for CPT 1998 and the 1998 Medicare Fee Schedule. The HCPCS codes had work RVUs assigned to them by HCFA. In April of 1997 the RUC expressed concern that survey data were not available for all providers and subsequently recommended, in May of 1997, that the HCFA assigned relative values for the 24 HCPCS codes be crosswalked over to the new CPT codes, and that they remain interim until a survey had been conducted by each of the professions that provide the service. The five organizations named above presented to the RUC a joint proposal based on survey data from all providers and a work neutral regression technique to eliminate inconsistencies among practice patterns. The RUC's recommendation on the 24 psychotherapy services represents an acceptance of a base value of 1.30 for 90804 and a method of adding the additional work of the other codes, derived from the regression analysis, to this code. The methodology and rationale are described below.

Four key relationships distinguish the psychotherapy codes: time; the provision of medical evaluation and management; the type of psychotherapy; and the setting. AACAP, ANA, and APA surveyed all 24 services, while the 12 psychotherapy codes without medical evaluation and management were surveyed by ApA and NASW. The organizations contracted with The Lewin Group for assistance on the data collection and statistical analysis. The Lewin Group found that estimates of the four key relationships were not consistent across the surveyed codes. Differentials for the key relationships were in some instances negative, which is counterintuitive. The Lewin Group and the organizations hypothesized that some survey respondents may not have understood the logical relationship between the codes. It is also possible, given the number of different medical

and non-medical specialties involved in the survey, that the respondents have different practice patterns, standards of care, and patient populations. A regression technique was applied to correct for inconsistencies in the survey results across the codes.

Since regression methods have been rarely used at the RUC, the Chair directed the Research Subcommittee to examine the methodology prior to deliberation of the full RUC. The subcommittee found that the regression method was useful in situations where the survey data was inconsistent and where the work neutral approach had been used in the past. The goal of the regression analysis was to estimate the average incremental effect of E/M, time, type, and setting on a code's work RVU across all codes and all specialty groups. The estimated work effect for each relationship could then be applied to a base code to arrive at the work relative value for each service. The estimated work effects for each type of effect are as follows:

Type of Effect	Estimated Work Effect
E/M	0.17
Time (45-50)	0.69
Time (75-80)	1.00
Inpatient	0.04
Interactive	0.12

Work neutrality was used as a guideline for setting the base work RVU in two different ways. First, work neutrality was employed to ensure that the total work RVUs recommended for the 24 codes did not exceed the total median work RVUs from the survey. Second, work neutrality was used to keep the recommended total work RVUs in line with the total pool of work RVUs from the old codes (90842, 90843, 90844, and 90855) based on 1996 Medicare frequency data. To do this, frequency assumptions were required to crosswalk the new codes to the old. The recommended work relative values are also work neutral to the total pool of work RVUs projected from the HCPCS psychotherapy codes used during the first three-quarters of 1997.

The base code is 90804, *individual psychotherapy, insight oriented, behavior modifying and/or supportive, in an office or outpatient facility, approximately 20 to 30 minutes face-to-face with the patient* 90804 is currently valued by HCFA at 1.11 RVUs. The survey found a median work RVU of 1.25 and the regression analysis indicated a work RUV of 1.40. The work neutrality analysis comparing the total pool of survey RVUs to the pool of regression derived RVUs showed that the base RVU from the regression should be reduced by 0.10 work RVUs to 1.30. Therefore, the organizations recommended and the RUC has accepted 1.30 work RVUs for 90804. This recommendation is further supported by the current HCFA RVU for 90805 of 1.47. The only difference between 90804 and 90805 is the provision of E/M. If the estimated work effect for E/M (0.17) is removed from 90805 the result is 1.30: the recommended work RVU for 90804.

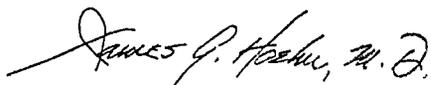
The RUC's recommendation is for an acceptance of 1.30 work RVUs for 90804 as the base and the additive methodology derived from the regression analysis. The addition of the estimated work effect to the base code allows the creation of a consistent work scale across all 24 psychotherapy codes. The RUC recommendations for each of the psychotherapy codes are as follows:

CPT Code	Descriptor	Base	E/M Effect	Time (45-50) Effect	Time (75-80) Effect	Inpatient Effect	Interactive Effect	Recommended Work RVU
90804	Psytx, office (20-30)	1.30						1.30
90805	Psytx, office (20-30) w/e&m	1.30	0.17					1.47
90806	Psytx, office (45-50)	1.30		0.69				1.99
90807	Psytx, office (45-50)	1.30	0.17	0.69				2.16

CPT Code	Descriptor	Base	E/M Effect	Time (45-50) Effect	Time (75-80) Effect	Inpatient Effect	Interactive Effect	Recommended Work RVU
	w/e&m							
90808	Psytx, office (75-80)	1.30		0.69	1.00			2.99
90809	Psytx, office (75-80) w/e&m	1.30	0.17	0.69	1.00			3.16
90810	Intac psytx, office (20-30)	1.30					0.12	1.42
90811	Intac psytx, off 20-30 w/e&m	1.30	0.17				0.12	1.59
90812	Intac psytx, office (45-50)	1.30		0.69			0.12	2.11
90813	Intac psytx, off 45-50 w/e&m	1.30	0.17	0.69			0.12	2.28
90814	Intac psytx, office (75-80)	1.30		0.69	1.00		0.12	3.11
90815	Intac psytx, off 75-80 w/e&m	1.30	0.17	0.69	1.00		0.12	3.28
90816	Psytx, hosp (20-30)	1.30				0.04		1.34
90817	Psytx, hosp (20-30) w/e&m	1.30	0.17			0.04		1.51
90818	Psytx, hosp (45-50)	1.30		0.69		0.04		2.03
90819	Psytx, hosp (45-50) w/e&m	1.30	0.17	0.69		0.04		2.20
90821	Psytx, hosp (75-80)	1.30		0.69	1.00	0.04		3.03
90822	Psytx, hosp (75-80) w/e&m	1.30	0.17	0.69	1.00	0.04		3.20
90823	Intac psytx, hosp (20-30)	1.30				0.04	0.12	1.46
90824	Intac psytx, hsp 20-30 w/e&m	1.30	0.17			0.04	0.12	1.63
90826	Intac psytx, hosp (45-50)	1.30		0.69		0.04	0.12	2.15
90827	Intac psytx, hsp 45-50 w/e&m	1.30	0.17	0.69		0.04	0.12	2.32
90828	Intac psytx, hosp (75-80)	1.30		0.69	1.00	0.04	0.12	3.15
90829	Intac psytx, hsp 75-80 w/e&m	1.30	0.17	0.69	1.00	0.04	0.12	3.32

Thank you for the opportunity to comment on these services. If requested, we would be willing to meet with you during the refinement process this summer to further discuss this issue.

Sincerely,



James G. Hoehn, MD

cc: Bart McCann, MD
Terry Kay

January 13, 1998

James Hoehn, MD
Chairman, AMA/Specialty Society RVS Update Committee
American Medical Association
515 North State Street
Chicago, Illinois 60610

Dear Dr. Hoehn:

On behalf of the five organizations that are signatories to this letter, we are pleased to present the consolidated results of our surveys related to the work values of the 24 psychotherapy codes. As requested by the RUC in April 1997, the five organizations -- the American Academy of Child and Adolescent Psychiatry (AACAP), American Nurses Association (ANA), American Psychiatric Association (APA), American Psychological Association (ApA), and National Association of Social Workers (NASW) -- conducted a survey of the 24 psychotherapy codes which were newly issued by HCFA for use in 1997.

The process has been conciliatory and cooperative from the beginning. All 24 codes were surveyed by AACAP, ANA, APA, while the 12 "pure" psychotherapy codes that do not include medical evaluation and management (E&M) were surveyed by the ApA and NASW. Each code (except for the six interactive codes) had two vignettes from which to choose -- an adult and child patient -- and each organization used the same list of reference services. It is important to note that the reference services did not include any of the previous CPT codes for psychotherapy (ie; CPT 90842, 90843, 90844, and 90855) since that would have potentially skewed the results.

In combining data from the survey responses, we have unanimously decided to use a budget neutral regression analysis for all of the elements of the survey. While we realize this has been rarely used by the RUC, we believe this is the best approach to take given the straight survey results.

The Lewin Group, who was our consultant through the process, found that the estimates of the four key relationships were not consistent across the surveyed codes. As you may recall, the four relationships for the psychotherapy codes are: whether medical E&M services are provided with psychotherapy, the approximate length of the psychotherapy session (20-30 minutes, 45-50 minutes, or 75-80 minutes), the type of psychotherapy used (insight-oriented vs. interactive), and the setting in which the psychotherapy is performed (office/outpatient vs. inpatient/partial hospitalization/residential care).

Lewin found that the differentials between these four factors varied greatly in the returned surveys, even sometimes showing negative relationships, which is counterintuitive. For example, the relationship between codes with E&M and without E&M ranged from a low of 0.00 to a high of 0.52. These inconsistencies led us to the use of budget neutral regression analysis so we could make full use of the survey information to build a coherent relative value scale for psychotherapy. This is certainly a goal of our organizations, which we hope is shared by the RUC.

We look forward to discussing our survey results with you and the RUC members at the February meeting.

Sincerely,



Ronald Shellow, MD
RUC Advisor
American Psychiatric Association



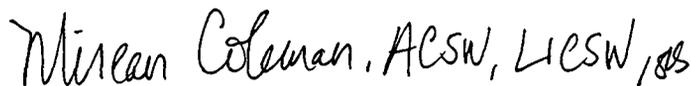
Sherry Barron-Seabrook, MD
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Eileen Sullivan-Marx, RN, PhD, SAAN
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Mirean Coleman, ACSW, LICSW
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Enclosures

o

Proposed Work Values for the New Psychotherapy CPT Codes

Prepared for
Relative Value Update Committee Meeting
February 6-8, 1998

Overview

- ◆ Background
- ◆ Survey Findings
- ◆ Regression Analysis: Purpose
- ◆ Regression Analysis: Findings
- ◆ Final Recommended Work RVUs for New Psychotherapy Codes
- ◆ Discussion

Background

- ◆ Before 1997: 4 codes for psychotherapy
- ◆ For 1997: 24 codes to describe same services
- ◆ Five groups worked together to survey these new codes:
 - American Academy of Child and Adolescent Psychiatry (AACAP)
 - American Nurses Association (ANA)
 - American Psychiatric Association (APA)
 - American Psychological Association (APA)
 - National Association of Social Workers (NASW)

Survey Purpose

- ◆ The purpose of the survey was to derive estimates of work relative value units for the new psychotherapy codes:

Office or Outpatient		Inpatient, Partial Hospitalization, or Residential	
CPT	Code Descriptor	CPT	Code Descriptor
90804	20-30 minutes, no E&M	90816	20-30 minutes, no E&M
90805	20-30 minutes, with E&M	90817	20-30 minutes, with E&M
90806	45-50 minutes, no E&M	90818	45-50 minutes, no E&M
90807	45-50 minutes, with E&M	90819	45-50 minutes, with E&M
90808	75-80 minutes, no E&M	90821	75-80 minutes, no E&M
90809	75-80 minutes, with E&M	90822	75-80 minutes, with E&M
INTERACTIVE			
CPT	Code Descriptor	CPT	Code Descriptor
90810	20-30 minutes, no E&M	90823	20-30 minutes, no E&M
90811	20-30 minutes, with E&M	90824	20-30 minutes, with E&M
90812	45-50 minutes, no E&M	90826	45-50 minutes, no E&M
90813	45-50 minutes, with E&M	90827	45-50 minutes, with E&M
90814	75-80 minutes, no E&M	90828	75-80 minutes, no E&M
90815	75-80 minutes, with E&M	90829	75-80 minutes, with E&M

Four Factors Defining New Psychotherapy Codes

- ◆ Codes are distinguished by four factors:
 - Whether medical evaluation and management (E&M) services are provided with the psychotherapy
 - Length of the psychotherapy session
 - 20-30 minutes, 45-50 minutes, or 75-80 minutes
 - Type of psychotherapy
 - insight-oriented vs. interactive
 - Setting
 - office/outpatient vs. inpatient/partial hospitalization/residential care

Number of Final Responses by CPT Code and Organization

At least 30
responses per
code

CPT	ANA	NASW	AACAP	APA1	APA2	Total
# Sent	500	508	350	400	281	2039
90804	18	36	38	35	61	188
90805	13		36		61	110
90806	23	56	39	43	61	222
90807	23		37		61	121
90808	21	44	33	29	54	181
90809	19		35		50	104
90810	3	16	33	29	24	105
90811	5		36		25	66
90812	7	22	35	29	22	115
90813	3		34		22	59
90814	5	17	32	22	21	97
90815	5		30		22	57
90816	5	10	17	24	46	102
90817	8		18		52	78
90818	10	11	16	26	39	102
90819	9		18		44	71
90821	3	10	13	23	34	83
90822	2		13		35	50
90823	0	4	16	20	15	55
90824	0		15		15	30
90826	2	5	17	20	14	58
90827	2		15		15	32
90828	1	5	11	20	22	59
90829	1		11		23	35

Note APA1 = American Psychological Association
APA2 = American Psychiatric Association

Response Rates by CPT Code and Organization

CPT	ANA	NASW	AACAP	APA1	APA2	Total
# Sent	500	508	350	400	281	2039
90804	3.60%	7.09%	10.86%	8.75%	21.71%	9.22%
90805	2.60%		10.29%		21.71%	9.73%
90806	4.60%	11.02%	11.14%	10.75%	21.71%	10.89%
90807	4.60%		10.57%		21.71%	10.70%
90808	4.20%	8.66%	9.43%	7.25%	19.22%	8.88%
90809	3.80%		10.00%		17.79%	9.20%
90810	0.60%	3.15%	9.43%	7.25%	8.54%	5.15%
90811	1.00%		10.29%		8.90%	5.84%
90812	1.40%	4.33%	10.00%	7.25%	7.83%	5.64%
90813	0.60%		9.71%		7.83%	5.22%
90814	1.00%	3.35%	9.14%	5.50%	7.47%	4.76%
90815	1.00%		8.57%		7.83%	5.04%
90816	1.00%	1.97%	4.86%	6.00%	16.37%	5.00%
90817	1.60%		5.14%		18.51%	6.90%
90818	2.00%	2.17%	4.57%	6.50%	13.88%	5.00%
90819	1.80%		5.14%		15.66%	6.28%
90821	0.60%	1.97%	3.71%	5.75%	12.10%	4.07%
90822	0.40%		3.71%		12.46%	4.42%
90823	0.00%	0.79%	4.57%	5.00%	5.34%	2.70%
90824	0.00%		4.29%		5.34%	2.65%
90826	0.40%	0.98%	4.86%	5.00%	4.98%	2.84%
90827	0.40%		4.29%		5.34%	2.83%
90828	0.20%	0.98%	3.14%	5.00%	7.83%	2.89%
90829	0.20%		3.14%		8.19%	3.09%

Response rates were highest for the most frequently provided codes.

Note APA1 = American Psychological Association
APA2 = American Psychiatric Association

Findings: Median Work RVUs by CPT Code

CPT	All Groups	ANA	NASW	AACAP	APA1	APA2
90804	1.25	1.33	1.88	1.28	1.20	1.24
90805	1.40	1.40		1.50		1.40
90806	2.00	2.00	2.24	1.95	2.00	1.90
90807	2.12	2.10		2.20		2.10
90808	3.43	3.43	3.62	3.43	3.40	3.20
90809	3.50	3.60		3.50		3.43
90810	1.35	1.30	2.05	1.35	1.30	1.25
90811	1.40	1.77		1.45		1.40
90812	2.00	1.50	2.30	2.00	2.00	2.00
90813	2.50	3.00		2.38		2.55
90814	3.40	2.70	4.00	3.38	3.41	3.20
90815	3.43	2.90		3.47		3.43
90816	1.40	1.40	1.63	1.30	1.50	1.26
90817	1.50	1.35		1.50		1.50
90818	2.05	2.12	2.50	2.07	2.17	1.85
90819	2.30	2.60		2.40		2.30
90821	3.15	2.70	3.50	3.15	3.20	3.10
90822	3.40	2.35		3.45		3.40
90823	1.50		2.07	1.70	1.48	1.40
90824	1.50			1.50		1.51
90826	2.28	2.32	3.50	2.50	2.18	2.20
90827	2.80	2.75		2.99		2.75
90828	3.20	2.14	3.50	3.20	3.25	3.15
90829	3.50	3.65		3.45		3.50

Notes: APA1 = American Psychological Association
 APA2 = American Psychiatric Association

Findings: Differentials (Over All Groups)

CPT	Time Differential	E&M Differential	Interactive Differential	Inpatient Differential
90804				
90805		0.15		
90806	0.75			
90807	0.72	0.12		
90808	1.43			
90809	1.38	0.07		
90810			0.10	
90811		0.05	0.00	
90812	0.65		0.00	
90813	1.10	0.50	0.38	
90814	1.40		-0.03	
90815	0.93	0.03	-0.07	
90816				0.15
90817		0.10		0.10
90818	0.65			0.05
90819	0.80	0.25		0.18
90821	1.10			-0.28
90822	1.10	0.25		-0.10
90823			0.10	0.15
90824		0.00	0.00	0.10
90826	0.78		0.23	0.28
90827	1.30	0.52	0.50	0.30
90828	0.92		0.05	-0.20
90829	0.70	0.30	0.10	0.07

- ◆ Time differentials were relatively well reported, with generally higher work for more time.
- ◆ However, the differentials for the other three characteristics were inconsistent across codes and at times even counterintuitive.

Regression Analysis: Purpose

- ◆ The purpose of the regression analysis was to estimate the average, incremental effects of E&M, session time, type of psychotherapy and setting on a code's work RVU.
 - Across specialty groups
 - Across codes
- ◆ This enables one to create a consistent work RVU scale by adding the average incremental effects of the above four factors to a base code value.

Regression Analysis: Findings

Base Code	Estimated Work Effect
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90804	1.30
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Type of Effect

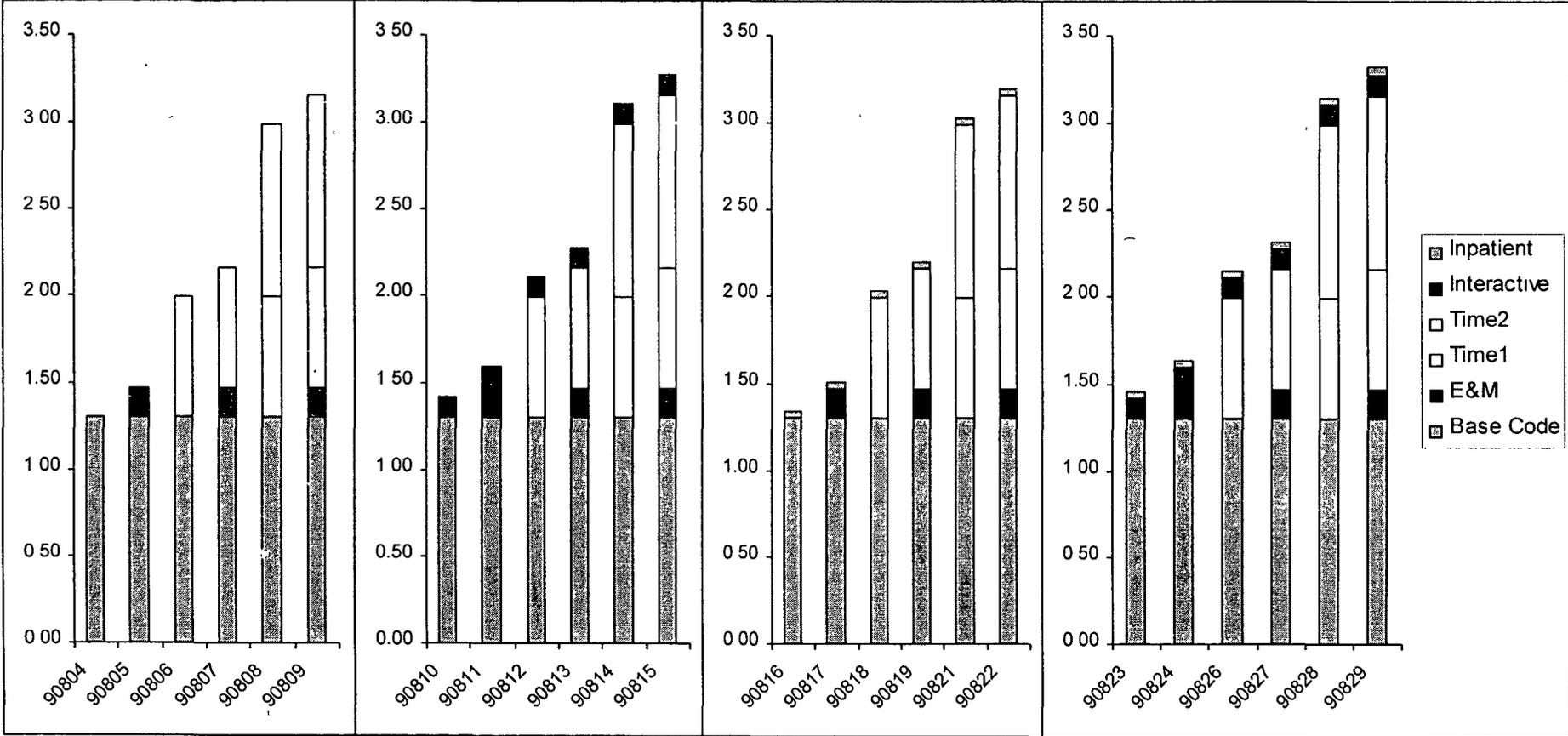
E&M	0.17
Time1	0.69
Time2	1.00
Inpatient	0.04
Interactive	0.12

How Analysis Results Were Used to Develop Recommended Work RVUs

CPT	Calculations to Derive Scale	Recommended Work RVU Scale	CPT	Calculations to Derive Scale	Recommended Work RVU Scale
90804	Base Code (1.30)	1.30	90816	90804 + Inpatient Increment (0.04)	1.34
90805	90804 + E&M Increment (0.17)	1.47	90817	90816 + E&M Increment (0.17)	1.51
90806	90804 + Time1 Increment (0.69)	1.99	90818	90816 + Time1 Increment (0.69)	2.03
90807	90806 + E&M Increment (0.17)	2.16	90819	90818 + E&M Increment (0.17)	2.20
90808	90806 + Time2 Increment (1.00)	2.99	90821	90818 + Time2 Increment (1.00)	3.03
90809	90808 + E&M Increment (0.17)	3.16	90822	90821 + E&M Increment (0.17)	3.20
90810	90804 + Interactive Increment (0.12)	1.42	90823	90816 + Interactive Increment (0.12)	1.46
90811	90810 + E&M Increment (0.17)	1.59	90824	90823 + E&M Increment (0.17)	1.63
90812	90810 + Time1 Increment (0.69)	2.11	90826	90823 + Time1 Increment (0.69)	2.15
90813	90812 + E&M Increment (0.17)	2.28	90827	90826 + E&M Increment (0.17)	2.32
90814	90812 + Time2 Increment (1.00)	3.11	90828	90826 + Time2 Increment (1.00)	3.15
90815	90814 + E&M Increment (0.17)	3.28	90829	90828 + E&M Increment (0.17)	3.32

The scale for new psychotherapy codes is built up by adding the appropriate regression-estimated increment(s) to the base code.

How Analysis Results Were Used to Develop Recommended Work RVUs



Outpatient Psychotherapy

Outpatient Interactive

Inpatient Psychotherapy

Inpatient Interactive

Final Recommended Work RVUs for New Psychotherapy Codes

Office or Outpatient			Inpatient, Partial Hospitalization, or Residential		
CPT	Code Descriptor	RVU	CPT	Code Descriptor	RVU
90804	20-30 minutes, no E&M	1.30	90816	20-30 minutes, no E&M	1.34
90805	20-30 minutes, with E&M	1.47	90817	20-30 minutes, with E&M	1.51
90806	45-50 minutes, no E&M	1.99	90818	45-50 minutes, no E&M	2.03
90807	45-50 minutes, with E&M	2.16	90819	45-50 minutes, with E&M	2.20
90808	75-80 minutes, no E&M	2.99	90821	75-80 minutes, no E&M	3.03
90809	75-80 minutes, with E&M	3.16	90822	75-80 minutes, with E&M	3.20
INTERACTIVE					
CPT	Code Descriptor	RVU	CPT	Code Descriptor	RVU
90810	20-30 minutes, no E&M	1.42	90823	20-30 minutes, no E&M	1.46
90811	20-30 minutes, with E&M	1.59	90824	20-30 minutes, with E&M	1.63
90812	45-50 minutes, no E&M	2.11	90826	45-50 minutes, no E&M	2.15
90813	45-50 minutes, with E&M	2.28	90827	45-50 minutes, with E&M	2.32
90814	75-80 minutes, no E&M	3.11	90828	75-80 minutes, no E&M	3.15
90815	75-80 minutes, with E&M	3.28	90829	75-80 minutes, with E&M	3.32

Note: Results tested for budget neutrality and found to have no effect on aggregate Medicare spending for psychotherapy.

Discussion of Proposed RVUs

- ◆ Regression analysis was chosen for the following reasons:
 - It allows estimation of the average incremental effects across specialty groups and codes.
 - It aggregates all the survey responses to derive the average effects and create the scale. It thus yields greater statistical precision in estimating the average incremental effects of the four, defining psychotherapy characteristics.
- ◆ The proposed scale is reasonable, with consistent relationships across codes.
- ◆ Formal consensus across all five specialty groups was achieved on the proposed scale.



The Lewin Group
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703 218 5500/Fax 703 218 5501

MEMORANDUM

January 5, 1998

To: Elizabeth Sloan, AACAP
Katherine Bradley, ANA
Shelley Stewart, APA
Laurie Badanes Prather, APA
Mirean F. Coleman, NASW

From: Al Dobson
Margaret Harrison
Laura Meyer

Subject: Explanation of analytic methods used to develop psychotherapy
work relative value unit (RVU) scale

The new, more-detailed set of psychotherapy codes was created by HCFA to better differentiate among various modalities for providing psychotherapy. These new psychotherapy codes are distinguished by four factors: whether medical evaluation and management (E&M) services are provided with psychotherapy; the approximate length of the psychotherapy session (20-30 minutes, 45-50 minutes, or 75-80 minutes); the type of psychotherapy (insight-oriented vs. interactive), and finally, the setting in which the psychotherapy is performed (office/outpatient vs. inpatient/partial hospitalization/residential care). In order to assign relative work values to the new codes, it is necessary to determine the incremental work values of these four factors. If an incremental value for each factor is established, then it is possible to create the entire psychotherapy relative value scale by adding the increments in a logical sequence to a base value.

When The Lewin Group analyzed the AMA/Specialty Society RVS Update Process Survey results, we found that the estimates of the four key relationships were not consistent across the surveyed codes. **Exhibit 1** shows the differentials between codes for the four factors. Each differential is the difference between the given code's median RVU and the median RVU of the equivalent code without the factor (e.g., of a smaller time period, without E&M, insight-oriented rather than interactive, and office/outpatient rather than inpatient).

Each set of differentials observed in the data showed high variability across codes-- sometimes even negative. For example, the relationship between codes with E&M and without E&M ranges from a low of 0.00 to a high of 0.52. This

finding of inconsistent variability led us to explore potential methods to estimate the average incremental effects of the four factors so that we could make full use of the survey information to build a coherent relative value scale for psychotherapy.

The technique we decided to use was regression analysis. Regression analysis is a standard analytic technique to determine the relationship between a dependent variable and a series of independent (explanatory) variables. In this case, the dependent variable was the final work RVU reported by survey participants. The independent variables were the differences in the four factors defining the codes: whether E&M is provided; whether interactive psychotherapy is provided, whether therapy is provided in an inpatient setting, and two time variables intended to capture the impact of the 45-50 minute time period and the 75-80 minute time period relative to the base 20-30 minute time period.

Through regression analysis the Lewin Group estimated the average effects of differences in E&M, time, type of therapy, and setting on psychotherapy work values. Although the regression model does not explicitly include mental effort, technical skill, and psychological stress, it is important to note that the model implicitly accounts for these effects because survey participants used these factors to derive their final work RVU estimates for each individual code. In addition, the regression model's intercept yielded an estimate of the base code's (90804) work RVU. CPT 90804 is defined as a 20-30 minute psychotherapy session, using insight-oriented therapy, performed in an office or outpatient setting, with no medical evaluation and management services provided. We used standard statistical procedures to remove statistical outliers (extreme values) prior to running the regression analysis. **Exhibit 2** contains a table presenting the estimated average effects and the estimated base-code work value.

We then created the proposed RVU scale by adding the relevant increments for E&M, time, interactive therapy, and performance in an inpatient setting to the base code's work RVU estimate. For example, we began with code 90804 and added the estimated E&M increment to derive the value for 90805, then added the 45-50 minute work increment ("Time1" increment) to 90804 to get a value for 90805, and so forth. This process is displayed in **Exhibit 3**. The proposed scale itself is then presented in **Exhibit 4**.

After creating the scale we explored the possibility of making the proposed scale budget neutral with respect to the old psychotherapy codes using the 1997 RVUs and 1996 BMAD frequency estimates (the latest data available). We found that the impact of making the model budget neutral was negligible; the ratio needed to



enforce budget neutrality was 0.9996. This would have reduced our proposed scale by less than five-tenths of a percent (0.04%), which had no substantive impact on the proposed RVUs.

There are many reasons why the Lewin Group chose regression analysis. First, regression analysis, as mentioned, provides a way to estimate average effects and create a consistent scale based upon the survey data. Second, the regression pools all the data together, both across specialties and across codes. This controls for differences in specialty response and also increases the sample size used to estimate the different effects. Regression analysis aggregates all the survey responses to derive the average effects and create the scale, rather than just using the survey responses for each code to estimate the RVU for a particular code. Thus, regression analysis yields greater statistical precision in estimating the impact of those factors underlying the construction of the new psychotherapy code set.

Exhibit 1
Differentials in the Survey Medians for Psychotherapy CPT Codes

CPT	Time Differential	E&M Differential	Interactive Differential	Inpatient Differential
90804				
90805		0.15		
90806	0.75			
90807	0.72	0.12		
90808	1.43			
90809	1.38	0.07		
90810			0.10	
90811		0.05	0.00	
90812	0.65		0.00	
90813	1.10	0.50	0.38	
90814	1.40		-0.03	
90815	0.93	0.03	-0.07	
90816				0.15
90817		0.10		0.10
90818	0.65			0.05
90819	0.80	0.25		0.18
90821	1.10			-0.28
90822	1.10	0.25		-0.10
90823			0.10	0.15
90824		0.00	0.00	0.10
90826	0.78		0.23	0.28
90827	1.30	0.52	0.50	0.30
90828	0.92		0.05	-0.20
90829	0.70	0.30	0.10	0.07

Exhibit 2

Regression-Estimated Work Effects

Base Code	Estimated Work Effect
90804	1.30
Type of Effect	
E&M	0.17
Time1	0.69
Time2	1.00
Inpatient	0.04
Interactive	0.12

- Notes:
- E&M = the RVU differential between a non-E&M code and the equivalent code with E&M.
 - Time1 = the RVU differential between a 45-50 minute code and a relevant 20-30 minute code
 - Time2 = the RVU differential between a 75-80 minute code and a relevant 45-50 minute code
 - Inpatient = the RVU differential between an inpatient code and the equivalent outpatient code
 - Interactive = the RVU differential between an interactive code and the equivalent insight-oriented code.

Exhibit 3

Process Used to Calculate Recommended RVU Scale

OUTPATIENT			INPATIENT		
CPT	Calculations to Derive Scale	Recommended Work RVU Scale	CPT	Calculations to Derive Scale	Recommended Work RVU Scale
90804	Base Code (1.30)	1.30	90816	90804 + Inpatient Increment (0.04)	1.34
90805	90804 + E&M Increment (0.17)	1.47	90817	90816 + E&M Increment (0.17)	1.51
90806	90804 + Time1 Increment (0.69)	1.99	90818	90816 + Time1 Increment (0.69)	2.03
90807	90806 + E&M Increment (0.17)	2.16	90819	90818 + E&M Increment (0.17)	2.20
90808	90806 + Time2 Increment (1.00)	2.99	90821	90818 + Time2 Increment (1.00)	3.03
90809	90808 + E&M Increment (0.17)	3.16	90822	90821 + E&M Increment (0.17)	3.20
90810	90804 + Interactive Increment (0.12)	1.42	90823	90816 + Interactive Increment (0.12)	1.46
90811	90810 + E&M Increment (0.17)	1.59	90824	90823 + E&M Increment (0.17)	1.63
90812	90810 + Time1 Increment (0.69)	2.11	90826	90823 + Time1 Increment (0.69)	2.15
90813	90812 + E&M Increment (0.17)	2.28	90827	90826 + E&M Increment (0.17)	2.32
90814	90812 + Time2 Increment (1.00)	3.11	90828	90826 + Time2 Increment (1.00)	3.15
90815	90814 + E&M Increment (0.17)	3.28	90829	90828 + E&M Increment (0.17)	3.32

Exhibit 4

Final Recommended Work RVU Scale for New Psychotherapy Codes

INSIGHT-ORIENTED							
Office or Outpatient				Inpatient, Partial Hospitalization, or Residential			
CPT	Survey Code	Code Descriptor	RVU	CPT	Survey Code	Code Descriptor	RVU
90804	908x2	20-30 minutes, no E&M	1.30	90816	908x14	20-30 minutes, no E&M	1.34
90805	908x3	20-30 minutes, with E&M	1.47	90817	908x15	20-30 minutes, with E&M	1.51
90806	908x4	45-50 minutes, no E&M	1.99	90818	908x16	45-50 minutes, no E&M	2.03
90807	908x5	45-50 minutes, with E&M	2.16	90819	908x17	45-50 minutes, with E&M	2.20
90808	908x6	75-80 minutes, no E&M	2.99	90821	908x18	75-80 minutes, no E&M	3.03
90809	908x7	75-80 minutes, with E&M	3.16	90822	908x19	75-80 minutes, with E&M	3.20
INTERACTIVE							
CPT	Survey Code	Code Descriptor	RVU	CPT	Survey Code	Code Descriptor	RVU
90810	908x8	20-30 minutes, no E&M	1.42	90823	908x20	20-30 minutes, no E&M	1.46
90811	908x9	20-30 minutes, with E&M	1.59	90824	908x21	20-30 minutes, with E&M	1.63
90812	908x10	45-50 minutes, no E&M	2.11	90826	908x22	45-50 minutes, no E&M	2.15
90813	908x11	45-50 minutes, with E&M	2.28	90827	908x23	45-50 minutes, with E&M	2.32
90814	908x12	75-80 minutes, no E&M	3.11	90828	908x24	75-80 minutes, no E&M	3.15
90815	908x13	75-80 minutes, with E&M	3.28	90829	908x25	75-80 minutes, with E&M	3.32

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

CPT Code: 90804

Global Period: XXX

Recommended RVW: 1.30

CPT Descriptor:

Individual psychotherapy, insight oriented, behavior modifying and/or supportive, in an office or outpatient facility, approximately 20 to 30 minutes face-to face with the patient.

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey:

Vignette 1 Approximately 20-30 minute psychotherapy visit with an obsessive compulsive 29-year-old female on chlomipramine, last seen 6 weeks ago, who begins to uncontrollably pull her hair out after she is fired from her job.

Vignette 2 Approximately 20-30 minute psychotherapy visit with a 12-year-old boy, major depression, single episode, who has been seen in outpatient psychotherapy for nine months, and is stable. Improvement on antidepressants.

Description of Pre-Service Work: Preparing to see patient; reviewing records; communicating with other professionals and the patient's family.

Description of Intra-Service Work: Obtaining (or updating) a history; performing an evaluation; counseling the patient; writing notes.

Description of Post-Service Work: Arranging for further services; reviewing results of studies; communicating further with patient, family, and other professionals, including written or telephone reports; documenting the services provided; providing written or telephone reports to Medicare or other third party payers.

SURVEY DATA:

Specialty: American Psychiatric Association, American Psychological Association, American Academy of Child and Adolescent Psychiatry, American Nursing Association and National Association of Social Workers

Sample Size: 2039

Response Rate (%): 9.22% (188)

Median RVW: 1.25

25th Percentile RVW: 1.10

75th Percentile RVW: 1.60

Low: 0.71

High: 2.60

Median Pre-Service Time: 10

Median Intra-Service Time: 30

25th Percentile Intra-Svc Time: 25

75th Percentile Intra-Svc Time: 30

Low: 2

High: 40

Median Post-Service Time: 15

KEY REFERENCE SERVICE(S):

	CPT Code	CPT Descriptor	RVW
1)	90862	Pharmacologic management, with no more than minimal medical psychotherapy.	0.95
2)	99203	Office or other outpatient visit for the evaluation and management of a new patient, which requires these three key components: a detailed history; a detailed examination; and medical decision making of low complexity. Usually, the presenting problem(s) are of moderate severity. Physicians typically spend 30 minutes face-to-face with the patient and/or family.	1.34
3)	99214	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 detailed history; a detailed examination; medical decision making of moderate complexity. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 25 minutes face-to-face with the patient and/or family.	1.10
4)	99215	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 comprehensive history; a comprehensive examination; medical decision making of high complexity. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 40 minutes face-to-face with the patient and/or family.	1.77

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

Compare the pre-, intra-, and post-service time and the intensity (mental effort and judgment; technical skill and physical effort; and psychological stress) of the service you are rating to the key reference services listed above.

CPT Code	Median Pre-Time	Median Intra-Time	Median Post-Time	Median Mental Effort and Judgment	Median Technical Skill and Physical Effort	Median Psychological Stress
90804	10	30	15	3	3	3
90862	10	25	10	3	3	3
90203	10	30	15	3	3	3
99214	10	25	10	3	3	3
99215	5	40	10	4	4	3

ADDITIONAL RATIONALE

For example, if recommended RVUs are based on an alternative method instead of the survey results.

SEE ATTACHED DOCUMENTATION.

FREQUENCY INFORMATION

How was this service previously reported? 90843

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. 1.2 million (Medicare)

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

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

CPT Code: 90805

Global Period: XXX

Recommended RVW: 1.47

CPT Descriptor:

Individual psychotherapy, insight oriented, behavior modifying and/or supportive, in an office or outpatient facility, approximately 20 to 30 minutes face-to-face with the patient; with medical evaluation and management services.

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey:

Vignette 1 Approximately 20-30 minute psychotherapy visit with an obsessive compulsive 29-year-old female on clomipramine, last seen 6 weeks ago, who begins to uncontrollably pull her hair out after she is fired from her job. Consider strategy for augmenting medication regimen.

Vignette 2 Approximately 20-30 minute psychotherapy visit with a 12-year-old boy, major depression, single episode, who has been seen in outpatient psychotherapy for nine months, and is stable. Improvement on antidepressants. Patient beginning to ask about stopping medications. Consider altering medication and evaluating compliance.

Description of Pre-Service Work: Preparing to see patient; reviewing records; communicating with other professionals and the patient's family.

Description of Intra-Service Work: Obtaining (or updating) a history; performing an evaluation; counseling the patient; writing notes.

Description of Post-Service Work: Arranging for further services; reviewing results of studies; communicating further with patient, family, and other professionals, including written or telephone reports; documenting the services provided; providing written or telephone reports to Medicare or other third party payers; medical diagnostic evaluation (e.g., evaluation of comorbid medical conditions, drug interactions, and physical examinations), drug management when indicated, physician orders, and interpretation of laboratory or other medical diagnostic studies and observations.

SURVEY DATA:

Specialty: American Psychiatric Association, American Psychological Association, American Academy of Child and Adolescent Psychiatry, American Nursing Association and National Association of Social Workers

Sample Size: 1131 Response Rate (%): 9.73% (110) Median RVW: 1.40

25th Percentile RVW: 1.25 75th Percentile RVW: 1.75 Low: 0.95 High: 2.50

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

25th Percentile Intra-Svc Time: 25 75th Percentile Intra-Svc Time: 30 Low: 20 High: 40

Median Post-Service Time: 15

KEY REFERENCE SERVICE(S):

	CPT Code	CPT Descriptor	RVW
1)	90862	Pharmacologic management, with no more than minimal medical psychotherapy.	0.95
2)	90203	Office or other outpatient visit for the evaluation and management of a new patient, which requires these three key components: a detailed history; a detailed examination; and medical decision making of low complexity. Usually, the presenting problem(s) are of moderate severity. Physicians typically spend 30 minutes face-to-face with the patient and/or family.	1.34
3)	99214	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 detailed history; a detailed examination; medical decision making of moderate complexity. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 25 minutes face-to-face with the patient and/or family.	1.10
4)	99215	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 comprehensive history; a comprehensive examination; medical decision making of high complexity. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 40 minutes face-to-face with the patient and/or family.	1.77

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

Compare the pre-, intra-, and post-service time and the intensity (mental effort and judgment; technical skill & physical effort; and psychological stress) of the service you are rating to the key reference services listed above.

CPT Code	Median Pre-Time	Median Intra-Time	Median Post-Time	Median Mental Effort and Judgment	Median Technical Skill and Physical Effort	Median Psychological Stress
90805	5	30	15	4	4	3
90862	5	20	10	3	3	3
90203	5	30	10	3	3	3
99214	5	25	10	3	3	3
99215	5	40	10	4	4	3

ADDITIONAL RATIONALE

For example, if recommended RVUs are based on an alternative method instead of the survey results.

SEE ATTACHED DOCUMENTATION.

FREQUENCY INFORMATION

How was this service previously reported? 90843

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. 1.4 million (Medicare)

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

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

CPT Code: 90806

Global Period: XXX

Recommended RVW: 1.99

CPT Descriptor:

Individual psychotherapy, insight oriented, behavior modifying and/or supportive, in an office or outpatient facility, approximately 45 to 50 minutes face-to-face with the patient.

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey:

Vignette 1 Approximately 45-50 minutes individual psychotherapy in office for 72-year-old woman with dysthymic disorder and dependent personality disorder, with COPD and congestive heart failure, on antidepressant medication, who made an overdose attempt four months ago but has been stable since.

Vignette 2 Approximately 45-50 minutes individual psychotherapy in office for 16-year-old girl with panic disorder treated with cognitive behavioral therapy.

Description of Pre-Service Work: Preparing to see patient; reviewing records; communicating with other professionals and the patient's family.

Description of Intra-Service Work: Obtaining (or updating) a history; performing an evaluation; counseling the patient; writing notes.

Description of Post-Service Work: Arranging for further services; reviewing results of studies; communicating further with patient, family, and other professionals, including written or telephone reports; documenting the services provided; providing written or telephone reports to Medicare or other third party payers.

SURVEY DATA:

Specialty: American Psychiatric Association, American Psychological Association, American Academy of Child and Adolescent Psychiatry, American Nursing Association and National Association of Social Workers

Sample Size: 2039 Response Rate (%): 10.89% (222) Median RVW: 2.00

25th Percentile RVW: 1.80 75th Percentile RVW: 2.50 Low: 1.08 High: 4.00

Median Pre-Service Time: 10 Median Intra-Service Time: 50

25th Percentile Intra-Svc Time: 45 75th Percentile Intra-Svc Time: 50 Low: 35 High: 70

Median Post-Service Time: 15

KEY REFERENCE SERVICE(S):

	CPT Code	CPT Descriptor	RVW
1)	99215	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 comprehensive history; a comprehensive examination; medical decision making of high complexity. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 40 minutes face-to-face with the patient and/or family.	1.77
2)	99204	Office or other outpatient visit for the evaluation and management of a new patient, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of moderate complexity. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 45 minutes face-to-face with the patient and/or family.	2.00
3)	99205	Office or other outpatient visit for the evaluation and management of a new patient, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of high complexity. 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.	2.67

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

Compare the pre-, intra-, and post-service time and the intensity (mental effort and judgment; technical skill & physical effort; and psychological stress) of the service you are rating to the key reference services listed above.

CPT Code	Median Pre-Time	Median Intra-Time	Median Post-Time	Median Mental Effort and Judgment	Median Technical Skill and Physical Effort	Median Psychological Stress
90806	10	50	15	4	4	3
99215	10	40	10	3	3	3
99204	10	45	17.5	4	4	3
99205	10	50	20	4	4	3

ADDITIONAL RATIONALE

For example, if recommended RVUs are based on an alternative method instead of the survey results.

SEE ATTACHED DOCUMENTATION.

FREQUENCY INFORMATION

How was this service previously reported? 90844

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. 3.4 million (Medicare)

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

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

CPT Code: 90807

Global Period: XXX

Recommended RVW: 2.16

CPT Descriptor:

Individual psychotherapy, insight oriented, behavior modifying and/or supportive, in an office or outpatient facility, approximately 45 to 50 minutes face-to-face with the patient; with medical evaluation and management services.

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey:

Vignette 1 Approximately 45-50 minutes individual psychotherapy in office for 72-year-old woman with dysthymic disorder and dependent personality disorder, with COPD and congestive heart failure, on antidepressant medication, who made an overdose attempt four months ago but has been stable since. Consideration of co-morbid medical diagnoses, interaction of medication, and laboratory screening and interpretation.

Vignette 2 Approximately 45-50 minutes individual psychotherapy in office for 16-year-old girl with panic disorder. Treated with cognitive behavioral therapy. Consider medication adjustment with tricyclic and alprazolam.

Description of Pre-Service Work: Preparing to see patient; reviewing records; communicating with other professionals and the patient's family.

Description of Intra-Service Work: Obtaining (or updating) a history; performing an evaluation; counseling the patient; writing notes.

Description of Post-Service Work: Arranging for further services; reviewing results of studies; communicating further with patient, family, and other professionals, including written or telephone reports; documenting the services provided; providing written or telephone reports to Medicare or other third party payers; medical diagnostic evaluation (e.g., evaluation of comorbid medical conditions, drug interactions, and physical examinations), drug management when indicated, physician orders, and interpretation of laboratory or other medical diagnostic studies and observations.

SURVEY DATA:

Specialty: American Psychiatric Association, American Psychological Association, American Academy of Child and Adolescent Psychiatry, American Nursing Association and National Association of Social Workers

Sample Size: 1131

Response Rate (%): 10.70% (121)

Median RVW: 2.12

25th Percentile RVW: 1.99

75th Percentile RVW: 2.60

Low: 1.35

High: 3.68

Median Pre-Service Time: 10

Median Intra-Service Time: 50

25th Percentile Intra-Svc Time: 45

75th Percentile Intra-Svc Time: 50

Low: 40

High: 65

Median Post-Service Time: 15

KEY REFERENCE SERVICE(S):

	CPT Code	CPT Descriptor	RVW
1)	99215	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 comprehensive history; a comprehensive examination; medical decision making of high complexity. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 40 minutes face-to-face with the patient and/or family.	1.77
2)	99204	Office or other outpatient visit for the evaluation and management of a new patient, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of moderate complexity. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 45 minutes face-to-face with the patient and/or family.	2.00
3)	99205	Office or other outpatient visit for the evaluation and management of a new patient, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of high complexity. 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.	2.67
4)	90847	Family medical psychotherapy (conjoint psychotherapy) by physician, with continuing medical diagnostic evaluation, and drug management when indicated.	2.21

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

Compare the pre-, intra-, and post-service time and the intensity (mental effort and judgment; technical skill & physical effort; and psychological stress) of the service you are rating to the key reference services listed above.

CPT Code	Median Pre-Time	Median Intra-Time	Median Post-Time	Median Mental Effort and Judgment	Median Technical Skill and Physical Effort	Median Psychological Stress
90807	10	50	15	4	4	4
99215	10	40	10	4	3.5	3
99204	5.5	45	11	4	4	4
99205	5	60	12.5	4	4	3
90847	5	45	10	3.5	3.5	3.5

ADDITIONAL RATIONALE

For example, if recommended RVUs are based on an alternative method instead of the survey results.

SEE ATTACHED DOCUMENTATION.

FREQUENCY INFORMATION

How was this service previously reported? 90844

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. 1.7 million (Medicare)

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

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

CPT Code: 90808

Global Period: XXX

Recommended RVW: 2.99

CPT Descriptor:

Individual psychotherapy, insight oriented, behavior modifying and/or supportive, in an office or outpatient facility, approximately 75 to 80 minutes face-to-face with the patient.

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey:

Vignette 1 Approximately 75-80 minutes individual psychotherapy with established patient, a 41-year-old male with post-traumatic stress disorder. He has chronic complaints of insomnia, anxiety attacks with uncontrolled shaking, anger outbursts, and flashbacks to the events surrounding the death of his wife, killed in a head-on collision while the patient was following in a separate vehicle. He feels overwhelmed and unable to meet the needs of either his children or his job.

Vignette 2 Approximately 75-80 minutes individual psychotherapy in office for 17-year-old boy who discloses for the first time his worries that he is homosexual and expresses suicidal ideation.

Description of Pre-Service Work: Preparing to see patient; reviewing records; communicating with other professionals and the patient's family.

Description of Intra-Service Work: Obtaining (or updating) a history; performing an evaluation; counseling the patient; writing notes.

Description of Post-Service Work: Arranging for further services; reviewing results of studies; communicating further with patient, family, and other professionals, including written or telephone reports; documenting the services provided; providing written or telephone reports to Medicare or other third party payers.

SURVEY DATA:

Specialty: American Psychiatric Association, American Psychological Association, American Academy of Child and Adolescent Psychiatry, American Nursing Association and National Association of Social Workers

Sample Size: 2039

Response Rate (%): 8.88% (181)

Median RVW: 3.43

25th Percentile RVW: 3.00

75th Percentile RVW: 3.55

Low: 1.85

High: 5.50

Median Pre-Service Time: 10

Median Intra-Service Time: 80

25th Percentile Intra-Svc Time: 75

75th Percentile Intra-Svc Time: 80

Low: 55

High: 120

Median Post-Service Time: 20

KEY REFERENCE SERVICE(S):

	CPT Code	CPT Descriptor	RVW
1)	99245	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 high complexity. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 80 minutes face-to-face with the patient and/or family.	3.43
2)	99205	Office or other outpatient visit for the evaluation and management of a new patient, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of high complexity. 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.	2.67
3)	90801	Psychiatric diagnostic interview examination including history, mental status, or disposition (may include communication with family or other sources, ordering and medical interpretation of laboratory or other medical diagnostic studies. In certain circumstances other informants will be seen in lieu of the patient.)	2.80
4)	99223	Initial hospital care, per day, for the evaluation and management of a patient, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of high complexity. Usually, the problem(s) requiring admission are of high severity. Physicians typically spend 70 minutes at the bedside and on the patient's hospital floor or unit.	2.99

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

Compare the pre-, intra-, and post-service time and the intensity (mental effort and judgment; technical skill & physical effort; and psychological stress) of the service you are rating to the key reference services listed above.

CPT Code	Median Pre-Time	Median Intra-Time	Median Post-Time	Median Mental Effort and Judgment	Median Technical Skill and Physical Effort	Median Psychological Stress
90808	10	80	20	4	4	4
99245	10	80	20	4	4	4
99205	12.5	60	20	4	4	3.5
90801	10	60	15	4	4	3
99223	10	70	10	5	4	4

ADDITIONAL RATIONALE

For example, if recommended RVUs are based on an alternative method instead of the survey results.

SEE ATTACHED DOCUMENTATION.

FREQUENCY INFORMATION

How was this service previously reported? 90842

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. 136,000 (Medicare)

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

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

CPT Code: 90809

Global Period: XXX

Recommended RVW: 3.16

CPT Descriptor:

Individual psychotherapy, insight oriented, behavior modifying and/or supportive, in an office or outpatient facility, approximately 75 to 80 minutes face-to-face with the patient; with medical evaluation and management services.

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey:

Vignette 1 Approximately 75-80 minutes individual psychotherapy with established patient, a 41-year-old male with post-traumatic stress disorder. He has chronic complaints of insomnia, anxiety attacks with uncontrolled shaking, anger outbursts, and flashbacks to the events surrounding the death of his wife, killed in a head-on collision while the patient was following in a separate vehicle. He feels overwhelmed and unable to meet the needs of either his children or his job. Consideration of comorbid diagnosis such as hyperthyroidism, laboratory screening and interpretation. Medication evaluation for anti-anxiety, antidepressant and/or sleep medications.

Vignette 2 Approximately 75-80 minutes in individual psychotherapy in office for 17-year-old girl recently diagnosed with schizophrenia. She has stopped taking her medication, has become increasingly paranoid and has verbally threatened her family. Evaluate for co-morbid medical illness, laboratory screening and interpretation; consider change in medication.

Description of Pre-Service Work: Preparing to see patient; reviewing records; communicating with other professionals and the patient's family.

Description of Intra-Service Work: Obtaining (or updating) a history; performing an evaluation; counseling the patient; writing notes.

Description of Post-Service Work: Arranging for further services; reviewing results of studies; communicating further with patient, family, and other professionals, including written or telephone reports; documenting the services provided; providing written or telephone reports to Medicare or other third party payers; medical diagnostic evaluation (e.g., evaluation of comorbid medical conditions, drug interactions, and physical examinations), drug management when indicated, physician orders, and interpretation of laboratory or other medical diagnostic studies and observations.

SURVEY DATA:

Specialty: American Psychiatric Association, American Psychological Association, American Academy of Child and Adolescent Psychiatry, American Nursing Association and National Association of Social Workers

Sample Size: 1131

Response Rate (%): 9.20% (104)

Median RVW: 3.50

25th Percentile RVW: 3.28

75th Percentile RVW: 3.65

Low: 2.20

High: 5.00

Median Pre-Service Time: 10

Median Intra-Service Time: 80

25th Percentile Intra-Svc Time: 75

75th Percentile Intra-Svc Time: 80

Low: 60

High: 100

Median Post-Service Time: 20

KEY REFERENCE SERVICE(S):

	CPT Code	CPT Descriptor	RVW
1)	99245	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 high complexity. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 80 minutes face-to-face with the patient and/or family.	3.43
2)	99255	Initial inpatient consultation for a new or established patient, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of high complexity. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 110 minutes at the bedside and on the patient's hospital floor or unit.	3.65
3)	99223	Initial hospital care, per day, for the evaluation and management of a patient, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of high complexity. Usually, the problem(s) requiring admission are of high severity. Physicians typically spend 70 minutes at the bedside and on the patient's hospital floor/unit.	2.99
4)	90801	Psychiatric diagnostic interview examination including history, mental status, or disposition (may include communication with family or other sources, ordering and medical interpretation of laboratory or other medical diagnostic studies. In certain circumstances other informants will be seen in lieu of the patient.)	2.80

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

Compare the pre-, intra-, and post-service time and the intensity (mental effort and judgment; technical skill & physical effort; and psychological stress) of the service you are rating to the key reference services listed above.

CPT Code	Median Pre-Time	Median Intra-Time	Median Post-Time	Median Mental Effort and Judgment	Median Technical Skill and Physical Effort	Median Psychological Stress
90809	10	80	20	5	4	4
99245	10	80	15	4	4	4
99255	10	80	10	4	4	4
99223	15	75	20	4.5	4	4
90801	10	60	20	4	4	4

ADDITIONAL RATIONALE

For example, if recommended RVUs are based on an alternative method instead of the survey results.

SEE ATTACHED DOCUMENTATION.

FREQUENCY INFORMATION

How was this service previously reported? 90842

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. 56,000 (Medicare)

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

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

CPT Code: 90810

Global Period: XXX

Recommended RVW: 1.42

CPT Descriptor:

Individual psychotherapy, interactive, using play equipment, physical devices, a language interpreter, or other mechanisms of non-verbal communication, in an office or outpatient facility, approximately 20 to 30 minutes face-to-face with the patient.

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey:

Approximately 20-30 minutes of interactive psychotherapy with a 6-year-old boy who has oppositional-defiant disorder and whose tantrums and stubborn refusal to follow instructions began after his mother's remarriage.

Description of Pre-Service Work: Preparing to see patient; reviewing records; communicating with other professionals and the patient's family.

Description of Intra-Service Work: Obtaining (or updating) a history; performing an evaluation; counseling the patient; writing notes.

Description of Post-Service Work: Arranging for further services; reviewing results of studies; communicating further with patient, family, and other professionals, including written or telephone reports; documenting the services provided; providing written or telephone reports to Medicare or other third party payers.

SURVEY DATA:

Specialty: American Psychiatric Association, American Psychological Association, American Academy of Child and Adolescent Psychiatry, American Nursing Association and National Association of Social Workers

Sample Size: 2039

Response Rate (%): 5.15% (105)

Median RVW: 1.35

25th Percentile RVW: 1.20

75th Percentile RVW: 1.80

Low: 0.65

High: 3.50

Median Pre-Service Time: 10

Median Intra-Service Time: 30

25th Percentile Intra-Svc Time: 25

75th Percentile Intra-Svc Time: 30

Low: 15

High: 40

Median Post-Service Time: 15

KEY REFERENCE SERVICE(S):

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
1)	99214	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 detailed history; a detailed examination; medical decision making of moderate complexity. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 25 minutes face-to-face with the patient and/or family.	1.10
2)	99203	Office or other outpatient visit for the evaluation and management of a new patient, which requires these three key components: a detailed history; a detailed examination; and medical decision making of low complexity. Usually, the presenting problem(s) are of moderate severity. Physicians typically spend 30 minutes face-to-face with the patient and/or family.	1.34
3)	90820	Interactive medical psychiatric diagnostic interview examination.	3.01
4)	99215	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 comprehensive history; a comprehensive examination; medical decision making of high complexity. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 40 minutes face-to-face with the patient and/or family.	1.77

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

Compare the pre-, intra-, and post-service time and the intensity (mental effort and judgment; technical skill & physical effort; and psychological stress) of the service you are rating to the key reference services listed above.

<u>CPT Code</u>	<u>Median Pre-Time</u>	<u>Median Intra-Time</u>	<u>Median Post-Time</u>	<u>Median Mental Effort and Judgment</u>	<u>Median Technical Skill and Physical Effort</u>	<u>Median Psychological Stress</u>
90810	10	30	15	4	4	3
99214	5	25	10	3	3	3
99203	10	30	10	3	3	3
90820	40	37.5	30	4.5	5	4
99215	5	35	7.5	4	4	3.5

ADDITIONAL RATIONALE

For example, if recommended RVUs are based on an alternative method instead of the survey results.

SEE ATTACHED DOCUMENTATION.

FREQUENCY INFORMATION

How was this service previously reported? 90855

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. 23,000 (Medicare)

Is this service performed by many physicians across the United States? X Yes ___ No

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

CPT Code: 90811

Global Period: XXX

Recommended RVW: 1.59

CPT Descriptor:

Individual psychotherapy, interactive, using play equipment, physical devices, language interpreter, or other mechanisms of non-verbal communication, in an office or outpatient facility, approximately 20 to 30 minutes face-to-face with the patient; with medical evaluation and management services.

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey:

Approximately 20-30 minutes of interactive psychotherapy for 9-year-old boy with attention-deficit hyperactivity disorder who, at times, refuses to take his stimulant medication and whose teachers have not reported a robust response to medication.

Description of Pre-Service Work: Preparing to see patient; reviewing records; communicating with other professionals and the patient's family.

Description of Intra-Service Work: Obtaining (or updating) a history; performing an evaluation; counseling the patient; writing notes.

Description of Post-Service Work: Arranging for further services; reviewing results of studies; communicating further with patient, family, and other professionals, including written or telephone reports; documenting the services provided; providing written or telephone reports to Medicare or other third party payers; medical diagnostic evaluation (e.g., evaluation of comorbid medical conditions, drug interactions, and physical examinations), drug management when indicated, physician orders, and interpretation of laboratory or other medical diagnostic studies and observations.

SURVEY DATA:

Specialty: American Psychiatric Association, American Psychological Association, American Academy of Child and Adolescent Psychiatry, American Nursing Association and National Association of Social Workers

Sample Size: 1131

Response Rate (%): 5.84% (66)

Median RVW: 1.40

25th Percentile RVW: 1.30

75th Percentile RVW: 1.80

Low: 1.05

High: 3.50

Median Pre-Service Time: 5

Median Intra-Service Time: 30

25th Percentile Intra-Svc Time: 25

75th Percentile Intra-Svc Time: 30

Low: 10

High: 40

Median Post-Service Time: 15

KEY REFERENCE SERVICE(S):

	CPT Code	CPT Descriptor	RVW
1)	99214	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 detailed history; a detailed examination; medical decision making of moderate complexity. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 25 minutes face-to-face with the patient and/or family.	1.10
2)	99203	Office or other outpatient visit for the evaluation and management of a new patient, which requires these three key components: a detailed history; a detailed examination; and medical decision making of low complexity. Usually, the presenting problem(s) are of moderate severity. Physicians typically spend 30 minutes face-to-face with the patient and/or family.	1.34
3)	99215	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 comprehensive history; a comprehensive examination; medical decision making of high complexity. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 40 minutes face-to-face with the patient and/or family.	1.77

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

Compare the pre-, intra-, and post-service time and the intensity (mental effort and judgment; technical skill & physical effort; and psychological stress) of the service you are rating to the key reference services listed above.

CPT Code	Median Pre-Time	Median Intra-Time	Median Post-Time	Median Mental Effort and Judgment	Median Technical Skill and Physical Effort	Median Psychological Stress
90811	5	30	15	4	4	3
99214	5	25	10	3	3	3
99203	10	30	15	3	3.5	3
99215	10	40	10	4	4	3

ADDITIONAL RATIONALE

For example, if recommended RVUs are based on an alternative method instead of the survey results.

SEE ATTACHED DOCUMENTATION.

FREQUENCY INFORMATION

How was this service previously reported? 90855

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. 39,000 (Medicare)

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

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

CPT Code: 90812

Global Period: XXX

Recommended RVW: 2.11

CPT Descriptor:

Individual psychotherapy, interactive, using play equipment, physical devices, language interpreter, or other mechanisms of non-verbal communication, in an office or outpatient facility, approximately 45 to 50 minutes face-to-face with the patient.

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey:

Approximately 45-50 minutes of interactive psychotherapy with a 6-year-old girl with a history of separation anxiety disorder. Although she is sleeping better, she is still frightened at school and other locations away from her parents.

Description of Pre-Service Work: Preparing to see patient; reviewing records; communicating with other professionals and the patient's family.

Description of Intra-Service Work: Obtaining (or updating) a history; performing an evaluation; counseling the patient; writing notes.

Description of Post-Service Work: Arranging for further services; reviewing results of studies; communicating further with patient, family, and other professionals, including written or telephone reports; documenting the services provided; providing written or telephone reports to Medicare or other third party payers.

SURVEY DATA:

Specialty: American Psychiatric Association, American Psychological Association, American Academy of Child and Adolescent Psychiatry, American Nursing Association and National Association of Social Workers

Sample Size: 2039

Response Rate (%): 5.64% (115)

Median RVW: 2.00

25th Percentile RVW: 1.80

75th Percentile RVW: 2.45

Low: 1.20

High: 3.65

Median Pre-Service Time: 10

Median Intra-Service Time: 50

25th Percentile Intra-Svc Time: 45

75th Percentile Intra-Svc Time: 50

Low: 40

High: 60

Median Post-Service Time: 17.5

KEY REFERENCE SERVICE(S):

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
1)	99215	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 comprehensive history; a comprehensive examination; medical decision making of high complexity. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 40 minutes face-to-face with the patient and/or family.	1.77
2)	99204	Office or other outpatient visit for the evaluation and management of a new patient, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of moderate complexity. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 45 minutes face-to-face with the patient and/or family.	2.00
3)	99205	Office or other outpatient visit for the evaluation and management of a new patient, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of high complexity. 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.	2.67

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

Compare the pre-, intra-, and post-service time and the intensity (mental effort and judgment; technical skill & physical effort; and psychological stress) of the service you are rating to the key reference services listed above.

<u>CPT Code</u>	<u>Median Pre-Time</u>	<u>Median Intra-Time</u>	<u>Median Post-Time</u>	<u>Median Mental Effort and Judgment</u>	<u>Median Technical Skill and Physical Effort</u>	<u>Median Psychological Stress</u>
90812	10	50	17.5	4	4	3
99215	5	45	10	3	3	3
99204	9.5	45	12.5	4	3	3
99205	10	50	10	4	4	4

ADDITIONAL RATIONALE

For example, if recommended RVUs are based on an alternative method instead of the survey results.

SEE ATTACHED DOCUMENTATION.

FREQUENCY INFORMATION

How was this service previously reported? 90855

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. 46,000 (Medicare)

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

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

CPT Code: 90813

Global Period: XXX

Recommended RVW: 2.28

CPT Descriptor:

Individual psychotherapy, interactive, using play equipment, physical devices, language interpreter, or other mechanisms of non-verbal communication, in an office or outpatient facility, approximately 45 to 50 minutes face-to-face with the patient; with medical evaluation and management services.

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey:

Approximately 45-50 minutes interactive psychotherapy with 8-year-old girl with history of separation anxiety disorder and generalized anxiety disorder, seen for monthly medication management and short term psychotherapy, presents for assistance planning for a scheduled surgical procedure requiring general anesthesia. She requires face-to-face time using clay materials to enact the hospital admission and surgical procedure. Also requires evaluation of potential interaction between psychotropic medications and anesthesia.

Description of Pre-Service Work: Preparing to see patient; reviewing records; communicating with other professionals and the patient's family.

Description of Intra-Service Work: Obtaining (or updating) a history; performing an evaluation; counseling the patient; writing notes.

Description of Post-Service Work: Arranging for further services; reviewing results of studies; communicating further with patient, family, and other professionals, including written or telephone reports; documenting the services provided; providing written or telephone reports to Medicare or other third party payers; medical diagnostic evaluation (e.g., evaluation of comorbid medical conditions, drug interactions, and physical examinations), drug management when indicated, physician orders, and interpretation of laboratory or other medical diagnostic studies and observations.

SURVEY DATA:

Specialty: American Psychiatric Association, American Psychological Association, American Academy of Child and Adolescent Psychiatry, American Nursing Association and National Association of Social Workers

Sample Size: 1131

Response Rate (%): 5.22% (59)

Median RVW: 2.50

25th Percentile RVW: 2.15

75th Percentile RVW: 2.75

Low: 1.85

High: 3.75

Median Pre-Service Time: 10

Median Intra-Service Time: 50

25th Percentile Intra-Svc Time: 45

75th Percentile Intra-Svc Time: 50

Low: 40

High: 60

Median Post-Service Time: 15

KEY REFERENCE SERVICE(S):

	CPT Code	CPT Descriptor	RVW
1)	99215	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 comprehensive history; a comprehensive examination; medical decision making of high complexity. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 40 minutes face-to-face with the patient and/or family.	1.77
2)	99205	Office or other outpatient visit for the evaluation and management of a new patient, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of high complexity. 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.	2.67
3)	99204	Office or other outpatient visit for the evaluation and management of a new patient, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of moderate complexity. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 45 minutes face-to-face with the patient and/or family.	2.00

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

Compare the pre-, intra-, and post-service time and the intensity (mental effort and judgment; technical skill & physical effort; and psychological stress) of the service you are rating to the key reference services listed above.

CPT Code	Median Pre-Time	Median Intra-Time	Median Post-Time	Median Mental Effort and Judgment	Median Technical Skill and Physical Effort	Median Psychological Stress
90813	10	50	15	4	4	4
99215	5	40	10	3	3	3
99205	10	60	10	4	4	4
99204	8	45	15	4	3.5	3

ADDITIONAL RATIONALE

For example, if recommended RVUs are based on an alternative method instead of the survey results.

SEE ATTACHED DOCUMENTATION.

FREQUENCY INFORMATION

How was this service previously reported? 90855

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. 42,000 (Medicare)

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

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

CPT Code: 90814

Global Period: XXX

Recommended RVW: 3.11

CPT Descriptor:

Individual psychotherapy, interactive, using play equipment, physical devices, language interpreter, or other mechanisms of non-verbal communication, in an office or outpatient facility, approximately 75 to 80 minutes face-to-face with the patient.

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey:

Approximately 75-80 minutes of interactive psychotherapy for an 8-year-old boy with a history of sexual abuse, and persistent problems with sleeping, eating and sustaining relationships.

Description of Pre-Service Work: Preparing to see patient; reviewing records; communicating with other professionals and the patient's family.

Description of Intra-Service Work: Obtaining (or updating) a history; performing an evaluation; counseling the patient; writing notes.

Description of Post-Service Work: Arranging for further services; reviewing results of studies; communicating further with patient, family, and other professionals, including written or telephone reports; documenting the services provided; providing written or telephone reports to Medicare or other third party payers.

SURVEY DATA:

Specialty: American Psychiatric Association, American Psychological Association, American Academy of Child and Adolescent Psychiatry, American Nursing Association and National Association of Social Workers

Sample Size: 2039

Response Rate (%): 4.76% (97)

Median RVW: 3.40

25th Percentile RVW: 2.90

75th Percentile RVW: 3.55

Low: 1.77

High: 5.00

Median Pre-Service Time: 10

Median Intra-Service Time: 80

25th Percentile Intra-Svc Time: 75

75th Percentile Intra-Svc Time: 80

Low: 60

High: 90

Median Post-Service Time: 20

KEY REFERENCE SERVICE(S):

	CPT Code	CPT Descriptor	RVW
1)	99245	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 high complexity. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 80 minutes face-to-face with the patient and/or family.	3.43
2)	99223	Initial hospital care, per day, for the evaluation and management of a patient, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of high complexity. Usually, the problem(s) requiring admission are of high severity. Physicians typically spend 70 minutes at the bedside and on the patient's hospital floor or unit.	2.99
3)	99215	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 comprehensive history; a comprehensive examination; medical decision making of high complexity. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 40 minutes face-to-face with the patient and/or family.	1.77

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

Compare the pre-, intra-, and post-service time and the intensity (mental effort and judgment; technical skill & physical effort; and psychological stress) of the service you are rating to the key reference services listed above.

CPT Code	Median Pre-Time	Median Intra-Time	Median Post-Time	Median Mental Effort and Judgment	Median Technical Skill and Physical Effort	Median Psychological Stress
90814	10	80	20	4	4	4
99245	10	80	20	4	4	4
99223	7.5	70	7.5	4	3.5	4
99215	15	52.5	17.5	4	4	4

ADDITIONAL RATIONALE

For example, if recommended RVUs are based on an alternative method instead of the survey results.

SEE ATTACHED DOCUMENTATION.

FREQUENCY INFORMATION

How was this service previously reported? 90855

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. 2,000 (Medicare)

Is this service performed by many physicians across the United States? X Yes ___ No

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

CPT Code: 90815

Global Period: XXX

Recommended RVW: 3.28

CPT Descriptor:

Individual psychotherapy, interactive, using play equipment, physical devices, language interpreter, or other mechanisms of non-verbal communication, in an office or outpatient facility, approximately 75 to 80 minutes face-to-face with the patient; with medical evaluation and management services.

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey:

Approximately 75-80 minutes of interactive psychotherapy for an 8-year-old boy with history of sexual abuse, and persistent problems with sleeping, eating, and sustaining relationships. Medication to manage anxiety, distractibility, and mood disturbance has been only modestly helpful.

Description of Pre-Service Work: Preparing to see patient; reviewing records; communicating with other professionals and the patient's family.

Description of Intra-Service Work: Obtaining (or updating) a history; performing an evaluation; counseling the patient; writing notes.

Description of Post-Service Work: Arranging for further services; reviewing results of studies; communicating further with patient, family, and other professionals, including written or telephone reports; documenting the services provided; providing written or telephone reports to Medicare or other third party payers; medical diagnostic evaluation (e.g., evaluation of comorbid medical conditions, drug interactions, and physical examinations), drug management when indicated, physician orders, and interpretation of laboratory or other medical diagnostic studies and observations.

SURVEY DATA:

Specialty: American Psychiatric Association, American Psychological Association, American Academy of Child and Adolescent Psychiatry, American Nursing Association and National Association of Social Workers

Sample Size: 1131

Response Rate (%): 5.04% (57)

Median RVW: 3.43

25th Percentile RVW: 3.20

75th Percentile RVW: 3.55

Low: 2.40

High: 4.50

Median Pre-Service Time: 10

Median Intra-Service Time: 80

25th Percentile Intra-Svc Time: 75

75th Percentile Intra-Svc Time: 80

Low: 55

High: 90

Median Post-Service Time: 20

KEY REFERENCE SERVICE(S):

	CPT Code	CPT Descriptor	RVW
1)	99245	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 high complexity. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 80 minutes face-to-face with the patient and/or family.	3.43
2)	99255	Initial inpatient consultation for a new or established patient, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of high complexity. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 110 minutes at the bedside and on the patient's hospital floor or unit.	3.65

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

Compare the pre-, intra-, and post-service time and the intensity (mental effort and judgment; technical skill & physical effort; and psychological stress) of the service you are rating to the key reference services listed above.

CPT Code	Median Pre-Time	Median Intra-Time	Median Post-Time	Median Mental Effort and Judgment	Median Technical Skill and Physical Effort	Median Psychological Stress
90815	10	80	20	5	5	4
99245	10	80	15	4	4	4
99255	15	95	25	4	4	4

ADDITIONAL RATIONALE

For example, if recommended RVUs are based on an alternative method instead of the survey results.

SEE ATTACHED DOCUMENTATION.

FREQUENCY INFORMATION

How was this service previously reported? 90855

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. 1,000 (Medicare)

Is this service performed by many physicians across the United States? X Yes ___ No

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

CPT Code: 90816

Global Period: XXX

Recommended RVW: 1.34

CPT Descriptor:

Individual psychotherapy, insight oriented, behavior modifying and/or supportive, in an inpatient hospital, partial hospitalization or residential care setting, approximately 20 to 30 minutes face-to-face with the patient.

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey:

Vignette 1 Approximately 20-30 minute psychotherapy in hospital on third day of detoxification admission for 24-year-old male with yearlong history of cocaine dependence and alcohol.

Vignette 2 Approximately 20-30 minute individual psychotherapy in residential treatment center for 14-year-old boy with conduct disorder who periodically requires seclusion for aggression.

Description of Pre-Service Work: Communicating with other professionals and the patient's family; obtaining and/or reviewing the results of diagnostic and other studies; reviewing the patient's chart; written and telephone reports.

Description of Intra-Service Work: Obtaining (or updating) a history; counseling the patient; writing notes.

Description of Post-Service Work: Arranging for further services; communicating further with other professionals and the patient's family; obtaining and/or reviewing the results of diagnostic and other studies; documenting the services provided; written and telephone reports.

SURVEY DATA:

Specialty: American Psychiatric Association, American Psychological Association, American Academy of Child and Adolescent Psychiatry, American Nursing Association and National Association of Social Workers

Sample Size: 2039

Response Rate (%): 5.00% (102)

Median RVW: 1.40

25th Percentile RVW: 1.15

75th Percentile RVW: 1.51

Low: 0.70

High: 2.80

Median Pre-Service Time: 10

Median Intra-Service Time: 28.5

25th Percentile Intra-Svc Time: 25

75th Percentile Intra-Svc Time: 30

Low: 15

High: 40

Median Post-Service Time: 10

KEY REFERENCE SERVICE(S):

	CPT Code	CPT Descriptor	RVW
1)	99232	Subsequent hospital care, per day, for the evaluation and management of a patient, which requires at least two of these three key components: an expanded problem focused interval history; an expanded problem focused examination; medical decision making of moderate complexity. Usually, the patient is responding inadequately to therapy or has developed a minor complication. Physicians typically spend 25 minutes at the bedside and on the patient's hospital floor or unit.	1.06
2)	99233	Subsequent hospital care, per day, for the evaluation and management of a patient, which requires at least two of these three key components: a detailed interval history; a detailed examination; medical decision making of high complexity. Usually, the patient is unstable or has developed a significant complication or a significant new problem. Physicians typically spend 35 minutes at the bedside and on the patient's hospital floor or unit.	1.51
3)	99214	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 detailed history; a detailed examination; medical decision making of moderate complexity. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 25 minutes face-to-face with the patient or family.	1.10

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

Compare the pre-, intra-, and post-service time and the intensity (mental effort and judgment; technical skill & physical effort; and psychological stress) of the service you are rating to the key reference services listed above.

CPT Code	Median Pre-Time	Median Intra-Time	Median Post-Time	Median Mental Effort and Judgment	Median Technical Skill and Physical Effort	Median Psychological Stress
90816	10	28.5	10	3	3	3
99232	10	25	10	3	3	3
99233	10	30	10	4	3	4
99214	5	25	10	3	3	3

ADDITIONAL RATIONALE

For example, if recommended RVUs are based on an alternative method instead of the survey results.

SEE ATTACHED DOCUMENTATION.

FREQUENCY INFORMATION

How was this service previously reported? 90843

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. 625,000 (Medicare)

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

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

CPT Code: 90817

Global Period: XXX

Recommended RVW: 1.51

CPT Descriptor:

Individual psychotherapy, insight oriented, behavior modifying and/or supportive, in an inpatient hospital, partial hospitalization or residential care setting, approximately 20 to 30 minutes face-to-face with the patient; with medical evaluation and management services.

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey:

Vignette 1 Approximately 20-30 minute individual psychotherapy in nursing home for 85-year-old female with carcinoma metastatic to lung and adjustment disorder with anxiety. Consider prescribing medication.

Vignette 2 Approximately 20-30 minute individual psychotherapy in residential treatment center for 14-year-old boy with schizophrenia on atypical neuroleptic requiring laboratory monitoring who periodically requires seclusion for aggression.

Description of Pre-Service Work: Communicating with other professionals and the patient's family; obtaining and/or reviewing the results of diagnostic and other studies; reviewing the patient's chart; written and telephone reports.

Description of Intra-Service Work: Obtaining (or updating) a history; counseling the patient; writing notes.

Description of Post-Service Work: Arranging for further services; communicating further with other professionals and the patient's family; obtaining and/or reviewing the results of diagnostic and other studies; documenting the services provided; written and telephone reports; medical diagnostic evaluation (e.g., evaluation of comorbid medical conditions, drug interactions, and physical examinations), drug management when indicated, physician orders, and interpretation of laboratory or other medical diagnostic studies and observations.

SURVEY DATA:

Specialty: American Psychiatric Association, American Psychological Association, American Academy of Child and Adolescent Psychiatry, American Nursing Association and National Association of Social Workers

Size: 1131

Response Rate (%): 6.90% (78)

Median RVW: 1.50

25th Percentile RVW: 1.20

75th Percentile RVW: 1.75

Low: 0.80

High: 3.00

Median Pre-Service Time: 10

Median Intra-Service Time: 25

25th Percentile Intra-Svc Time: 25

75th Percentile Intra-Svc Time: 30

Low: 12

High: 40

Median Post-Service Time: 10

KEY REFERENCE SERVICE(S):

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
1)	99232	Subsequent hospital care, per day, for the evaluation and management of a patient, which requires at least two of these three key components: an expanded problem focused interval history; an expanded problem focused examination; medical decision making of moderate complexity. Usually, the patient is responding inadequately to therapy or has developed a minor complication. Physicians typically spend 25 minutes at the bedside and on the patient's hospital floor or unit.	1.06
2)	99233	Subsequent hospital care, per day, for the evaluation and management of a patient, which requires at least two of these three key components: a detailed interval history; a detailed examination; medical decision making of high complexity. Usually, the patient is unstable or has developed a significant complication or a significant new problem. Physicians typically spend 35 minutes at the bedside and on the patient's hospital floor or unit.	1.51
3)	90862	Pharmacologic management, including prescription, use, and review of medication with no more than minimal medical psychotherapy.	0.95
4)	99214	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 detailed history; a detailed examination; medical decision making of moderate complexity. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 25 minutes face-to-face with the patient or family.	1.10

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

Compare the pre-, intra-, and post-service time and the intensity (mental effort and judgment; technical skill & physical effort; and psychological stress) of the service you are rating to the key reference services listed above.

CPT Code	Median Pre-Time	Median Intra-Time	Median Post-Time	Median Mental Effort and Judgment	Median Technical Skill and Physical Effort	Median Psychological Stress
90817	10	25	10	4	4	3
99232	5	25	10	3	3	3
99233	10	35	10	4	4	4
90862	5	20	10	3	3	3
99214	5	25	5	3	3.5	3

ADDITIONAL RATIONALE

For example, if recommended RVUs are based on an alternative method instead of the survey results.

SEE ATTACHED DOCUMENTATION.

FREQUENCY INFORMATION

How was this service previously reported? 90843

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. 752,000 (Medicare)

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

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

CPT Code: 90818

Global Period: XXX

Recommended RVW: 2.03

CPT Descriptor:

Individual psychotherapy, insight oriented, behavior modifying and/or supportive, in an inpatient hospital, partial hospitalization or residential care setting, approximately 45 to 50 minutes face-to-face with the patient.

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey:

Vignette 1 Approximately 45-50 minutes individual psychotherapy in hospital for 35-year-old female with postpartum depression responding to medication, who is about to be discharged.

Vignette 2 Approximately 45-50 minutes individual psychotherapy in hospital for 15-year-old boy hospitalized for detoxification, preparing for transfer to partial hospitalization program.

Description of Pre-Service Work: Communicating with other professionals and the patient's family; obtaining and/or reviewing the results of diagnostic and other studies; reviewing the patient's chart; written and telephone reports.

Description of Intra-Service Work: Obtaining (or updating) a history; counseling the patient; writing notes.

Description of Post-Service Work: Arranging for further services; communicating further with other professionals and the patient's family; obtaining and/or reviewing the results of diagnostic and other studies; documenting the services provided; written and telephone reports.

SURVEY DATA:

Specialty: American Psychiatric Association, American Psychological Association, American Academy of Child and Adolescent Psychiatry, American Nursing Association and National Association of Social Workers

Sample Size: 2039

Response Rate (%): 5.00% (102)

Median RVW: 2.05

25th Percentile RVW: 1.77

75th Percentile RVW: 2.40

Low: 1.20

High: 3.75

Median Pre-Service Time: 10

Median Intra-Service Time: 47

25th Percentile Intra-Svc Time: 45

75th Percentile Intra-Svc Time: 50

Low: 35

High: 60

Median Post-Service Time: 15

KEY REFERENCE SERVICE(S):

	CPT Code	CPT Descriptor	RVW
1)	99233	Subsequent hospital care, per day, for the evaluation and management of a patient, which requires at least two of these three key components: a detailed interval history; a detailed examination; medical decision making of high complexity. Usually, the patient is unstable or has developed a significant complication or a significant new problem. Physicians typically spend 35 minutes at the bedside and on the patient's hospital floor or unit.	1.51
2)	99222	Initial hospital care, per day, for the evaluation and management of a patient, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of moderate complexity. Usually, the problem(s) requiring admission are of moderate severity. Physicians typically spend 50 minutes at the bedside and on the patient's hospital floor/unit.	2.14
3)	99215	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 comprehensive history; a comprehensive exam; medical decision making of high complexity. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 40 minutes face-to-face with the patient or family.	1.77
4)	99223	Initial hospital care, per day, for the evaluation and management of a patient, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of high complexity. Usually, the problem(s) requiring admission are of high severity. Physicians typically spend 70 minutes at the bedside and on the patient's hospital floor/unit.	2.99
5)	99238	Hospital discharge day management; 30 minutes or less.	1.28

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

Compare the pre-, intra-, and post-service time and the intensity (mental effort and judgment; technical skill & physical effort; and psychological stress) of the service you are rating to the key reference services listed above.

CPT Code	Median Pre-Time	Median Intra-Time	Median Post-Time	Median Mental Effort and Judgment	Median Technical Skill and Physical Effort	Median Psychological Stress
90818	10	47	15	4	4	3
99233	10	35	10	4	4	3
99222	10	50	15	3	3	3
99215	5	40	10	4	3	3
99223	12.5	50	20	4	4	4
99238	10	20	10	3	3	3

ADDITIONAL RATIONALE

For example, if recommended RVUs are based on an alternative method instead of the survey results.

SEE ATTACHED DOCUMENTATION.

FREQUENCY INFORMATION

How was this service previously reported? 90844

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. 644,000 (Medicare)

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

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

CPT Code: 90819

Global Period: XXX

Recommended RVW: 2.20

CPT Descriptor:

Individual psychotherapy, insight oriented, behavior modifying and/or supportive, in an inpatient hospital, partial hospitalization or residential care setting, approximately 45 to 50 minutes face-to-face with the patient; with medical evaluation and management services.

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey:

Vignette 1 Approximately 45-50 minutes individual psychotherapy in hospital for 65-year-old female with major depression unresponsive to antidepressant medication, under consideration for ECT. Laboratory screening and interpretation, and consider underlying co-morbid medical diagnosis.

Vignette 2 Approximately 45-50 minutes individual psychotherapy in hospital for 16-year-old girl hospitalized for acute psychosis who reveals a history of abuse of diet pills. Consider laboratory screening and interpretation and medication evaluation.

Description of Pre-Service Work: Communicating with other professionals and the patient's family; obtaining and/or reviewing the results of diagnostic and other studies; reviewing the patient's chart; written and telephone reports.

Description of Intra-Service Work: Obtaining (or updating) a history; counseling the patient; writing notes.

Description of Post-Service Work: Arranging for further services; communicating further with other professionals and the patient's family; obtaining and/or reviewing the results of diagnostic and other studies; documenting the services provided; written and telephone reports; medical diagnostic evaluation (e.g., evaluation of comorbid medical conditions, drug interactions, and physical examinations), drug management when indicated, physician orders, and interpretation of laboratory or other medical diagnostic studies and observations.

SURVEY DATA:

Specialty: American Psychiatric Association, American Psychological Association, American Academy of Child and Adolescent Psychiatry, American Nursing Association and National Association of Social Workers

Sample Size: 1131

Response Rate (%): 6.28% (71)

Median RVW: 2.30

25th Percentile RVW: 2.00

75th Percentile RVW: 2.80

Low: 1.41

High: 4.20

Median Pre-Service Time: 10

Median Intra-Service Time: 45

25th Percentile Intra-Svc Time: 45

75th Percentile Intra-Svc Time: 50

Low: 40

High: 60

Median Post-Service Time: 15

KEY REFERENCE SERVICE(S):

	CPT Code	CPT Descriptor	RVW
1)	99233	Subsequent hospital care, per day, for the evaluation and management of a patient, which requires at least two of these three key components: a detailed interval history; a detailed examination; medical decision making of high complexity. Usually, the patient is unstable or has developed a significant complication or a significant new problem. Physicians typically spend 35 minutes at the bedside and on the patient's hospital floor or unit.	1.51
2)	99222	Initial hospital care, per day, for the evaluation and management of a patient, which requires these three key components: a comprehensive history; a comprehensive exam; and medical decision making of moderate complexity. Usually, the problem(s) requiring admission are of moderate severity. Physicians typically spend 50 minutes at the bedside and on the patient's hospital floor/unit.	2.14
3)	99223	Initial hospital care, per day, for the evaluation and management of a patient, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of high complexity. Usually, the problem(s) requiring admission are of high severity. Physicians typically spend 70 minutes at the bedside and on the patient's hospital floor/unit.	2.99

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

Compare the pre-, intra-, and post-service time and the intensity (mental effort and judgment; technical skill & physical effort; and psychological stress) of the service you are rating to the key reference services listed above.

CPT Code	Median Pre-Time	Median Intra-Time	Median Post-Time	Median Mental Effort and Judgment	Median Technical Skill and Physical Effort	Median Psychological Stress
90819	10	45	15	4	4	4
99233	10	35	10	4	3	3
99222	10	50	10	4	4	3
99223	10	50	20	4	4	4

ADDITIONAL RATIONALE

For example, if recommended RVUs are based on an alternative method instead of the survey results.

SEE ATTACHED DOCUMENTATION.

FREQUENCY INFORMATION

How was this service previously reported? 90844

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. 578,000 (Medicare)

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

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

CPT Code: 90821

Global Period: XXX

Recommended RVW: 3.03

CPT Descriptor:

Individual psychotherapy, insight oriented, behavior modifying and/or supportive, in an inpatient hospital, partial hospitalization or residential care setting, approximately 75 to 80 minutes face-to-face with the patient.

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey:

Vignette 1 Approximately 75-80 minute psychotherapy in hospital for 68-year-old woman with bipolar disorder, post suicide attempt who will be placed in congregate living facility upon discharge. Patient has responded well to antidepressant medication.

Vignette 2 Approximately 75-80 minutes psychotherapy in partial hospitalization setting with 15-year-old girl with anorexia nervosa who struggles with continued relapses. She has had a four-pound weight loss in the past week.

Description of Pre-Service Work: Communicating with other professionals and the patient's family; obtaining and/or reviewing the results of diagnostic and other studies; reviewing the patient's chart; written and telephone reports.

Description of Intra-Service Work: Obtaining (or updating) a history; counseling the patient; writing notes.

Description of Post-Service Work: Arranging for further services; communicating further with other professionals and the patient's family; obtaining and/or reviewing the results of diagnostic and other studies; documenting the services provided; written and telephone reports.

SURVEY DATA:

Specialty: American Psychiatric Association, American Psychological Association, American Academy of Child and Adolescent Psychiatry, American Nursing Association and National Association of Social Workers

Sample Size: 2039

Response Rate (%): 4.07% (83)

Median RVW: 3.15

25th Percentile RVW: 2.82

75th Percentile RVW: 3.50

Low: 1.70

High: 5.00

Median Pre-Service Time: 10

Median Intra-Service Time: 80

25th Percentile Intra-Svc Time: 75

75th Percentile Intra-Svc Time: 80

Low: 60

High: 95

Median Post-Service Time: 15

KEY REFERENCE SERVICE(S):

	CPT Code	CPT Descriptor	RVW
1)	99255	Initial inpatient consultation for a new or established patient, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of high complexity. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 110 minutes at the bedside and on the patient's hospital floor or unit.	3.65
2)	99223	Initial hospital care, per day, for the evaluation and management of a patient, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of high complexity. Usually, the problem(s) requiring admission are of high severity. Physicians typically spend 70 minutes at the bedside and on the patient's hospital floor or unit.	2.99
3)	99245	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 high complexity. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 80 minutes face-to-face with the patient and/or family.	3.43

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

Compare the pre-, intra-, and post-service time and the intensity (mental effort and judgment; technical skill & physical effort; and psychological stress) of the service you are rating to the key reference services listed above.

CPT Code	Median Pre-Time	Median Intra-Time	Median Post-Time	Median Mental Effort and Judgment	Median Technical Skill and Physical Effort	Median Psychological Stress
90821	10	80	15	4	4	4
99255	25	80	30	4	4	4
99223	10	75	15	4	4	4
99245	10	80	15	4	4	4

ADDITIONAL RATIONALE

For example, if recommended RVUs are based on an alternative method instead of the survey results.

SEE ATTACHED DOCUMENTATION.

FREQUENCY INFORMATION

How was this service previously reported? 90842

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. 23,000 (Medicare)

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

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

CPT Code: 90822

Global Period: XXX

Recommended RVW: 3.20

CPT Descriptor:

Individual psychotherapy, insight oriented, behavior modifying and/or supportive, in an inpatient hospital, partial hospitalization or residential care setting, approximately 75 to 80 minutes face-to-face with the patient; with medical evaluation and management services.

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey:

Vignette 1 Approximately 75-80 minute psychotherapy in hospital for 68-year-old woman with bipolar disorder, post suicide attempt who will be placed in congregate living facility upon discharge. Patient has many questions about her medication and its management. Consideration of laboratory screening and interpretation. Medication evaluation for potential side effects and drug interactions.

Vignette 2 Approximately 75-80 minutes of psychotherapy in partial hospitalization setting with 15-year-old girl with anorexia nervosa who struggles with continued relapses and has begun abusing diuretics and laxatives. Laboratory screening and interpretation, and medication evaluation.

Description of Pre-Service Work: Communicating with other professionals and the patient's family; obtaining and/or reviewing the results of diagnostic and other studies; reviewing the patient's chart; written and telephone reports.

Description of Intra-Service Work: Obtaining (or updating) a history; counseling the patient; writing notes.

Description of Post-Service Work: Arranging for further services; communicating further with other professionals and the patient's family; obtaining and/or reviewing the results of diagnostic and other studies; documenting the services provided; written and telephone reports; medical diagnostic evaluation (e.g., evaluation of comorbid medical conditions, drug interactions, and physical examinations), drug management when indicated, physician orders, and interpretation of laboratory or other medical diagnostic studies and observations.

SURVEY DATA:

Specialty: American Psychiatric Association, American Psychological Association, American Academy of Child and Adolescent Psychiatry, American Nursing Association and National Association of Social Workers

Sample Size: 1131

Response Rate (%): 4.42% (50)

Median RVW: 3.40

25th Percentile RVW: 3.00

75th Percentile RVW: 3.60

Low: 1.80

High: 6.10

Median Pre-Service Time: 10

Median Intra-Service Time: 78.5

25th Percentile Intra-Svc Time: 75

75th Percentile Intra-Svc Time: 80

Low: 60

High: 90

Median Post-Service Time: 17.5

KEY REFERENCE SERVICE(S):

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
1)	99223	Initial hospital care, per day, for the evaluation and management of a patient, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of high complexity. Usually, the problem(s) requiring admission are of high severity. Physicians typically spend 70 minutes at the bedside and on the patient's hospital floor or unit.	2.99
2)	99245	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 high complexity. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 80 minutes face-to-face with the patient and/or family.	3.43
3)	99255	Initial inpatient consultation for a new or established patient, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of high complexity. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 110 minutes at the bedside and on the patient's hospital floor or unit.	3.65

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

Compare the pre-, intra-, and post-service time and the intensity (mental effort and judgment; technical skill & physical effort; and psychological stress) of the service you are rating to the key reference services listed above.

<u>CPT Code</u>	<u>Median Pre-Time</u>	<u>Median Intra-Time</u>	<u>Median Post-Time</u>	<u>Median Mental Effort and Judgment</u>	<u>Median Technical Skill and Physical Effort</u>	<u>Median Psychological Stress</u>
90822	10	78.5	17.5	4	4	4
99223	10	70	15	4	4	3.5
99245	10	80	15	4	4	4
99255	10	90	15	4	4	4

ADDITIONAL RATIONALE

For example, if recommended RVUs are based on an alternative method instead of the survey results.

SEE ATTACHED DOCUMENTATION.

FREQUENCY INFORMATION

How was this service previously reported? 90842

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. 11,000 (Medicare)

Is this service performed by many physicians across the United States? X Yes ___ No

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

CPT Code: 90823

Global Period: XXX

Recommended RVW: 1.46

CPT Descriptor:

Individual psychotherapy, interactive, using play equipment, physical devices, language interpreter, or other mechanisms of non-verbal communication, in an inpatient hospital, partial hospital or residential care setting, approximately 20 to 30 minutes face-to-face with the patient.

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey:

Approximately 20-30 minutes of interactive psychotherapy with 8-year-old girl with mild mental retardation who was hospitalized because of violent outbursts. Her parents state they are no longer able to control her.

Description of Pre-Service Work: Communicating with other professionals and the patient's family; obtaining and/or reviewing the results of diagnostic and other studies; reviewing the patient's chart; written and telephone reports.

Description of Intra-Service Work: Obtaining (or updating) a history; counseling the patient; writing notes.

Description of Post-Service Work: Arranging for further services; communicating further with other professionals and the patient's family; obtaining and/or reviewing the results of diagnostic and other studies; documenting the services provided; written and telephone reports.

SURVEY DATA:

Specialty: American Psychiatric Association, American Psychological Association, American Academy of Child and Adolescent Psychiatry, American Nursing Association and National Association of Social Workers

Sample Size: 2039

Response Rate (%): 2.70% (55)

Median RVW: 1.50

25th Percentile RVW: 1.28

75th Percentile RVW: 2.00

Low: 1.06

High: 3.50

Median Pre-Service Time: 11

Median Intra-Service Time: 30

25th Percentile Intra-Svc Time: 25

75th Percentile Intra-Svc Time: 30

Low: 20

High: 40

Median Post-Service Time: 15

KEY REFERENCE SERVICE(S):

	CPT Code	CPT Descriptor	RVW
1)	99232	Subsequent hospital care, per day, for the evaluation and management of a patient, which requires at least two of these three key components: an expanded problem focused interval history; an expanded problem focused examination; medical decision making of moderate complexity. Usually, the patient is responding inadequately to therapy or has developed a minor complication. Physicians typically spend 25 minutes at the bedside and on the patient's hospital floor or unit.	1.06
2)	99233	Subsequent hospital care, per day, for the evaluation and management of a patient, which requires at least two of these three key components: a detailed interval history; a detailed examination, medical decision making of high complexity. Usually, the patient is unstable or has developed a significant complication or a significant new problem. Physicians typically spend 35 minutes at the bedside and on the patient's hospital floor or unit.	1.51
3)	99214	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 detailed history; a detailed examination; medical decision making of moderate complexity. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 25 minutes face-to-face with the patient and/or family.	1.10

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

Compare the pre-, intra-, and post-service time and the intensity (mental effort and judgment; technical skill & physical effort; and psychological stress) of the service you are rating to the key reference services listed above.

CPT Code	Median Pre-Time	Median Intra-Time	Median Post-Time	Median Mental Effort and Judgment	Median Technical Skill and Physical Effort	Median Psychological Stress
90823	11	30	15	4	4	4
99232	10	25	12.5	3	4	3
99233	10	30	10	4	4	4
99214	5	25	8	3	3	3

ADDITIONAL RATIONALE

For example, if recommended RVUs are based on an alternative method instead of the survey results.

SEE ATTACHED DOCUMENTATION.

FREQUENCY INFORMATION

How was this service previously reported? 90855

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. 15,000 (Medicare)

Is this service performed by many physicians across the United States? X Yes ___ No

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

CPT Code: 90824

Global Period: XXX

Recommended RVW: 1.63

CPT Descriptor:

Individual psychotherapy, interactive, using play equipment, physical devices, language interpreter, or other mechanisms of non-verbal communication, in an inpatient hospital, partial hospital or residential care setting, approximately 20 to 30 minutes face-to-face with the patient; with medical evaluation and management services.

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey:

Approximately 20-30 minutes of interactive psychotherapy with 8-year-old girl with mild mental retardation and a seizure disorder who was hospitalized because of violent outbursts. Her parents state they are no longer able to control her.

Description of Pre-Service Work: Communicating with other professionals and the patient's family; obtaining and/or reviewing the results of diagnostic and other studies; reviewing the patient's chart; written and telephone reports.

Description of Intra-Service Work: Obtaining (or updating) a history; counseling the patient; writing notes.

Description of Post-Service Work: Arranging for further services; communicating further with other professionals and the patient's family; obtaining and/or reviewing the results of diagnostic and other studies; documenting the services provided; written and telephone reports; medical diagnostic evaluation (e.g., evaluation of comorbid medical conditions, drug interactions, and physical examinations), drug management when indicated, physician orders, and interpretation of laboratory or other medical diagnostic studies and observations.

SURVEY DATA:

Specialty: American Psychiatric Association, American Psychological Association, American Academy of Child and Adolescent Psychiatry, American Nursing Association and National Association of Social Workers

Sample Size: 1131

Response Rate (%): 2.65% (30)

Median RVW: 1.51

25th Percentile RVW: 1.40

75th Percentile RVW: 1.90

Low: 1.15 High: 4.00

Median Pre-Service Time: 10

Median Intra-Service Time: 25

25th Percentile Intra-Svc Time: 25

75th Percentile Intra-Svc Time: 30

Low: 15 High: 30

Median Post-Service Time: 15

KEY REFERENCE SERVICE(S):

	CPT Code	CPT Descriptor	RVW
1)	99233	Subsequent hospital care, per day, for the evaluation and management of a patient, which requires at least two of these three key components: a detailed interval history; a detailed examination; medical decision making of high complexity. Usually, the patient is unstable or has developed a significant complication or a significant new problem. Physicians typically spend 35 minutes at the bedside and on the patient's hospital floor or unit.	1.51
2)	99232	Subsequent hospital care, per day, for the evaluation and management of a patient, which requires at least two of these three key components: an expanded problem focused interval history; an expanded problem focused exam; medical decision making of moderate complexity. Usually, the patient is responding inadequately to therapy or has developed a minor complication. Physicians typically spend 25 minutes at the bedside and on the patient's hospital floor/unit.	1.06
3)	99215	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 comprehensive history; a comprehensive exam; medical decision making of high complexity. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 40 minutes face-to-face with the patient or family.	1.77
4)	99214	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 detailed history; a detailed examination; medical decision making of moderate complexity. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 25 minutes face-to-face with the patient or family.	1.10

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

Compare the pre-, intra-, and post-service time and the intensity (mental effort and judgment; technical skill & physical effort; and psychological stress) of the service you are rating to the key reference services listed above.

CPT Code	Median Pre-Time	Median Intra-Time	Median Post-Time	Median Mental Effort and Judgment	Median Technical Skill and Physical Effort	Median Psychological Stress
90824	10	25	15	4	4	4
99233	10	32.5	10	4	4	4
99232	6.5	22.5	10	3	3	3
99215	10	35	10	4	4	4
99214	5	25	10	3	3.5	3

ADDITIONAL RATIONALE

For example, if recommended RVUs are based on an alternative method instead of the survey results.

SEE ATTACHED DOCUMENTATION.

FREQUENCY INFORMATION

How was this service previously reported? 90855

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. 44,000 (Medicare)

Is this service performed by many physicians across the United States? X Yes _____ No

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

CPT Code: 90826

Global Period: XXX

Recommended RVW: 2.15

CPT Descriptor:

Individual psychotherapy, interactive, using play equipment, physical devices, language interpreter, or other mechanisms of non-verbal communication, in an inpatient hospital, partial hospital or residential care setting, approximately 45 to 50 minutes face-to-face with the patient.

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey:

Approximately 45-50 minutes of interactive psychotherapy with an 8-year-old girl who is combative and making multiple superficial cuts on her arm. She is hospitalized for self-destructive behavior. With a history of physical and sexual abuse, she has been removed from her home and placed in the custody of child protective services.

Description of Pre-Service Work: Communicating with other professionals and the patient's family; obtaining and/or reviewing the results of diagnostic and other studies; reviewing the patient's chart; written and telephone reports.

Description of Intra-Service Work: Obtaining (or updating) a history; counseling the patient; writing notes.

Description of Post-Service Work: Arranging for further services; communicating further with other professionals and the patient's family; obtaining and/or reviewing the results of diagnostic and other studies; documenting the services provided; written and telephone reports.

SURVEY DATA:

Specialty: American Psychiatric Association, American Psychological Association, American Academy of Child and Adolescent Psychiatry, American Nursing Association and National Association of Social Workers

Sample Size: 2039 Response Rate (%): 2.84% (58) Median RVW: 2.28

25th Percentile RVW: 2.00 75th Percentile RVW: 2.99 Low: 1.50 High: 4.00

Median Pre-Service Time: 11 Median Intra-Service Time: 50

25th Percentile Intra-Svc Time: 45 75th Percentile Intra-Svc Time: 50 Low: 40 High: 70

Median Post-Service Time: 15

KEY REFERENCE SERVICE(S):

	CPT Code	CPT Descriptor	RVW
1)	99222	Initial hospital care, per day, for the evaluation and management of a patient, which requires these three key components: a comprehensive history; a comprehensive exam; and medical decision making of moderate complexity. Usually, the problem(s) requiring admission are of moderate severity. Physicians typically spend 50 minutes at the bedside and on the patient's hospital floor/unit.	2.14
2)	99233	Subsequent hospital care, per day, for the evaluation and management of a patient, which requires at least two of these three key components: a detailed interval history; a detailed examination; medical decision making of high complexity. Usually, the patient is unstable or has developed a significant complication or a significant new problem. Physicians typically spend 35 minutes at the bedside and on the patient's hospital floor or unit.	1.51
3)	99223	Initial hospital care, per day, for the evaluation and management of a patient, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of high complexity. Usually, the problem(s) requiring admission are of high severity. Physicians typically spend 70 minutes at the bedside and on the patient's hospital floor/unit.	2.99
4)	99215	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 comprehensive history; a comprehensive exam; medical decision making of high complexity. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 40 minutes face-to-face with the patient or family.	1.77

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

Compare the pre-, intra-, and post-service time and the intensity (mental effort and judgment; technical skill & physical effort; and psychological stress) of the service you are rating to the key reference services listed above.

CPT Code	Median Pre-Time	Median Intra-Time	Median Post-Time	Median Mental Effort and Judgment	Median Technical Skill and Physical Effort	Median Psychological Stress
90826	11	50	15	4	4	4
99222	10	50	20	4	4	3
99233	12.5	40	15	4	4	4
99223	15	70	30	4	4	4
99215	5	40	10	3	3	3

ADDITIONAL RATIONALE

For example, if recommended RVUs are based on an alternative method instead of the survey results.

SEE ATTACHED DOCUMENTATION.

FREQUENCY INFORMATION

How was this service previously reported? 90855

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. 24,000 (Medicare)

Is this service performed by many physicians across the United States? X Yes ___ No

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

CPT Code: 90827

Global Period: XXX

Recommended RVW: 2.32

CPT Descriptor:

Individual psychotherapy, interactive, using play equipment, physical devices, language interpreter, or other mechanisms of non-verbal communication, in an inpatient hospital, partial hospital or residential care setting, approximately 45 to 50 minutes face-to-face with the patient; with medical evaluation and management services.

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey:

Approximately 45-50 minutes interactive psychotherapy with 8-year-old boy who is self-destructive and aggressive, has bipolar disorder, and who could no longer be managed in a partial hospital program and requires residential treatment. His predominant mood is anger and he refuses to discuss the traumas and losses he has endured. He has not yet responded to a combination of mood stabilizer and antidepressant medication. Laboratory screening and interpretation and medication management.

Description of Pre-Service Work: Communicating with other professionals and the patient's family; obtaining and/or reviewing the results of diagnostic and other studies; reviewing the patient's chart; written and telephone reports.

Description of Intra-Service Work: Obtaining (or updating) a history; counseling the patient; writing notes.

Description of Post-Service Work: Arranging for further services; communicating further with other professionals and the patient's family; obtaining and/or reviewing the results of diagnostic and other studies; documenting the services provided; written and telephone reports; medical diagnostic evaluation (e.g., evaluation of comorbid medical conditions, drug interactions, and physical examinations), drug management when indicated, physician orders, and interpretation of laboratory or other medical diagnostic studies and observations.

SURVEY DATA:

Specialty: American Psychiatric Association, American Psychological Association, American Academy of Child and Adolescent Psychiatry, American Nursing Association and National Association of Social Workers

Sample Size: 1131

Response Rate (%): 2.83% (32)

Median RVW: 2.80

25th Percentile RVW: 2.58

75th Percentile RVW: 3.00

Low: 1.88

High: 4.50

Median Pre-Service Time: 10

Median Intra-Service Time: 50

25th Percentile Intra-Svc Time: 45

75th Percentile Intra-Svc Time: 50

Low: 35

High: 70

Median Post-Service Time: 17.5

KEY REFERENCE SERVICE(S):

	CPT Code	CPT Descriptor	RVW
1)	99222	Initial hospital care, per day, for the evaluation and management of a patient, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of moderate complexity. Usually, the problem(s) requiring admission are of moderate severity. Physicians typically spend 50 minutes at the bedside and on the patient's hospital floor or unit.	2.14
2)	99223	Initial hospital care, per day, for the evaluation and management of a patient, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of high complexity. Usually, the problem(s) requiring admission are of high severity. Physicians typically spend 70 minutes at the bedside and on the patient's hospital floor or unit.	2.99
3)	99215	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 comprehensive history; a comprehensive examination; medical decision making of high complexity. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 40 minutes face-to-face with the patient and/or family.	1.77
4)	90847	Family medical psychotherapy (conjoint psychotherapy) by physician, with continuing medical diagnostic evaluation, and drug management when indicated.	2.21

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

Compare the pre-, intra-, and post-service time and the intensity (mental effort and judgment; technical skill & physical effort; and psychological stress) of the service you are rating to the key reference services listed above.

CPT Code	Median Pre-Time	Median Intra-Time	Median Post-Time	Median Mental Effort and Judgment	Median Technical Skill and Physical Effort	Median Psychological Stress
90827	10	50	17.5	4	4.5	4
99222	10	50	15	4	4	4
99223	20	57.5	20	4	4.5	4
99215	7.5	42.5	10	3.5	3	3
90847	10	45	10	3	3	3

ADDITIONAL RATIONALE

For example, if recommended RVUs are based on an alternative method instead of the survey results.

SEE ATTACHED DOCUMENTATION.

FREQUENCY INFORMATION

How was this service previously reported? 90855

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. 47,000 (Medicare)

Is this service performed by many physicians across the United States? X Yes ___ No

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

CPT Code: 90828

Global Period: XXX

Recommended RVW: 3.15

CPT Descriptor:

Individual psychotherapy, interactive, using play equipment, physical devices, language interpreter, or other mechanisms of non-verbal communication, in an inpatient hospital, partial hospital or residential care setting, approximately 75 to 80 minutes face-to-face with the patient.

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey:

Approximately 75-80 minutes of interactive psychotherapy for a 70-year-old male in hospital with major depressive disorder who has suffered cerebral vascular accident with expressive aphasia and right hemiplegia.

Description of Pre-Service Work: Communicating with other professionals and the patient's family; obtaining and/or reviewing the results of diagnostic and other studies; reviewing the patient's chart; written and telephone reports.

Description of Intra-Service Work: Obtaining (or updating) a history; counseling the patient; writing notes.

Description of Post-Service Work: Arranging for further services; communicating further with other professionals and the patient's family; obtaining and/or reviewing the results of diagnostic and other studies; documenting the services provided; written and telephone reports.

SURVEY DATA:

Specialty: American Psychiatric Association, American Psychological Association, American Academy of Child and Adolescent Psychiatry, American Nursing Association and National Association of Social Workers

Sample Size: 2039

Response Rate (%): 2.89% (59)

Median RVW: 3.20

25th Percentile RVW: 2.67

75th Percentile RVW: 3.65

Low: 1.77

High: 5.00

Median Pre-Service Time: 15

Median Intra-Service Time: 80

25th Percentile Intra-Svc Time: 75

75th Percentile Intra-Svc Time: 80

Low: 55

High: 110

Median Post-Service Time: 15

KEY REFERENCE SERVICE(S):

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
1)	99233	Subsequent hospital care, per day, for the evaluation and management of a patient, which requires at least two of these three key components: a detailed interval history; a detailed examination; medical decision making of high complexity. Usually, the patient is unstable or has developed a significant complication or a significant new problem. Physicians typically spend 35 minutes at the bedside and on the patient's hospital floor or unit.	1.51
2)	99255	Initial inpatient consultation for a new or established patient, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of high complexity. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 110 minutes at the bedside and on the patient's hospital floor or unit.	3.65
3)	99223	Initial hospital care, per day, for the evaluation and management of a patient, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of high complexity. Usually, the problem(s) requiring admissions are of high severity. Physicians typically spend 70 minutes at the bedside and on the patient's hospital floor/unit.	2.99
4)	99245	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 high complexity. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 80 minutes face-to-face with the patient and/or family.	3.43

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

Compare the pre-, intra-, and post-service time and the intensity (mental effort and judgment; technical skill & physical effort; and psychological stress) of the service you are rating to the key reference services listed above.

<u>CPT Code</u>	<u>Median Pre-Time</u>	<u>Median Intra-Time</u>	<u>Median Post-Time</u>	<u>Median Mental Effort and Judgment</u>	<u>Median Technical Skill and Physical Effort</u>	<u>Median Psychological Stress</u>
90828	15	80	15	4	4	4
99233	17.5	57.5	10	4	4	4
99255	15	100	20	4	4	4
99223	10	70	15	4	4	3
99245	10	80	20	4	4	4

ADDITIONAL RATIONALE

For example, if recommended RVUs are based on an alternative method instead of the survey results.

SEE ATTACHED DOCUMENTATION.

FREQUENCY INFORMATION

How was this service previously reported? 90855

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. 1,000 (Medicare)

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

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

CPT Code: 90829

Global Period: XXX

Recommended RVW: 3.32

CPT Descriptor:

Individual psychotherapy, interactive, using play equipment, physical devices, language interpreter, or other mechanisms of non-verbal communication, in an inpatient hospital, partial hospital or residential care setting, approximately 75 to 80 minutes face-to-face with the patient; with medical evaluation and management services.

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey:

Approximately 75-80 minutes of interactive psychotherapy for 70-year-old male in hospital, with major depression who has suffered cerebral vascular accident with expressive aphasia and right hemiplegia. He has also developed unstable blood pressure while on antidepressants. Consider comorbid medical diagnosis, medication evaluation, and antidepressant medications.

Description of Pre-Service Work: Communicating with other professionals and the patient's family; obtaining and/or reviewing the results of diagnostic and other studies; reviewing the patient's chart; written and telephone reports.

Description of Intra-Service Work: Obtaining a history; counseling the patient; writing notes.

Description of Post-Service Work: Arranging for further services; communicating further with other professionals and the patient's family; obtaining and/or reviewing the results of diagnostic and other studies; documenting the services provided; written and telephone reports; medical diagnostic evaluation (e.g., evaluation of comorbid medical conditions, drug interactions, and physical examinations), drug management when indicated, physician orders, and interpretation of laboratory or other medical diagnostic studies and observations.

SURVEY DATA:

Specialty: American Psychiatric Association, American Psychological Association, American Academy of Child and Adolescent Psychiatry, American Nursing Association and National Association of Social Workers

Sample Size: 1131

Response Rate (%): 3.09% (35)

Median RVW: 3.50

25th Percentile RVW: 3.40

75th Percentile RVW: 3.65

Low: 2.40

High: 6.00

Median Pre-Service Time: 12

Median Intra-Service Time: 80

25th Percentile Intra-Svc Time: 75

75th Percentile Intra-Svc Time: 80

Low: 70

High: 90

Median Post-Service Time: 20

KEY REFERENCE SERVICE(S):

	CPT Code	CPT Descriptor	RVW
1)	99245	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 high complexity. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 80 minutes face-to-face with the patient and/or family.	3.43
2)	99255	Initial inpatient consultation for a new or established patient, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of high complexity. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 110 minutes at the bedside and on the patient's hospital floor or unit.	3.65
3)	99223	Initial hospital care, per day, for the evaluation and management of a patient, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of high complexity. Usually, the problem(s) requiring admissions are of high severity. Physicians typically spend 70 minutes at the bedside and on the patient's hospital floor or unit.	2.99
4)	99291	Critical care, evaluation and management of the unstable critically ill or unstable critically injured patient, requiring the constant attendance of the physician; first hour.	4.00

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

Compare the pre-, intra-, and post-service time and the intensity (mental effort and judgment; technical skill & physical effort; and psychological stress) of the service you are rating to the key reference services listed above.

CPT Code	Median Pre-Time	Median Intra-Time	Median Post-Time	Median Mental Effort and Judgment	Median Technical Skill and Physical Effort	Median Psychological Stress
90829	12	80	20	4.5	5	4
99245	10	80	15	4	4	4
99255	15	100	15	4.5	4.5	4
99223	20	70	20	4	4	3.5
99291	7.5	60	20	5	5	5

ADDITIONAL RATIONALE

For example, if recommended RVUs are based on an alternative method instead of the survey results.

SEE ATTACHED DOCUMENTATION.

FREQUENCY INFORMATION

How was this service previously reported? 90855

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. 1,000 (Medicare)

Is this service performed by many physicians across the United States? X Yes ___ No

Psychotherapy Work Survey Reference Services

CPT Code	1997 Descriptor	1997 Work RVU
97770	Development of cognitive skills to improve attention, memory, problem solving, includes compensatory training and/or sensory integrative activities, direct (one on one) patient contact by provider, each 15 minutes.	0.44
99231	Subsequent hospital care, per day, for the evaluation and management of a patient, which requires at least two of these three key components: a problem focused interval history; a problem focused examination; medical decision making that is straightforward or of low complexity. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the patient is stable, recovering or improving. Physicians typically spend 15 minutes at the bedside and on the patient's hospital floor or unit.	0.64
90862	Pharmacologic management, including prescription, use, and review of medication with no more than minimal medical psychotherapy.	0.95
99232	Subsequent hospital care, per day, for the evaluation and management of a patient, which requires at least two of these three key components: an expanded problem focused interval history; an expanded problem focused examination; 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 patient's and/or family's needs. Usually, the patient is responding inadequately to therapy or has developed a minor complication. Physicians typically spend 25 minutes at the bedside and on the patient's hospital floor or unit.	1.06
99214	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 detailed history; a detailed examination; 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 patient's and/or family's needs. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 25 minutes face-to-face with the patient and/or family.	1.10
99238	Hospital discharge day management; 30 minutes or less.	1.28
99203	Office or other outpatient visit for the evaluation and management of a new patient, which requires these three key components: a detailed history; a detailed examination; and medical decision making of low complexity. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are of moderate severity. Physicians typically spend 30 minutes face-to-face with the patient and/or family.	1.34
99383	Initial preventive medicine evaluation and management of an individual including a comprehensive history, a comprehensive examination, counseling/anticipatory guidance/risk factor reduction interventions, and the ordering of appropriate laboratory/diagnostic procedures, new patient; late childhood (age 5 through 11 years).	1.36

Psychotherapy Work Survey Reference Services

CPT Code	1997 Descriptor	1997 Work RVU
99233	Subsequent hospital care, per day, for the evaluation and management of a patient, which requires at least two of these three key components: a detailed interval history; a detailed examination; medical decision making of high complexity. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the patient is unstable or has developed a significant complication or a significant new problem. Physicians typically spend 35 minutes at the bedside and on the patient's hospital floor or unit.	1.51
99384	Initial preventive medicine evaluation and management of an individual including a comprehensive history, a comprehensive examination, counseling/anticipatory guidance/risk factor reduction interventions, and the ordering of appropriate laboratory/diagnostic procedures, new patient; adolescent (age 12 through 17 years).	1.53
99385	Initial preventive medicine evaluation and management of an individual including a comprehensive history, a comprehensive examination, counseling/anticipatory guidance/risk factor reduction interventions, and the ordering of appropriate laboratory/diagnostic procedures, new patient; 18-39 years.	1.53
99215	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 comprehensive history; a comprehensive examination; medical decision making of high complexity. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 40 minutes face-to-face with the patient and/or family.	1.77
99386	Initial preventive medicine evaluation and management of an individual including a comprehensive history, a comprehensive examination, counseling/anticipatory guidance/risk factor reduction interventions, and the ordering of appropriate laboratory/diagnostic procedures, new patient; 40-64 years.	1.88
99204	Office or other outpatient visit for the evaluation and management of a new 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 patient's and/or family's needs. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 45 minutes face-to-face with the patient and/or family.	2.00
99387	Initial preventive medicine evaluation and management of an individual including a comprehensive history, a comprehensive examination, counseling/anticipatory guidance/risk factor reduction interventions, and the ordering of appropriate laboratory/diagnostic procedures, new patient; 65 years and over.	2.06

Psychotherapy Work Survey Reference Services

CPT Code	1997 Descriptor	1997 Work RVU
99222	Initial hospital care, per day, for the evaluation and management of a 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 patient's and/or family's needs. Usually, the problem(s) requiring admission are of moderate severity. Physicians typically spend 50 minutes at the bedside and on the patient's hospital floor or unit.	2.14
90880	Medical hypnotherapy.	2.19
90847	Family medical psychotherapy (conjoint psychotherapy) by a physician, with continuing medical diagnostic evaluation, and drug management when indicated.	2.21
99205	Office or other outpatient visit for the evaluation and management of a new patient, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of high complexity. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's 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.	2.67
90801	Psychiatric diagnostic interview examination including history, mental status, or disposition (may include communication with family or other sources, ordering and medical interpretation of laboratory or other medical diagnostic studies. In certain circumstances other informants will be seen in lieu of the patient.)	2.80
99223	Initial hospital care, per day, for the evaluation and management of a patient, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of high complexity. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the problem(s) requiring admission are of high severity. Physicians typically spend 70 minutes at the bedside and on the patient's hospital floor or unit.	2.99
90820	Interactive medical psychiatric diagnostic interview examination.	3.01
99285	Emergency department visit for the evaluation and management of a patient, which requires these three key components within the constraints imposed by the urgency of the patient's clinical condition and mental status: a comprehensive history ; a comprehensive examination; and medical decision making of high complexity. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are of high severity and pose an immediate significant threat to life or physiologic function.	3.06

Psychotherapy Work Survey Reference Services

CPT Code	1997 Descriptor	1997 Work RVU
99245	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 high complexity. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 80 minutes face-to-face with the patient and/or family.	3.43
99255	Initial inpatient consultation for a new or established patient, which requires these three key components: a comprehensive history; a comprehensive examination; and medical decision making of high complexity. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 110 minutes at the bedside and on the patient's hospital floor or unit.	3.65
92950	Cardiopulmonary resuscitation (eg, in cardiac arrest).	3.80
99291	Critical care, evaluation and management of the unstable critically ill or unstable critically injured patient, requiring the constant attendance of the physician; first hour.	4.00

CPT five-digit codes, two-digit number modifiers, and descriptions only are copyrighted by the American Medical Association. No payment schedules, fee schedules, relative value units, scales, conversion factors, or components thereof are included in CPT. The AMA is not recommending that any specific relative values, fees, payment schedules, or related listings be attached to CPT. Any relative value scales assigned to CPT codes are not those of the AMA, and the AMA is not recommending use of these relative values.

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS

Arteriovenous Regional Chemotherapy Perfusion

A new code, CPT 36823, was developed to reflect *Insertion of arterial and venous cannula(s) for isolated extracorporeal circulation and regional chemotherapy perfusion to an extremity, with or without hyperthermia, with removal of cannula(s) and repair of arteriotomy venotomy sites*. The procedure represents a complex operative procedure frequently performed on patients with extremity lesions.

The procedure involves isolation of the main vascular supply to the arm or leg with cannulation of the artery and vein with this cannulas being used to establish a circuit with a membrane oxygenator perfusion pump (heart-lung machine). A tourniquet is then applied distal to the cannulation sites and the limb perfused with high doses of chemotherapy for a prescribed period (usually one or to hours). After completion of this perfusion period, both the tourniquet and the cannulas are removed and vascular repairs of the vessels are undertaken. The wounds are closed and the patient is taken to the recovery area. This procedure represents a unique combination of a highly invasive surgical procedure with chemotherapy supported by a membrane oxygenator/rofusion device. The procedure was initially described in 1954 but has only become more commonly used since oxygenator/rofusion pumps became available in the 1960's.

The procedure is similar in terms of intensity and work to CPT 35081 *Direct repair of aneurysm, false aneurysm, or excision (partial or total) and graft insertion, with or without patch graft; for aneurysm, false aneurysm and associated occlusive disease, abdominal aorta* (work RVU = 28.00). The intraoperative exposure of vessels and cannulation and repair is also similar to the dissection of major vessels in the groin.

The RUC reviewed the original survey results with particular emphasis on the post-operative care and the number of follow-up visits required after the procedure. It was the consensus that the intra-service time should be slightly decreased. The work

RVU of 21.00 represented the 25th percentile of the survey. The RUC agreed that this number appropriately valued the new procedure. The RUC, therefore, recommends acceptance of 21.00 as the work relative value unit for this new CPT code.

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
•36823	D1	Insertion of arterial and venous cannula(s) for isolated extracorporeal circulation and regional chemotherapy perfusion to an extremity, with or without hyperthermia, with removal of cannula(s) and repair of arteriotomy and venotomy sites	090	21.00

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

(September 1998)

CPT Code: 3682X (D1)

Global Period: 090

Recommended RVW: 28.00

CPT Descriptor: Insertion of arterial and venous cannula(s) for isolated extracorporeal circulation and regional chemotherapy perfusion to an extremity, with or without hyperthermia, with removal of cannulas) and repair of arteriotomy and venotomy sites

Vignette Used in Survey:

A 55-year-old male, two years status post-resection of an intermediate thickness malignant melanoma, returns with multiple in-transit metastases on his right, lower extremity. The patient is medically fit and there is no evidence of other metastatic disease. He is subsequently taken to the OR, where an isolated hyperthermic limb perfusion is performed. The patient is discharged on postoperative day 5.

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 and until the time of the procedure. This activity includes reviewing the previous work-up, including consulting with the referring physician, if necessary, and other health care professionals; and communicating with the patient (and/or the patient's family) to explain the operative risks and benefits and to obtain informed consent. Other preoperative services include scheduling the operation, 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, including selection of appropriate vascular cannulas, preparation and supervision of the extra-corporeal circuit, and associated chemotherapeutic medications. Assessment of patient size is required for optimal chemotherapeutic dose into the perfusion circuit. Measurements and positions of in-transit metastases are documented to facilitate evaluation of response to therapy.

Description of Intra-Service Work:

Under general anesthesia, incisions are made for the exposure of the perfusion vessels, (such as external iliac, femoral or popliteal) then the vessels are encircled with appropriate vascular instrumentation. Cannulas are then placed in position and manipulated beyond the proposed tourniquet site. The cannulas are connected to the perfusion circuit and management of intraoperative anticoagulation is initiated. The tourniquet is applied and perfusion begun. Cannulas frequently require manipulation to insure optimal flow rates. Once this stable perfusion circuit is established, the limb may be warmed to facilitate the chemotherapeutic effect which must be coordinated using sterile tissue warmers, and invasive extremity temperature probes are routinely placed. Appropriate chemotherapeutic drugs are then administered. Evaluation of leakage rates from the perfusion circuit must be assessed. Following completion of the prescribed perfusion dose and time, the tourniquet is removed, as are the cannulas. The arteriotomy and venotomy are repaired. (Note that if nodal dissection is necessary, it is billed separately.) The anticoagulation is then managed with or without reversal, and the wounds are closed in layers over drains.

Description of Post-Service Work:

Post-service work begins after skin closure in the operating room and includes the application of sterile dressings, writing postoperative orders, completing the operative dictation, communicating with family and other health care professionals, and all hospital visits and services performed by the surgeon, wound and drain care, and managing antibiotics and analgesics. Discharge management includes the surgeon's final examination of the patient, education of patient and family regarding drain care and output measurements as well as activity limitations, instructions for continuing care, and preparation of discharge records. Additionally, all post-discharge office visits for 90 days after the day of operation are considered part of the postoperative work for this procedure including removal of sutures and drains, surveillance for complications and perfusion, and antibiotic and/or analgesic adjustments. Assessments of response are mandatory to this procedure.

SURVEY DATA:

Specialty(s): American College of Surgeons
 Type of Sample: Random

Survey n: 24
 Response: 17
 Rate %: 71%

	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	28.00	75	230	30	1	20	4	80	25	4	80
low	15.00		120								
25th%	21.00		180								
75th%	32.44		300								
high	48.00		480								

KEY REFERENCE SERVICE(S):

1998 RVW	Global	CPT	Descriptor
28.01	090	35081	Direct repair of aneurysm, false aneurysm, or excision (partial or total) and graft insertion, with or without patch graft, for aneurysm, false aneurysm, and associated occlusive disease, abdominal aorta
34.25	090	47130	Hepatectomy, resection of liver; total right lobectomy

LOS and Time Estimates (Median)	Mean Intensity/Complexity Measures		
	3682X (D1)	35081	47130
LOS	7	7	8
PRE-service time	75	45	75
INTRA-service time	230	240	240
POST-service time	235	220	248
Mental Effort and Judgment			
The number of possible diagnosis and/or the number of management options that must be considered	3.35	4.25	4.40
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	4.12	4.33	4.20
Urgency of medical decision making	3.13	3.67	3.75
Technical Skill/physical Effort			
Technical skill required	4.65	5.00	5.00
Physical effort required	3.76	4.25	4.80
Psychological Stress			
The risk of significant complications, morbidity and/or mortality	4.53	4.50	4.80
Outcome depends on skill and judgment of physician	4.53	4.75	4.80
Estimated risk of malpractice suit with poor outcome	3.24	4.00	3.60
Time Segments			
PRE-service intensity/complexity	3.41	3.75	4.00
INTRA-service intensity complexity	4.41	4.25	4.80
POST-service intensity complexity	3.41	3.25	3.60

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

3682X (D1) is similar in terms of intensity and work to CPT 35081 (RVW 28.01). The intraoperative exposure of vessels and cannulation and repair is also similar to the dissection of major vessels in the groin. The median RVW of 28.00 is recommended.

ADDITIONAL RATIONALE:

1. Reasonability of low response rate: Regional chemoperfusion was developed in the late 1950's to treat regionally metastatic melanoma. Today, the treatment options for this stage of the disease have changed very little. Patients requiring D1 are referred to one of the half dozen institutions in the United States familiar with the procedure. Although the procedure may have an estimated annual frequency of 1000, only a few surgeons in the country actively perform D1. Consequently, the response rate for D1 is less than 30.

2. IWP/PUT: Based on the survey median times, the recommended RVW of 28.00 results in an IWP/PUT of 0.076, which is a reasonable average intensity for the 230 minutes of intraoperative work.

IWP/PUT calculation:

	Pre-op RVW calc*		Global RVWs for Post-operative Work**									
	eval, posit, etc	scrub, dress, etc	99291 @4.00	99233 @1.51	99232 @1.06	99231 @0.64	99238 @1.28	99215 @1.73	99214 @1.08	99213 @0.65	99212 @0.43	99211 @0.17
min / vis	50	25	0	1	2	3	1	0	0	4	0	0
RVWs	1.12	0.02	0	1.51	2.12	1.92	1.28	0	0	2.60	0	0

*Pre-op standards per Harvard Study: [scrub,dress rvw = time x 0.8 x 0.0103 x 0.988] [eval,posit,etc rvw = time x 2.2 x 0.0103 x 0.988]

**Note, per recent HCFA global RVW adjustments, office visits are not at 100% of face rvw values

Intra-RVW = Recommended RVW - (Pre+Post-op RVW) = 28.00 - 1.14 - 9.43 = 17.43

IWP/PUT = Intra-RVW / Intra-minutes = 17.43 / 230 = 0.076

FREQUENCY INFORMATION**1. How was this service previously reported?**

37799 Unlisted procedure, vascular surgery
96549 Unlisted chemotherapy procedure

2. How often do physicians in your specialty perform this service?

Commonly Sometimes Rarely

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

Approximately 1,000 cases annually.

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

Yes No

American Medical Association

Physicians dedicated to the health of America



Sherry L. Smith
Director
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Memo to: RUC Members

From: Sherry Smith *Sherry Smith*

Date: December 3, 1998

Subject: RUC Comment Letter and RUC Recommendations

Attached for your review are the draft RUC letter to HCFA on the 1999 Medicare Physician Payment Schedule and the RUC recommendations from the September 1998 RUC meeting. Please review both documents and fax any changes to (312) 464-5849 by December 16, 1998. If you have any questions or comments you would like to discuss regarding the HCFA comment letter, please call Patrick Gallagher at (312) 464-4738. To discuss the RUC recommendations please call Jill Zanutto at (312) 464-4820.

American Medical Association

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

515 North State Street
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312 464-5849 Fax

December 21, 1998

Nancy Ann Min-DeParle, JD
Administrator
Health Care Financing Administration
Department of Health and Human Services
Room 309-G
Hubert H. Humphrey Building
200 Independence Avenue, SW
Washington, DC 20201

Attn: HCFA-1006-P

Subject: Medicare Program; Revisions to Payment Policies Under the Physician Fee Schedule for Calendar Year 1999

Dear Ms. DeParle:

The American Medical Association/Specialty Society RVS Update Committee (RUC) is pleased to provide comments on the Final Rule for revisions to payment policies under the physician payment schedule for calendar year 1998, published in the *Federal Register* on November 2, 1999. This Rule establishes policy changes affecting Medicare payments for physicians' services as a result of resource-based practice expense relative value units (RVUs), in addition to several other payment policy changes.

The RUC appreciates HCFA including the RUC as one of the organizations to provide recommendations during the practice expense refinement period and beyond. We understand that most comments on the November 2, 1998 Final Rule supported using the RUC process to refine practice expense RVUs. The RUC has followed closely the development of resource-based practice expenses over the past several years and has had extensive discussions since September 1997 on a potential role. The RUC now believes that it is the organization that should assume responsibility for developing recommendations to the Health Care Financing Administration (HCFA) on refining and updating practice expense relative values. Specifically, the RUC has agreed to provide recommendations on refining the Clinical Practice Expert Panel (CPEP) data, the practice expense per hour data, and the physician time data. The RUC will also examine other refinement issues involving the general methodology utilized to calculate practice expense RVUs. Additionally, the RUC has established a process for collecting direct input data for new and revised codes which HCFA can use in its calculations of practice expense RVUs.

General Methodology

HCFA's use of the "top-down" methodology relies heavily on the specialty practice cost data derived from the AMA Socioeconomic Monitoring Survey (SMS) to calculate practice expense pools and also on CPEP data to assign practice expenses among individual codes. We understand that many aspects of the "top-down" methodology will be examined during the refinement period and the RUC is committed to developing recommendations that will enhance this methodology so that practice expense RVUs are based on reliable cost data.

We are pleased that HCFA has chosen to maintain practice expense RVUs interim throughout the refinement process. Given the large number of unresolved issues that HCFA has deferred to the refinement process, it is imperative that specialty societies and the RUC have sufficient time to correct data errors and refine the methodology. As the RUC begins the refinement process, it is also imperative that the RUC have full access to the data HCFA used in generating the new practice expense values. Currently, HCFA has utilized complex programming involving very large data files, where some of the critical details of the methodology utilized is still unknown. Additionally, any delays in fee schedule updates due to the year 2000 computer problem will slow down the refinement process and therefore may require practice expense RVUs to remain interim for a longer period of time.

Creation of Technical Component Cost Pool

HCFA created a separate technical services cost pool for codes without a work relative value, such as many radiology and pathology services. HCFA transferred the costs for this technical pool from specialty costs pools which contain codes without a work RVU. HCFA then allocated costs according to the current charge based relative value units. The RUC is concerned about the use of this methodology which had not been previously proposed or subject to public comment by the affected specialties. The RUC will make it a priority to review the CPEP data associated with these procedures so that the practice expenses for these codes can be resource based just like all other codes.

Refinement of the CPEP Data

On November 21, 1998 the RUC established the Practice Expense Advisory Committee (PEAC), a subcommittee of the RUC to be directly charged with refining the CPEP data. All of the issues identified by HCFA in the Final Rule relating to the CPEP data will be addressed by the PEAC. The PEAC will report to the RUC, which will make final recommendations to HCFA. The PEAC composition will mirror the RUC and include additional representation from the American Nurses Association, the American Academy of Physician Assistants, and the Medical Group Management Association. Other seats will be added as necessary to bring in the expertise of office managers and accountants. The PEAC will include one representative from each of the following organizations:

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American Academy of Ophthalmology
American Academy of Orthopaedic Surgeons
American Academy of Otolaryngology – Head and Neck Surgery, Inc.
American Academy of Pediatrics
the American Academy of Physician Assistants
American Association of Neurological Surgeons
American College of Cardiology
American College of Emergency Physicians
American College of Obstetricians and Gynecologists
American College of Physicians
American College of Radiology
American College of Surgeons
American Nurses Association
American Psychiatric Association
American Society of Anesthesiologists
American Society of Internal Medicine
American Society of Plastic and Reconstructive Surgeons
American Urological Association
College of American Pathologists
Medical Group Management Association
Society of Thoracic Surgeons

Also contributing to this refinement process will be 80 members of the RUC Advisory Committee, representing those specialty societies with a seat in the AMA House of Delegates that have elected to participate in the RUC process. Our process will also include input from the Health Care Professionals Advisory Committee, which represents audiologists, chiropractors, nurses, occupational therapists, optometrists, physical therapists, physician assistants, podiatrists, psychologists, social workers, and speech pathologists.

The RUC requests that HCFA share all comments it wishes to have reviewed regarding changes to the CPEP data with the RUC as soon as possible. The PEAC will convene on February 4, 1999 for an organizational meeting and is expected to begin its work soon thereafter. The RUC will hear a report with the PEAC's first set of recommendations in late April. With the RUC's approval, these recommendations will be submitted to HCFA in May.

Refinement of Practice Expense/Hour Data

The practice expense/hour data are based on the AMA SMS survey. The AMA has stated that these data were never collected for the purpose of developing relative values and has identified three potential problems with the use of these data for this purpose:

- The sample sizes for some specialties are too small to permit separate calculation of expense data from SMS. Even among the larger specialties, the inherent variability of the expense data will mean that the average expense figures provided will be subject to significant sampling error.
- The response rates for the expense items tend to be low relative to other questions on the survey leading to potential non-response bias.
- The SMS is a physician-level survey and physicians in group practices are asked for their share of expenses rather than the practice's expenses. Practice-level data may provide a better basis for constructing practice expense RVUs.

Although the SMS survey was not originally designed for the purpose of constructing practice expense RVUs, HCFA has made it clear that it intends to use the SMS and will look for improvements during the refinement process. The AMA is already planning modifications to the SMS over the next few years including the development of a practice-based survey to collect data on expenses and other items. The RUC believes that questions should be added to collect data on uncompensated care and non-billable hours, as well as questions pertaining to separately billable supplies and services. The RUC is very interested in providing input to any changes made to the SMS survey and believes that it can provide valuable input to AMA/SMS staff designing these questions. AMA staff responsible for the SMS have met with the RUC several times and will continue to do so during the refinement process.

Some specialties that are currently underrepresented in the SMS data may wish to increase their sample size by participating in an over-sample in a future SMS survey. While this approach is an attempt to overcome one of the identified limitations with the current survey, HCFA has not yet indicated that it will accept the data from oversamples of the SMS survey. Specifically, the RUC is very concerned that HCFA did not incorporate in the Final Rule the results of an oversample conducted for the Society of Thoracic Surgeons according to the SMS survey protocol. The RUC urges HCFA to consider these data and develop a clear policy regarding acceptable aggregate practice expense data for calculating practice expense RVUs. Such a policy is needed before additional specialties attempt to fund oversamples of the SMS survey.

Refinement of Physician Time Data

The number of practice expense RVUs assigned to the services performed by a particular specialty are determined by the practice/hour data from the SMS and the physician time data for each of the codes. HCFA utilized the RUC survey data on physician time and the Harvard data for all codes for which the RUC has not evaluated. However, HCFA made several adjustments to the Harvard and RUC data that were not fully explained in either the proposed or final rule. First, since the time data resulting from the refinement of the work relative value units have been on average 25% greater than the time data obtained by the Harvard study for the same services, HCFA has increased the Harvard time data to obtain consistency between the two data sources. Second, HCFA increased the total physician service times of E&M codes to reflect the increases in E&M relative values which occurred during the five-year review. Once HCFA increased the pre and post service times of the E&M codes by 25%, HCFA also increased the time associated with the E&M portion of global surgery codes.

The RUC acknowledges that the RUC physician time data may not be absolutely precise, however the RUC is concerned about the assumptions HCFA used to make these adjustments. The RUC will review HCFA's methodology during the refinement process and provide specific recommendations on the appropriateness of the adjustments. Additionally, the RUC will review comments from specialty societies that have already informed HCFA that their time data might be incorrect.

Development of Practice Expense RVUs for New/Revised Codes

The RUC has discussed at length its desire to provide HCFA with recommendations on practice expenses for new/revised codes. The RUC has agreed that, as the RUC reviews new or revised codes for the work component, it will also consider the direct practice expense inputs for these services. The RUC will begin this review in February and has designed a new survey instrument to collect this data. Since many aspects of the methodology for assigning indirect costs to individual codes will undergo changes during refinement, it is impractical at this time for the RUC to make recommendations on practice expense RVUs. Until the overall methodology becomes more definitive, the RUC will limit its recommendations for new and revised codes to the direct inputs required to perform a service which HCFA can then use to calculate practice expense RVUs. Additionally, due to possible alterations to the practice expense allocation methodology, the RUC recommends that all new/revised codes that receive practice expense RVUs during the refinement process be considered interim and that specialties be afforded an opportunity to refine their code level cost data during the refinement process.

Multiple Procedure Reduction

HCFA stated in the Final Rule that "Although we have not made a specific proposal with respect to multiple procedures thus far, we may do so in the future. We continue to believe

there are efficiencies when more than one service is performed during a single encounter." The RUC strongly opposes HCFA's assumption that lower practice costs are realized when more than one service is performed during a patient encounter. Until resource cost data are provided showing that physician practice expenses are reduced when multiple procedures are performed during a patient visit, there is no basis for applying a multiple procedure reduction. Currently, there is no practice expense cost data which demonstrates such practice costs savings resulting from providing multiple procedures.

Safety Issues

Several specialty societies have commented to HCFA that some codes were assigned nonfacility practice expense RVUs even though it is generally perceived that it is not safe to perform these services in the office. HCFA stated in response that it "would need more data to demonstrate that performing these service in the office is not appropriate before we would eliminate the non facility RVUs." The RUC urges HCFA to accept any information it receives from specialty societies about the appropriate clinical setting for procedures. Specialty societies are in an excellent position to provide HCFA with recommendations on which procedures should only be performed in an inpatient setting.

For example, the American Urological Association (AUA) has identified several codes for which HCFA has assigned nonfacility practice expense RVUs, yet in the AUA's opinion these procedures should not be performed in an office setting. A procedure such as a code 52240, cystourethroscopy with fulguration and or resection of large bladder tumor(s) should not be performed in the office because it requires the resources available in a major hospital, such as anesthesia machines, anesthesiologists, registered nurses, recovery rooms and access to the supporting facilities of all major medical specialties.

Uncompensated Care

As mentioned earlier, the AMA is examining adding questions to the SMS survey to collect data on uncompensated care since uncompensated is recognized as a legitimate practice expense category. Such data, applicable to all specialties, are especially pertinent to emergency physicians, who provide significant amounts of uncompensated services. The RUC urges HCFA to recognize the practice expenses involved in providing uncompensated care and include these practice expenses in HCFA's practice expense methodology.

Nancy Ann Min-DeParle, JD
December 21, 1998
Page 7

RUC Recommendations for 1999

The RUC appreciates HCFA's acceptance of 93% of the RUC's recommendations on work relative values. Several codes for CPT 1999 were examined at the September 1998 RUC meeting and the RUC's recommendations for these codes are attached to this letter for HCFA's consideration.

Thank you for the opportunity to participate in the RBRVS update process and to comment on this important issue. We look forward to further discussions with you on the RUC's involvement in the numerous issues related to refining and updating the practice expense relative value units.

Sincerely,


James G. Hoehn, MD

cc: RUC Participants

American Medical Association

Physicians dedicated to the health of America



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DRAFT

December 18, 1998

Nancy Ann Min-DeParle, JD
Administrator
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Department of Health and Human Services
Room 309-G
Hubert H. Humphrey Building
200 Independence Avenue, SW
Washington, DC 20201

Attn: HCFA-1006-P

Subject: Medicare Program; Revisions to Payment Policies Under the Physician Fee Schedule for Calendar Year 1999

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The RUC appreciates HCFA including the RUC as one of the organizations to provide recommendations during the refinement period and beyond. We understand that most comments on the November 2, 1998 Final Rule supported using the RUC process to refine practice expense RVUs. The RUC has followed closely the development of resource-based practice expenses over the past several years and has had extensive discussions since September 1997 on a potential role. The RUC now believes that it is the organization that should assume responsibility for developing recommendations to the Health Care Financing Administration (HCFA) on refining and updating practice expense relative values. Specifically, the RUC has agreed to provide recommendations on refining the Clinical Practice Expert Panel (CPEP) data, the practice expense per hour data, and the physician time data. The RUC will also examine other refinement issues involving the general methodology utilized to calculate practice expense RVUs. Additionally, the RUC has established a process for collecting direct input data for new and revised codes which HCFA can use in its calculations of practice expense RVUs.

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of the "top-down" methodology will be examined during the refinement period and the RUC is committed to developing recommendations which will enhance this methodology so that practice expense RVUs are based on reliable cost data.

We are pleased that HCFA has chosen to keep practice expense RVUs interim throughout the refinement process. Given the large number of unresolved issues which HCFA has deferred until the refinement process, it is imperative that specialties and the RUC have sufficient time to correct data errors and refine the methodology. Additionally, any delays in fee schedule updates due to the Y2K problem will slow down the refinement process and therefore require practice expense RVUs to remain interim for a longer period of time.

Refinement of the CPEP Data

On November 21, 1998 the RUC established the Practice Expense Advisory Committee (PEAC), a subcommittee of the RUC to be directly charged with refining the CPEP data. All of the issues identified by HCFA in the Final rule relating to the CPEPE data will be addressed by the PEAC. The PEAC will report to the RUC, which will make final recommendations to HCFA. The PEAC composition would mirror the RUC and include additional representation from the American Nurses Association, the American Academy of Physician Assistants, the Medical Group Management Association. Other seats will be added as necessary to bring in the expertise of office managers and accountants. The PEAC would include one representative from the following organizations:

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the American Academy of Physician Assistants
American Association of Neurological Surgeons
American College of Cardiology
American College of Emergency Physicians
American College of Obstetricians and Gynecologists
American College of Physicians
American College of Radiology
American College of Surgeons
American Nurses Association
American Psychiatric Association

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American Society of Anesthesiologists
American Society of Internal Medicine
American Society of Plastic and Reconstructive Surgeons
American Urological Association
College of American Pathologists
Medical Group Management Association
Society of Thoracic Surgeons

Also contributing to this refinement process will be 80 members of the RUC Advisory Committee, representing those specialty societies with a seat in the AMA House of Delegates who have elected to participate in the RUC process. Our process will also include input from the Health Care Professionals Advisory Committee, which represents audiologists, chiropractors, nurses, occupational therapists, optometrists, physical therapists, physician assistants, podiatrists, psychologists, social workers, and speech pathologists.

The RUC requests that HCFA share all comments it wishes to have reviewed regarding changes to the CPEP data with the RUC as soon as possible. The PEAC will convene on February 4, 1999 for an organizational meeting and is expected to begin its work in late March or early April. The RUC will hear a report with the PEAC's first set of recommendations in late April. With the RUC's approval, these recommendations will be submitted to HCFA in May.

Refinement of Practice Expense/Hour Data

The practice expense/hour data are based on the AMA SMS survey. The AMA has stated that these data were never collected for the purpose of developing relative values and has identified three potential problems with the use of these data for this purpose:

- The sample sizes for some specialties will be too small to permit separate calculation of expense data from SMS. Even among the larger specialties, the inherent variability of the expense data will mean that the average expense figures provided will be subject to significant sampling error.
- The response rates for the expense items tend to be low relative to other questions on the survey leading to potential non-response bias.
- The SMS is a physician-level survey and physicians in group practices are asked for their share of expenses rather than the practice's expenses. Practice-level data may provide a better basis for constructing practice expense RVUs.

Although the SMS survey was not originally designed for the purpose of constructing practice expense RVUs, HCFA has made it clear that it intends to use the SMS and will look for improvements during the refinement process. The AMA is already planning modifications to the SMS over the next few years that will improve its appropriateness for this methodology and the RUC is very interested in providing input to any changes made to the SMS survey. For example, questions may be added to collect data on uncompensated care and non-billable hours, as well as questions pertaining to

separately billable supplies and services. The RUC believes that it can provide valuable input to AMA staff designing these questions. AMA staff responsible for the SMS have met with the RUC several times and will continue to do so during the refinement process.

Some specialties that are currently underrepresented in the SMS data may wish to increase their sample size by participating in an over-sample in a future SMS survey. While this approach is an attempt to overcome one of the identified limitations with the current survey, HCFA has not yet indicated that it will accept the data from oversamples of the SMS survey. Specifically, the RUC is concerned that HCFA did not incorporate in the Final Rule the results of an oversample conducted for the Society of Thoracic Surgeons. Before additional specialties attempt to fund oversamples of the SMS survey, HCFA needs to develop a clear policy regarding what aggregate practice expense data is acceptable for calculating practice expense RVUs.

Refinement of Physician Time Data

The number of practice expense RVUs assigned to the services performed by a given specialty is determined by the practice/hour data from the SMS and the physician time data for each of the codes. HCFA utilized the RUC survey data on physician time and the Harvard data for all codes for which the RUC has not evaluated. However, HCFA made several adjustments to the Harvard and RUC data which were not fully explained in either the proposed or final rule. First, since the time data resulting from the refinement of the work relative value units have been on average 25% greater than the time data obtained by the Harvard study for the same services, HCFA has increased the Harvard time data to obtain consistency between the two data sources. Second, HCFA increased the total physician service times of E&M codes to reflect the increases in E&M relative values which occurred during the five-year review. Once HCFA increased the pre and post service times of the E&M codes by 25%, HCFA also increased the time associated with the E&M portion of global surgery codes.

The RUC acknowledges that the RUC physician time data may not be absolutely precise, however the RUC is concerned about the assumptions HCFA used to make these adjustments. The RUC will review HCFA's methodology during the refinement process and provide specific recommendations on the appropriateness of the adjustments. Additionally, the RUC will review comments from specialty societies that have already informed HCFA that their time data might be incorrect.

Development of Practice Expense RVUs for New/Revised Codes

The RUC has discussed at length its desire to provide HCFA with recommendations on practice expenses for new/revised codes. The RUC has agreed that as the RUC reviews new or revised codes for the work component, the committee will also consider the direct practice expense inputs for these services. The RUC will begin this review in February and has designed a new survey instrument to collect this data. Since many aspects of the methodology for assigning indirect costs to individual codes will undergo changes during refinement, it is impractical at this time for the RUC to make recommendations on practice expense RVUs. Until the overall methodology becomes more definitive, the RUC will limit its recommendations for new and revised codes to the direct inputs required to perform a service which HCFA can then use to calculate practice expense RVUs. Additionally, due to possible alterations to the practice expense allocation methodology, the RUC recommends that all

new/revised codes which receive practice expense RVUs during the refinement process be considered interim and that specialties be afforded an opportunity to refine their code level cost data during the refinement process.

Multiple Procedure Reduction

HCFA stated in the Final Rule that "Although we have not made a specific proposal with respect to multiple procedures thus far, we may do so in the future. We continue to believe there are efficiencies when more than one service is performed during a single encounter." The RUC strongly opposes HCFA's assumption that lower practice costs are realized when more than one service is performed during a patient encounter. Until resource cost data are provided showing that physician practice expenses are reduced when multiple procedures are performed during a patient visit, there is no basis for applying a multiple procedure reduction. Currently, there is no practice expense cost data which demonstrates such practice costs savings resulting from providing multiple procedures.

Safety Issues

Specialty Societies have commented to HCFA that some codes were assigned nonfacility practice expense RVUs even though it is not safe to perform these services in the office. HCFA stated in response that it "would need more data to demonstrate that performing these service in the office is not appropriate before we would eliminate the non facility RVUs." The RUC urges HCFA to accept any information it receives from specialty societies about the appropriate clinical setting for procedures. Specialty societies are in the best position to provide HCFA with recommendations on which procedures should only be performed in an inpatient setting.

For example, the American Urological Association (AUA) has identified several codes which HCFA has assigned nonfacility practice expense RVUs, yet in the AUA's opinion these procedures should not be performed in an office setting. A procedure such as a cystoscopy should not be performed in the office because it requires the resources available in a major hospital, such as anesthesia machines, anesthesiologists, registered nurses, recovery rooms and access to the supporting facilities of all major medical specialties. Maintaining non-facility PE RVUs for codes such as this - which are appropriately performed in licensed surgical facilities - does not accurately reflect urological practice patterns, and could possibly lead to inappropriate patient care.

RUC Recommendations for 1999

The RUC appreciates HCFA's acceptance of 93% of the RUC's recommendations on work relative values. Several codes for CPT 1999 were examined at the September 1998 RUC meeting and the RUC's recommendations for these codes are attached to this letter for HCFA's consideration.

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Thank you for the opportunity to participate in the RBRVS update process and to comment on this important issue. We look forward to further discussions with you on the RUC's involvement in the numerous issues related to refining and updating the practice expense relative value units

Sincerely,

James G. Hoehn, MD

cc: RUC Participants

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS

Laparoscopic Procedures (Adrenalectomy, Splenectomy, Jejunostomy)

Adrenalectomy

CPT code 56321 was established to describe the procedure: *Laparoscopy, surgical: with adrenalectomy, partial or complete, or exploration of adrenal gland with or without biopsy, transabdominal, lumbar or dorsal*. Laparoscopy is not a new technology, but the application of this methodology to adrenalectomy is relatively new and was first reported in 1992.

CPT code 60540 *Adrenalectomy, partial or complete, or exploration of adrenal gland with or without biopsy, transabdominal, lumbar or dorsal (separate procedure) (work RVU = 17.03)* was used as a comparison code when evaluating the potential work relative value for the new code. CPT 56321 is more technically complex than an open adrenalectomy (CPT 60540). The laparoscopic suturing is made more difficult because of the lack of two-dimensional vision. With an open procedure, the surgeon has both the advantages of tactile information, as well as the ability to view the operative field from more than one restricted view. Similarly, the work need to repair bleeding and suturing of structures is increased due to the more complex and time consuming methods required of laparoscopic suturing.

The RUC evaluated the intensity and complexity measures for the laparoscopic and open adrenalectomy procedures and the differences in intra-operative times. It was the consensus that the work of a laparoscopic adrenalectomy was greater than that for an open procedure. In addition, the RUC reviewed the time intensity/complexity measures and agreed that the work of a laparoscopic adrenalectomy was more closely related to CPT code 43631 *Gastrectomy, partial, distal; with gastroduodenostomy* (work RVU = 19.66). This value is similar to the RVU for a gastrectomy and also represents the additional intra-operative time for a laparoscopic adrenalectomy versus the open adrenalectomy.

The RUC recommends a work relative value of 20.0 for CPT 56321.

Splenectomy

A CPT code (56345) *Laparoscopy, surgical; splenectomy* was developed in 1997 and has since that time been carrier priced. In 1998, the RUC reviewed survey data for this procedure code and was able to establish an appropriate work relative unit. CPT code 56345 was developed to adequately reflect new technology and equipment. These components are utilized to reduce postoperative pain and length of hospitalization.

As part of its analysis, the RUC considered existing CPT code 38100 *Splenectomy, total (separate procedure)*(work RVU= 13.01). CPT code 38100 describes an “open” procedure. For CPT code 56345, the intraoperative intra time is longer than that for CPT 38100 due to the maceration and tedious removal process of the spleen through laparoscopic equipment. Laparoscopic suturing is made more difficult due to the lack of two-dimensional vision and visualization of intra-abdominal structures in the left upper quadrant. With an open procedure, surgeons have both the advantage of tactile information, and the ability to view the operative field from more than one restricted view. Similarly, the work performed to stop bleeding and suturing of structures is increased due to the more complex and time consuming methods required for laparoscopic suturing.

The RUC recommends a work relative value unit of 17.00. Th is value represents the 75th percentile of the survey data. This value takes into count 90 minutes if additional intraoperative time and one less hospital day for the laparoscopic procedures versus the open procedure (CPT 31800).

Jejunostomy

Similar to CPT code 56345, *Laparoscopy, surgical: jejunostomy (eg for decompression or feeding)* (CPT 56347) was developed in 1997 and has been valued independently by individual carriers since its inception in 1998. This code also incorporates new equipment and technology which reduce patient pain and length of hospital stay.

CPT code 44300 *Enterostomy or cecostomy, tube (eg for decompression or feeding) (separate procedure)*(work RVU = 8.88) was used as a comparison code in the RUC process. The RUC reviewed survey information and agreed that new CPT code 56347 required more work, technical skill and effort introducing and manipulating the equipment within multiple, separate

trocar sites. As with the other two laparoscopic procedures previously detailed, the suturing for the surgical jejunostomy is more difficult due to the lack of two dimensional vision.

The RUC recommends a work relative value unit of 9.78 for CPT code 56347. This value represents the median survey result by physicians.

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
•56321	E1	Laparoscopy, surgical; with adrenalectomy, partial or complete, or exploration of adrenal gland with or without biopsy, transabdominal, lumbar or dorsal	090	20.00
56345	P7	Laparoscopy, surgical; splenectomy	090	17.00
56347	P4	Laparoscopy, surgical; jejunostomy (eg, for decompression or feeding)	090	9.78

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

(September 1998)

CPT Code: ⁵⁶³²¹
5633X (E1)

Global Period: 090

Recommended RVW: 20.00

CPT Descriptor: Laparoscopy, surgical; with adrenalectomy, partial or complete, or exploration of adrenal gland with or without biopsy, transabdominal, lumbar or dorsal

Vignette Used in Survey:

A 45-year-old male has poorly-controlled hypertension despite multi-drug therapy. Biochemical and imaging evaluations reveal a 3.5 cm pheochromocytoma of the right adrenal gland, and he is referred for consideration of adrenalectomy. Work-up has also disclosed mild hypertensive cardiomyopathy. After a discussion of the risks and benefits of adrenalectomy through both laparoscopic and open techniques, he desires to proceed with operation, preferably laparoscopically. Outpatient preparation with phenoxybenzamine is begun, and beta-blockade is later added for persistent ectopy. He is admitted the evening before operation for conversion to intravenous antihypertensive and beta-blocking agents and for hemodynamic monitoring during mechanical bowel preparation. Under general endotracheal anesthesia, using multiple laparoscopic ports and a lateral transperitoneal approach, the tumor-bearing right adrenal gland is identified. The gland is mobilized intact from surrounding tissues, with particular attention to avoid avulsion of the adrenal vein from the inferior vena cava, while coordinating operative activities with the anesthesiologist to minimize blood pressure lability. Adrenalectomy is completed laparoscopically. Final histopathology returns pheochromocytoma confined to the adrenal gland. He requires two ICU days for management of vasoactive and anti-arrhythmic medications. He is transferred to the floor on postoperative day two and is discharged to home on postoperative day four.

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 initial incision. The day prior to operation, the patient is admitted for conversion from oral antihypertensive and beta-blocking agents to intravenous infusions. Because of the risk of catecholamine crisis, mechanical bowel preparation is also accomplished in a monitored setting. Appropriate orders are written and the immediate potassium supplementation for patients with primary hyperaldosteronism or preoperative steroid supplementation for patients with Cushing's syndrome and those undergoing bilateral adrenalectomy.) The preoperative work-up is reviewed with particular attention to CT, MIBG, and other localizing studies. Patient and family questions are answered. On the day of operation, after changing to scrub clothes, the surgeon meets the patient in the Operating Room. After observing the induction of anesthesia, which may be lengthy to place invasive monitoring devices and to avoid hypertensive crisis, the surgeon supervises insertion of a nasogastric sump tube and Foley bladder catheter. The surgeon oversees lateral decubitus positioning of the patient, ensuring that all pressure points are properly padded to avoid neuropraxia. (Particular care in positioning is required with Cushing's syndrome patients because of disease-related skin friability.) The surgeon oversees application of lower extremity intermittent pneumatic compression devices. The surgeon verifies with the nursing staff that all necessary surgical instruments and supplies are readily available in the operative suite (eg, trans-laparoscopic and transcutaneous sonography equipment for the posterior retroperitoneal approach, ultrasonic scissors and aspirator for Cushing's syndrome patients). The surgeon scrubs and gowns. The abdomen is draped for both laparoscopic and potential open access.

Description of Intra-Service Work:

A short transverse incision is made lateral to the edge of the right rectus muscle below the costal margin and carried down to the peritoneum, which is then opened under direct vision. A 10-12 mm port is secured through a purse-string suture at this site. Low flow carbon dioxide insufflation is started and converted to high flow when peritoneal insufflation is confirmed; a pressure of about 15 torr is reached and maintained. The videolaparoscope is then inserted through the port. A second port is inserted in the anterior axillary line, under observation through the videolaparoscope, followed by a third port in the midaxillary line. Diagnostic (surgical) laparoscopic evaluation of the peritoneal cavity is performed. The operating table is hyperextended at the patient's waist to aid exposure. The right colon and right lobe of the liver are mobilized by dividing peritoneal ligaments as needed. Instruments are placed for liver retraction. The anesthesiologist is informed that peri-adrenal dissection is about to begin, so that prompt intervention for catecholamine crisis can be instituted as needed. The retroperitoneal space is opened overlying the superior aspect of the kidney and the adrenal gland, and an additional port is inserted in the posterior axillary line. After identification by inspection, the adrenal gland is mobilized by a combination of sharp and blunt dissection. (Adrenal gland visualization may be difficult in obese patients, particularly with Cushing's syndrome, and may require transcutaneous or laparoscopic ultrasonography in addition to considerable dissection). Hemostatic clips are placed and vessels divided as needed, with particular care being taken not to avulse the adrenal veins from the inferior vena cava. All adrenal attachments except the main adrenal vein are divided, and the anesthesiologist is notified that adrenalectomy is nearly complete so that preparations may be made to treat any post-tumor-removal hypotension. The adrenal vein is multiply clipped on either side of the proposed point of transection or is divided with a laparoscopic stapler, again with great care not to injure the inferior vena cava. A specimen bag is introduced through a port and the adrenal is placed within it. The bag is then withdrawn through a port if the specimen size permits. (If the specimen is large, one of the port sites can be enlarged just prior to the conclusion of the procedure and the bag extracted through that site.) The operative field is irrigated with care to avoid dislodging clips by irrigation or suction. Adequate hemostasis is confirmed, including specific visualization of the residual clipped/stapled end of the adrenal vein. The port sheaths are sequentially removed under observation through the videolaparoscope, then the final port is removed; fascia is closed at the port sites as needed. All skin sites are closed with subcuticular sutures.

Description of Post-Service Work:

Post-service work begins after skin closure in the operating room and includes the application of sterile dressings, writing postoperative orders, completing the operative dictation, communicating with family and other health care professionals, and all hospital visits and services performed by the surgeon, including ICU care and ventilator management as needed (particularly for pheochromocytoma patients and for cases of advanced Cushing's syndrome), as well as ordering and reviewing postoperative radiographs and laboratory studies, wound and drain care, and managing analgesics. Discharge day management includes the surgeon's final examination of the patient, instructions for outpatient follow-up including coordination with referring physicians, preparation of discharge records, confirming arrangements for outpatient testing following removal of hormone secreting tumors, and finalizing the program for outpatient weaning of antihypertensives, potassium supplements, aldosterone antagonists, or steroids. Additionally, all post-discharge office visits for the first 90 days after the day of operation are considered part of the postoperative work for this procedure including removal of sutures, ordering and evaluating periodic imaging and laboratory reports, and/or analgesic adjustments.

SURVEY DATA:

Specialty(s): American College of Surgeons
 Type of Sample: Random

Survey n:	45					ICU		Hosp. - Other		Dischg day total min	Office		
Response:	32		PRE total min	INTRA total min	Same day total min	# visits	total min	# visits	total min		# visits	total min	
Rate %:	71%	RVW											
		MED	20.00	70	180	30	1	30	2	40	25	2	30
		low	17.03		90								
		25th%	18.50		150								
		75th%	22.25		210								
		high	37.00		270								

KEY REFERENCE SERVICE(S):

1998 RVW	Global	CPT	Descriptor
19.66	090	43631	Gastrectomy, partial, distal; with gastroduodenostomy
17.03	090	60540	Adrenalectomy, partial or complete, or exploration of adrenal gland with or without biopsy, transabdominal, lumbar or dorsal (separate procedure);

LOS and Time Estimates (Median)	Mean Intensity/Complexity Measures		
	5633X (E1)	60540	43631
LOS	4	5	5
PRE-service time	70	60	45
INTRA-service time	180	130	180
POST-service time	155	173	160
Mental Effort and Judgment			
The number of possible diagnosis and/or the number of management options that must be considered	4.33	3.83	3.29
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	4.40	3.89	3.40
Urgency of medical decision making	3.70	3.56	3.40
Technical Skill/physical Effort			
Technical skill required	4.73	3.79	3.43
Physical effort required	4.00	3.50	3.50
Psychological Stress			
The risk of significant complications, morbidity and/or mortality	4.43	3.63	3.57
Outcome depends on skill and judgment of physician	4.60	4.00	3.80
Estimated risk of malpractice suit with poor outcome	3.60	3.44	3.40
Time Segments			
PRE-service intensity/complexity	4.00	3.67	3.20
INTRA-service intensity complexity	4.70	4.00	3.00
POST-service intensity complexity	3.50	3.33	3.20

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

5633X (E1) is more technically complex than an open adrenalectomy (CPT 60540). Laparoscopic suturing is made more difficult because of the lack of two dimensional vision. With an open procedure, the surgeon has both the advantage of tactile information, as well as the ability to view the operative field from more than one restricted view. Similarly, the work needed to take care of bleeding and suturing of structures is increased due to the more complex and time consuming methods required for laparoscopic suturing.

The survey intensity and complexity average measures for the laparoscopic and open adrenalectomy procedures and the difference in intraoperative time indicate that the survey respondents believed that the work of a laparoscopic adrenalectomy is greater than the open procedure. In addition, the time and intensity/complexity measures indicate that the work of a laparoscopic adrenalectomy is more closely related to a gastrectomy (CPT 43631). The median RVW of 20.00 is recommended. This value is similar to the RVW for a gastrectomy and takes into account the additional intraoperative time for a laparoscopic adrenalectomy versus the open adrenalectomy.

ADDITIONAL RATIONALE (eg, if recommended RVUs are based on an alternative method instead of the survey results):

IWPUT calculation for global procedure:

	Pre-op RVW calc*		Global RVWs for Post-operative Work**									
	eval, posit, etc	scrub, dress, etc	99291 @4.00	99233 @1.51	99232 @1.06	99231 @0.64	99238 @1.28	99215 @1.73	99214 @1.08	99213 @0.65	99212 @0.43	99211 @0.17
min / vis	45	25	0	1	1	1	1	0	0	2	0	0
RVWs	1.01	0.02	0	1.51	1.06	0.64	1.28	0	0	1.30	0	0

*Pre-op standards per Harvard Study: [scrub,dress rvw = time x 0.8 x 0.0103 x 0.0988] [eval,posit,etc rvw = time x 2.2 x 0.0103 x 0.988]

**Note, per recent HCFA global RVW adjustments, office visits are not at 100% of face rvu values

Intra-RVW = Recommended RVW - (Pre+Post-op RVW) = 20.00 - 6.82 = 13.18

IWPUT = Intra-RVW / Intra-minutes = 13.18 / 180 = 0.073

FREQUENCY INFORMATION

1. How was this service previously reported?

Most are being reported as:

60540 Adrenalectomy, partial or complete, or exploration of adrenal gland with or without biopsy, transabdominal, lumbar or dorsal

The remainder are reported as:

60699 Unlisted procedure, endocrine system

56399 Unlisted procedure, laparoscopy, hysteroscopy

Current code 60540 will be reported by the new code about 30% of the time.

[20% (Mayo Clinic, JA vanHeerden, personal communication) to 100% (Cleveland Clinic, M Gagner, personal communication) of calendar year 1995 adrenalectomies were completed laparoscopically. Using an average value for these and other large series of cases yields a maximum of about 60% of adrenalectomies being done laparoscopically. Variations in patient referral patterns and in access to laparoscopic adrenalectomy technology and expertise will result in submaximal current utilization. This percentage should rise toward 60% as experience with this procedure accumulates.]

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?

1994 Medicare Part B data indicate about 1000 patients undergoing adrenalectomy annually. Because hormonally active adrenal tumors are more common in younger patients, about twice as many cases are found in patients <65 years. Thus, after allowing for unresectable cases and for pheochromocytomas discovered only at autopsy, the total volume of adrenalectomies is about 2500-3000/yr. (Overall in USA, pheochromocytoma incidence about 0.8/100,000 person-years annually, Cushing's disease due to primary adrenal causes 0.14/100,000, and adrenocortical carcinoma 1/1-2 million/year)

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

No

CPT Code: 56345 (P7)

Global Period: 090

Recommended RVW: 17.00

CPT Descriptor: Laparoscopy, surgical; splenectomy

Vignette Used in Survey:

A 45-year-old female presented with easy bruisability and a platelet count of 20,000; the diagnosis of idiopathic thrombocytopenic purpura has been made. She is refractory to all forms of medical therapy and is referred for surgical evaluation. The surgical options are discussed and laparoscopic splenectomy performed. The patient is observed closely for bleeding and potential hematologic problems. She is discharged four days postoperatively.

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 cardiopulmonary, gastrointestinal, and hematologic status; reviewing previous CT scans and ultrasounds, pathology and laboratory studies; consulting with the referring physician, if necessary, and other health care professionals; and communicating with the patient (and/or the patient's family) to explain the operative risks and benefits and to obtain informed consent. Other preoperative services include 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:

Diagnostic laparoscopy is performed. The splenic flexure and gastrocolic omentum are mobilized. The spleen is mobilized from the peritoneal attachments, and the hilar vessels and short gastric vessels are ligated and divided. The spleen is placed in a bag, morcellated, and removed. Hemostasis is obtained, and the operative site is observed for bleeding. The trocar sites are inspected after removal of the trocars, and the wounds are closed.

Description of Post-Service Work:

Post-service work begins after skin closure in the operating room and includes the application of sterile dressings. Post-service work also includes monitoring the patient's stability in the recovery room; writing orders; communicating with the family and other health care professionals (including written and oral reports and orders); and all hospital visits and services performed by the surgeon, including ICU care and ventilator management, as necessary; careful monitoring of cardiopulmonary status; ordering and reviewing postoperative radiographs and laboratory studies; monitoring and care of the incision; monitoring, maintenance, and removal of all tubes and drains; and antibiotic and pain medication management. Discharge management includes the surgeon's final examination of the patient, instructions for 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; ordering and evaluating periodic imaging and laboratory reports, if needed; and antibiotic and pain medication adjustments.

SURVEY DATA

Specialty(s): American College of Surgeons
 Type of Sample: Random

Survey n: 42
 Response: 40
 Rate %: 95%

	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	15.55	60	180	30	0	0	3	45	15	2	30
low	13.21		75								
25th%	14.27		150								
75th%	17.00		180								
high	26.02		300								

KEY REFERENCE SERVICE(S):

1998 RVW	Global	CPT	Descriptor
13.01	090	38100	Splenectomy; total (separate procedure)
14.19	090	38115	Repair of ruptured spleen (splenorhaphy) with or without partial splenectomy

LOS and Time Estimates (Median)	Mean Intensity/Complexity Measures		
	56345 (P7)	38100	38115
LOS	4	5	6
PRE-service time	60	60	60
INTRA-service time	180	90	120
POST-service time	120	125	180
Mental Effort and Judgment	4.18	3.44	3.78
Technical Skill/physical Effort	4.75	3.12	4.00
Psychological Stress	4.50	3.06	4.22

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

CPT 56345 (P7) intraoperative intra time is longer than the comparable open procedure (CPT 38100) due to the maceration and tedious removal process of the spleen through the laparoscopic equipment. The search for accessory spleens is more difficult and tedious laparoscopically. Laparoscopic suturing is made more difficult because of the lack of two dimensional vision and visualization of intra-abdominal structures in the left upper quadrant. With an open procedure, the surgeon has both the advantage of tactile information, as well as the ability to view the operative field from more than one restricted view. Similarly, the work needed to take care of bleeding and suturing of structures is increased due to the more complex and time consuming methods required for laparoscopic suturing.

The 75th percentile RVW of 17.00 is recommended. This value takes into account 90 minutes of additional intraoperative time and one less hospital day for the laparoscopic procedure (CPT 56345) versus the open procedure (CPT 38100). The additional rationale below presents the two approaches utilized to validate this recommendation.

ADDITIONAL RATIONALE

Rationales for RVW recommendation of 17.00:

1. IWPUT comparison:

Based on the survey median times, the recommended RVW of 17.00 results in an IWPUT of 0.061, which is a somewhat low, but reasonable "average" intensity for the 180 minutes of intraoperative work.

	Pre-op RVW calc*		"Global Package" RVWs for Post-operative Work									
	eval, posit, etc	scrub, dress, etc	99291 @4.00	99233 @1.51	99232 @1.06	99231 @0.64	99238 @1.28	99215 @1.73	99214 @1.08	99213 @0.65	99212 @0.43	99211 @0.17
min/vis	35	25	0	0	0	4	1	0	0	2	0	0
RVWs	0.78	0.02	0	0	0	2.56	1.28	0	0	1.30	0	0

*Pre-op standards per Harvard Study: [scrub,dress rvw = time x 0.8 x 0.0103 x 0.988] [eval,posit,etc rvw = time x 2.2 x 0.0103 x 0.988]

**Note, per recent HCFA global RVW adjustments, office visits are not at 100% of face rvu values

$$\text{Intra-RVW} = \text{Recommended RVW} - (\text{Pre+Post-op RVW}) = 17.00 - 5.94 = 11.06$$

$$\text{IWPUT} = \text{Intra-RVW} / \text{Intra-minutes} = 11.06 / 180 = 0.061$$

2. RVW & time comparison:

The addition of 4.00-6.00 rvu's for 90 minutes of additional intra-operative time (similar to 90 minutes for ICU codes 99291+99292), minus one hospital visit @0.64, compares well with the difference between the recommended RVW for CPT 56345 and the RVW for the open procedure (CPT 38100).

$$\text{RVU range} = 16.37-18.37 = [13.01 + (4.00 \text{ to } 6.00) - 0.64]$$

FREQUENCY INFORMATION

How was this service previously reported?

CPT 38100 Splenectomy; total (separate procedure)

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?

1996 Medicare utilization data indicate a frequency of approximately 2,000.

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

Yes No

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

(September 1998)

CPT Code: 56347 (P4)

Global Period: 090

Recommended RVW: 9.78

CPT Descriptor: Laparoscopy, surgical; jejunostomy (eg, for decompression or feeding)

Vignette Used in Survey:

A 70-year-old male who has had a previous CVA presented with esophagogastric dysmotility and repeated episodes of pulmonary aspirations. The patient requires enteral feedings for long-term nutritional support. The operation is performed, and the patient is discharged two days postoperatively with instructions on wound care and enteral feeding procedures.

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 cardiopulmonary, gastrointestinal, and hematologic status; reviewing previous CT scans and ultrasounds, pathology and laboratory studies; consulting with the referring physician, if necessary, and other health care professionals; and communicating with the patient (and/or the patient's family) to explain the operative risks and benefits and to obtain informed consent. Other preoperative services include 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:

Under general anesthesia, diagnostic laparoscopy is performed, and the proximal jejunum is identified at the base of the transverse mesocolon. Fifty cm distal to the ligament of Treitz, the antimesenteric wall of the jejunum is grasped, and a purse-string suture is placed. An opening is made in the bowel, and a percutaneously placed small feeding tube is inserted into the bowel, advanced and secured. The jejunum is then sutured to the anterior abdominal wall. Meticulous hemostasis is maintained, trocar sites are observed, and the wounds are closed.

Description of Post-Service Work:

Post-service work begins after skin closure in the operating room and includes the application of sterile dressings. Post-service work also includes monitoring the patient's stability in the recovery room; writing orders; communicating with the family and other health care professionals (including written and oral reports and orders); and all hospital visits and services performed by the surgeon, including ICU care and ventilator management, as necessary; careful monitoring of cardiopulmonary status; ordering and reviewing postoperative radiographs and laboratory studies; monitoring and care of the incision; monitoring, maintenance, and removal of all tubes and drains; obtaining a nutritional assessment and initiating early postoperative enteral feedings; antibiotic and pain medication management. Discharge management includes the surgeon's final examination of the patient, instructions for 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; ordering and evaluating periodic imaging and laboratory reports, if needed; and antibiotic and pain medication adjustments.

SURVEY DATA

Specialty(s): American College of Surgeons
 Type of Sample: Random

Survey n:	42					ICU		Hosp. - Other		Dischg day total min	Office	
Response:	30					#	total min	#	total min		#	total min
Rate %:	71%	RVW	PRE total min	INTRA total min	Same day total min	visits		visits			visits	
		MED 9.78	60	75	15	0	0	2	30	20	2	30
		low 5.50		30								
		25th% 8.89		60								
		75th% 11.11		90								
		high 15.00		120								

KEY REFERENCE SERVICE(S):

1998 RVW	Global	CPT	Descriptor
8.88	090	44300	Enterostomy or cecostomy, tube (eg, for decompression or feeding) (separate procedure)
7.28	090	43830	Gastrostomy, temporary (tube, rubber or plastic) (separate procedure);

LOS and Time Estimates (Median)	Mean Intensity/Complexity Measures		
	56347 (P4)	44300	43830
LOS	4	4	4
PRE-service time	60	40	30
INTRA-service time	75	60	60
POST-service time	100	85	70
Mental Effort and Judgment	2.96	2.58	2.33
Technical Skill/physical Effort	3.58	2.58	2.33
Psychological Stress	3.00	2.26	2.08

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

The overall work of CPT 56347(P4) is most comparable to CPT 44300. CPT 56347 requires more technical skill and effort for introducing and manipulating the equipment within multiple, separate trocar sites. Laparoscopic suturing is made more difficult because of the lack of two dimensional vision. [With an open procedure, the surgeon has both the advantage of tactile information, as well as the ability to view the operative field from more than one restricted view.] Similarly, the work needed to take care of bleeding and suturing of structures is increased due to the more complex and time consuming methods required for laparoscopic suturing. The median RVW of 9.78 is recommended.

ADDITIONAL RATIONALE:

IWP/PUT calculation:

	Pre-op RVW calc*		Global RVWs for Post-operative Work**									
	eval, posit, etc	scrub, dress, etc	99291 @4.00	99233 @1.51	99232 @1.06	99231 @0.64	99238 @1.28	99215 @1.73	99214 @1.08	99213 @0.65	99212 @0.43	99211 @0.17
min / vis	35	25	0	0	0	3	1	0	0	2	0	0
RVWs	0.78	0.02	0	0	0	1.92	1.28	0	0	1.30	0	0

*Pre-op standards per Harvard Study: [scrub,dress rvw = time x 0.8 x 0.0103 x 0.988] [eval,posit,etc rvw = time x 2.2 x 0.0103 x 0.988]

**Note, per recent HCFA global RVW adjustments, office visits are not at 100% of face rvu values

Intra-RVW = Recommended RVW - (Pre+Post-op RVW) = 9.78 - 5.30 = 4.48

IWP/PUT = Intra-RVW / Intra-minutes = 4.48 / 75 = 0.060

FREQUENCY INFORMATION

How was this service previously reported?

44300 Enterostomy or cecostomy, tube (eg, for decompression or feeding) (separate procedure) global=090

44015 Tube or needle catheter jejunostomy for enteral alimentation, intraoperative, any method (list separately in addition to primary procedure) global=zzz

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?

1996 Medicare utilization data indicate a frequency of approximately 500.

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

 Yes No

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS

Sentinel Node Biopsy

The RUC evaluated proposed work values for new CPT code 38792 *Injection procedure; for identification of sentinel node*. Increased awareness and better understanding of the natural history of various malignancies and results of treatment have led to new concepts about lymph nodes sampling and staging of malignancies, i.e., breast and melanoma. New procedures, such as sentinel node biopsy, are outgrowths of that enhanced understanding. Current CPT terminology did not effectively describe sentinel node biopsy procedures. The addition of code 38792, along with several editorial changes to other related codes, will allow for an accurate description of the service and will provide for additional outcomes tracking.

The RUC considered CPT code 11900 *Injection, intralesional; up to and including seven lesions* (work RVU = .52) when determining an appropriate work value for the new code. It was the consensus that the time and complexity measurements for CPT 38792 were very similar to CPT 11900, and as such, should be valued at a similar rate.

The RUC, therefore, recommends acceptance of .52 as the work relative value unit for CPT code 38792.

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
▲38747	EE2	Abdominal lymphadenectomy, regional, including celiac, <u>gastric, portal, peripancreatic, with or without</u> para-aortic and vena caval nodes (<u>Report List separately</u> in addition to code for primary procedure)	ZZZ	4.89 (No Change)

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CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
▲38790		Injection procedure; for lymphangiography	000	1.29 (No Change)
•38792	EE3	for identification of sentinel node (For excision of sentinel node, see 38500-38542) (For nuclear medicine lymphatics and lymph gland imaging, use 78195)	000	.52
78195		Lymphatics and lymph glands imaging (For sentinel node injection, see 38792) (For sentinel node excision, see 38500 - 38542)	XXX	1.20 (No Change)

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AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

(September 1998)

CPT Code: 3879X (EE3)

Global Period: 000

Recommended RVW: 1.40

CPT Descriptor: Injection procedure; for identification of sentinel node

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey:

A 55-year-old female swimming coach recently underwent wide local excision of a pigmented skin lesion of the upper arm. Final pathology has returned a 1.0 mm thick superficial spreading malignant melanoma. There is no palpable axillary adenopathy or evidence for distant metastasis. Sentinel node biopsy is recommended and she elects to proceed. General anesthesia is induced. Approximately 3 cc of isosulfan is injected intradermally at several sites around the wide excision site. A separately billable sentinel node biopsy is then performed. During observation after injection, her hemodynamics remain stable and there is no physical evidence of local histamine release or other anaphylactic manifestation. *[In responding to this survey, please consider **ONLY** the work for the injection procedure (bolded text above), including any associated pre- and post-procedure work. The work for the node biopsy is separately billable using a different CPT code and should not be considered for this survey.]*

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

Description of Pre-Service Work:

A history of prior allergic reactions to vital dyes, food coloring, or radioisotopes is sought. Based upon the site of the primary tumor (or its excision site) and the location of the anticipated draining nodal basin, the site(s) for dye or tracer injection is chosen.

Description of Intra-Service Work:

The dye or tracer is injected intradermally and (for extremity primary lesions) the extremity is elevated. Care is taken to inject around the scar tissue to achieve adequate tracer concentration in the local lymphatic spaces.

Description of Post-Service Work:

The patient is observed for evidence of local histamine release and other allergic or anaphylactic manifestations. Dosimetry and/or radioactivity measurements are made if needed after radionuclide tracer use.

SURVEY DATA:

Specialty(s): American College of Surgeons

Type of Sample: Random

Survey n:	46					ICU		Hosp. - Other		Dischg day total min	Office	
Response:	22					#	total min	#	total min		#	total min
Rate %:	48%	RWV	PRE total min	INTRA total min	Same day total min	visits		visits			visits	
		MED	1.40	15	10	10	0	0	0	0	0	0
		low	1.10									
		25th%	1.29									
		75th%	1.52									
		high	2.10									

KEY REFERENCE SERVICE(S):

1998 RWV	Global	CPT	Descriptor
1.29	000	38790	Injection procedure for lymphangiography
1.53	000	19030	Injection procedure only for mammary ductogram or galactogram

LOS and Time Estimates (Median)	Mean Intensity/Complexity Measures		
	3879X	38790	19030
LOS	0	0	0
PRE-service time	15	10	15
INTRA-service time	10	10	13
POST-service time	10	5	5
Mental Effort and Judgment			
The number of possible diagnosis and/or the number of management options that must be considered	2.27	2.10	2.25
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	2.50	2.20	2.50
Urgency of medical decision making	1.95	1.90	2.00
Technical Skill/physical Effort			
Technical skill required	2.14	2.40	2.38
Physical effort required	1.55	1.80	1.88
Psychological Stress			
The risk of significant complications, morbidity and/or mortality	1.64	1.80	1.50
Outcome depends on skill and judgment of physician	2.45	2.30	2.75
Estimated risk of malpractice suit with poor outcome	2.41	2.00	2.38
Time Segments			
PRE-service intensity/complexity	2.36	1.90	2.38
INTRA-service intensity complexity	2.18	2.20	2.38
POST-service intensity complexity	1.77	1.30	1.88

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

3879X (EE3) is slightly more intense than injection for lymphangiography (CPT 38790) because EE3 generally follows a positive local pathology report and requires precise injection in and around the biopsy or excised area for accurate placement of the tracer material in the lymphatic spaces.

3879X (EE3) is slightly less work than injection for mammary ductogram or galactogram (CPT 19030) because EE3 injection is not as deep/diffuse and does not require cannulation of a specific duct.

The median RVW of 1.40 is recommended. This value is midway between the relative work values for CPT codes 38790 and 19030 and is consistent with the discussion presented above.

ADDITIONAL RATIONALE (eg, if recommended RVUs are based on an alternative method instead of the survey results):

N/A

FREQUENCY INFORMATION

How was this service previously reported?

- 38790 Injection procedure for lymphangiography (RVW = 1.29; global = 000)
- 38999 Unlisted procedure, hemic or lymphatic system (by report)
- 78195 Lymphatics and lymph glands imaging (RVW = 1.20; global = XXX)

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?

Frequency will be nearly equal to that for sentinel node biopsies (approximately 108,000 potential candidates). There will be occasional technical failures and some patients will have complete regional lymphadenectomy rather than sentinel node biopsy based upon clinical or operative findings, so that the two numbers will not be exactly the same.

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

- Yes
- No

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS

Ultrasound Bone Densitometry

A new CPT code was established to reflect innovative changes in bone densitometry procedures. CPT code 76977 was created to report *Ultrasound bone density measurement and interpretation, peripheral site(s), any method*

In general, bone densitometry is used in conjunction with evaluation and management services to determine whether a patient is at risk for osteoporosis. The services include obtaining a patient history to identify the presence of known risk factors for osteoporosis as well as all medications currently being taken by the patient. Unlike most methods of bone densitometry current in clinical use, ultrasound bone densitometry does not use ionizing radiation. Specifically, the intended use of ultrasound bone densitometry is to perform a quantitative ultrasound measurement of the calcaneus. This measurement can be used in conjunction with other clinical risk factors as an aid to the physicians in the diagnosis of osteoporosis and medical conditions leading to reduced bone density.

For comparison purposes, the RUC referred to CPT code 78890 *Generation of automated data; interactive process involving nuclear physician and or allied health professional personnel; simple manipulations and interpretation not to exceed 30 minutes.* (work RVU = .05). Given the similarity in the areas of time and complexity for physician work, the RUC agreed that the same work relative value unit was appropriate for the new code.

The RUC recommends a work relative value unit of .05 for new CPT code 76977.

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
•76977	AAI	Ultrasound bone density measurement and interpretation, peripheral site(s), any method	XXX	.05

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

CPT Code: 7697X Tracking Number: AAA1 Global Period: XXX Recommended RVW: 0.22

CPT Descriptor: Ultrasound bone density measurement and interpretation, peripheral sites(s), any method

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey:

A thirty-five year-old woman with kidney stones secondary to hyperparathyroidism. Family history is positive for her father having osteoporosis.

A fifty-eight year-old male with corticosteroid dependent Rheumatoid Arthritis and rib fractures from playing golf.

A seventy year-old woman, who is considering estrogen replacement therapy for osteoporosis, is referred for therapy progress/disease-monitoring purposes.

A sixty-two year-old woman with a height loss and a family history of osteoporosis.

Description of Physician Work:

- | | |
|---------------------|---|
| Pre-Service Work: | • Review patient history |
| Intra-Service Work: | • Interprets results of study
• Compares results in relation to current diagnosis and future treatment, if appropriate |
| Post-Service Work: | • Dictate, correct, and sign report
• Discuss and communicate report/findings with referring physician(s) |

SURVEY DATA:

Specialty: American College of Radiology

Sample Size: 124 Response Rate (%): N=17 (14%) Median Initial RVW: 0.21 Median Final RVW: 0.21

Type of Sample (Circle One): random, panel, convenience.

Explanation of sample size: ACR Committees/Commissions

25th Percentile Final RVW: 0.18 75th Percentile Final RVW: 0.24 Low Final RVW: 0.05 High Final RVW: 0.36

Median Total-Service Time: 5 min

25th Percentile Total-Svc Time: 4.6 min 75th Percentile Total-Svc Time: 7.8 min Low: 2 min High: 30 min

Code: 7697X**KEY REFERENCE SERVICE(S):**

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
1)	76075	Dual energy x-ray absorptiometry (DEXA), bone density study, one or more sites; axial skeleton (eg, hips, pelvis, spine)	0.30
2)	76076	Dual energy x-ray absorptiometry (DEXA), bone density study, one or more sites; appendicular skeleton (peripheral) (eg, radius, wrist, heel)	0.22

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.

INTENSITY/COMPLEXITY MEASURES**CPT Code**
7697XReference
Service 1
76076Reference
Service 2
76075**Time Estimates**

Median Total Physician (Minutes)	5.0	5.0	7.5
----------------------------------	-----	-----	-----

Mental Effort and Judgement (Mean)

The number of possible diagnosis and/or the number of management options that must be considered	2.1	2.1	2.5
--	-----	-----	-----

The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	2.2	2.1	2.3
--	-----	-----	-----

Urgency of medical decision making	1.1	1.0	1.1
------------------------------------	-----	-----	-----

Technical Skill/Physical Effort (Mean)

Technical skill required	2.2	2.3	2.1
--------------------------	-----	-----	-----

Physical effort required	1.7	1.75	1.4
--------------------------	-----	------	-----

Code: 7697X

INTENSITY/COMPLEXITY MEASURES **CPT Code** **Reference** **Reference**
 7697X Service 1 Service 2
 76076 76075

Psychological Stress (Mean)

The risk of significant complications, morbidity and/or mortality	1.6	1.25	1.5
Outcome depends on the skill and judgement of physician	2.2	2.1	2.0
Estimated risk of malpractice suit with poor outcome	1.7	1.4	1.8

Time Segments(Mean)

Total-Service intensity/complexity	2.1	1.9	2.1
------------------------------------	-----	-----	-----

The number of times the respondents performed the procedure over the past year.

Mean

Median

28	0
----	---

Did the description of typical patient/service match your typical patient?

Yes

No

N=12 (92.3%)	N=1 (7.6%)
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ADDITIONAL RATIONALE

For example, if recommended RVUs are based on an alternative method instead of the survey results.

The RVWs and the Intensity/Complexity measures from the survey both rate code 7697X and 76076 to be comparable. Therefore, our recommended RVW for code 7697X is the same as that for code 76076 (0.22).

FREQUENCY INFORMATION

How was this service previously reported? 76999 (new technology)

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? Less than that frequency for 76076

Is this service performed by many physicians across the United States? __ Yes X No

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS

Pulmonary Function Procedures

Revised Code 94620

CPT code 94620 was revised to read: *Pulmonary stress testing; simple (eg, prolonged exercise test bronchospasm with pre- and post spirometry)*. The code descriptor for this procedure was modified by deleting the reference to “complex testing” and placing that procedure in a new code (see below, new code 94621). The change was instituted to ensure that the code would only be used to report “simple” stress testing. Simple and complex stress tests are vastly different in the amount of resources needed to perform them. One code cannot accurately describe two such disparate procedures.

The RUC used CPT code 93015 as a comparison code. CPT code 93015 describes: *Cardiovascular stress testing using maximal or submaximal treadmill or bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; with physician supervision, with interpretation and report* (work RVU = .75). The RUC agreed that the physician work involved in 93015 was greater than that of 94620. It was the consensus that .67, representing 25% percentile, was an appropriate for the physician work being described under the new code.

New Code 94621

In conjunction with the revision to CPT code 94620, a new CPT code was created: 94621, *Pulmonary stress testing; complex (including measurements of CO₂ production, O₂ uptake, and electrocardiographic recordings)*.

Complex stress testing measures the integration of cardiac and pulmonary function and the status of physician fitness and includes measuring of CO₂ production, O₂ uptake, and electrocardiographic recordings of the patient’s response to the stress. The outputs of this panel of complex metabolic tests are then analyzed and interpreted by the physicians, and a report is generated.

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As with revised code, the RUC reviewed CPT codes 93015 and in addition 99215 *Of or other outpatient visits for the evaluation and management of an established patient which requires at least two of these key comments: a comprehensive exam medical decision making of high complexity. Counseling and/or coordination of care with other providers or agencies are provided constant with the nature of the problems(s) at the present and or family needs. Usually the representing problem are of moderate to high severity* (work RVU).

When developing a work relative value, The RUC evaluated the survey median of 1.48, and agreed that the physician work was substantially greater than that for CPT code 93015. The RUC accepted the survey median as an appropriate value, and recommends that a work relative of unit of 1.48 be accepted for the new CPT code.

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
▲94060	WW6	Bronchospasm evaluation: spirometry as in 94010, before and after bronchodilator (aerosol or parenteral) or exercise (For prolonged exercise test for bronchospasm with pre and post spirometry, see 94620)	XXX	.31 (No Change)
▲94070	WW7	Prolonged postexposure evaluation of bronchospasm with multiple spirometric determinations after test dose of bronchodilator (aerosol only) antigen, exercise , cold air, methacholine or other chemical agent, with spirometry as in 94010 subsequent spirometrics	XXX	.60 (No Change)

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CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
▲94620	WW1	Pulmonary stress testing; simple (eg, prolonged exercise test bronchospasm with pre- and post spirometry) or complex	XXX	.67
•94621	WW2	complex (including measurements of CO ₂ production, O ₂ uptake, and electrocardiographic recordings)	XXX	1.48
•94014	WW3	Patient initiated spirometric recording per 30 day period of time; includes reinforced education, transmission of spirometric tracing, data capture, analysis of transmitted data, periodic recalibration and physician review and interpretation	XXX	.52 (Approved at May 1998 RUC Meeting)
•94015	WW4	recording (includes hook-up, reinforced education, data transmission, data capture, trend analysis, and periodic recalibration)	XXX	No physician work.
•94016	WW5	physician review and interpretation only	XXX	.52 (Approved at May 1998 RUC Meeting)

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AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code: 94620 Tracking Number: WW1 Global Period: XXX Recommended RVW: .67

CPT Descriptor: **Pulmonary stress testing; simple (eg, prolonged exercise test for bronchospasm with pre- and post spirometry)**

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 65 year-old woman is seen because of dyspnea and cough after walking several city blocks. She has a normal physical examination and spirogram is normal.

or

A 65 year-old woman with documented COPD is evaluated for entrance into a pulmonary rehabilitation program.

Description of Pre-Service Work: A simple exercise test is performed with baseline spiogram. The physician performs a brief history and physical to determine if patient is fit to do test. Time answering questions about test is taken. A simple exercise test is performed with a baseline spiogram. She walks on a treadmill until dyspnea occurs and a repeat spiogram is obtained to evaluate for exercise induced bronchospasm.

or

A six minute walk is performed to evaluate distance, dyspnea, oxyhemoglobin desaturation and heart rate. The test is usually repeated after a rest period to eliminate learning bias (but billed as one test). NOTE: Brief exercise with pulse oximetry to document desaturation or to determine oxygen flow to prevent desaturation should be coded as 94761.

Description of Intra-Service Work: The physician analyzes the data and prepares a written interpretation of the test results.

Description of Post-Service Work: The physician discusses findings with the patient and devises plans for therapy and further testing, then communicates with the results referring physician.

SURVEY DATA:

Specialty: American College of Chest Physicians (ACCP) and American Thoracic Society (ATS)

Sample Size: 184 Response Rate: 44/184 24% Initial Median RVW: 0.75
Final Median RVW: 0.75

Type of Sample (Circle One): random panel, convenience. Explanation of sample size: Good Response

25th Percentile RVW: 0.67 75th Percentile RVW: 1.05 Low: 0.3 High: 2.4

Median Pre-Service Time: 15 Median Intra-Service Time: 15

25th Percentile Intra-Svc Time: 10 75th Percentile Intra-Svc Time: 20 Low: 5 High: 60

Median Post-Service Time: Total Time Number of Visits

Day of Procedure: 10 _____

ICU: _____

Other Hospital: _____

Office: _____

CPT Code: 94620

KEY REFERENCE SERVICE (S):

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
1)	93015	Cardiovascular Stress test usidng maximal or submaximal treadmill or bicycle exercise, continous	0.75
2)	99214	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 detailed history, a detailed exam, 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 patient's and/or family's needs. Usually the presenting problems are of moderate to high severity. Physicians typically spend 25 minutes face-to-face with the patient .	1.10

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 service you are rating to the key reference services listed above. Make certain that you are including the c from the service that you are rating as well as the key reference services.

INTENSITY/COMPLEXITY MEASURES

	<u>CPT Code</u>	<u>Reference Service 1</u>	<u>Reference Service 2</u>
	<u>94620</u>	<u>93015</u>	<u>99214</u>
<u>Time Estimates</u>			
Median Pre-Time	15	15	5
Median Intra-Time	15	20	25
Median Post-Time	10	15	5
<u>Mental Effort and Judgement</u>			
The number of possible diagnosis and/or the number of management options that must be considered	2.95	2.33	3.22
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	2.98	3.25	3.22
Urgency of medical decision making	2.84	3.33	2.78
<u>Technical Skill/Physical Effort</u>			
Technical skill required	2.84	3.37	2.22
Physical effort required	2.17	2.03	2.22
<u>Psychological Stress</u>			
The risk of significant complications, morbidity and/or mortality	2.84	3.26	2.44
Outcome depends on the skill and judgement of physician	2.98	3.23	3.33
Estimated risk of malpractice suit with poor outcome	2.77	3.31	3.22

INTENSITY/COMPLEXITY MEASURESCPT CodeReferenceReference94620Service 1Service 29301599214Time Segments

<u>Time Segments</u>	<u>CPT Code</u>	<u>Reference Service 1</u>	<u>Reference Service 2</u>
Pre-Service intensity/complexity	2.88	3.03	2.75
Intra-Service intensity/complexity	3.11	3.31	3.75
Post-Service intensity/complexity	3.05	2.9	2.89

ADDITIONAL RATIONALE

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

The recommended RVW was pegged at the 25% because the work appeared to be slightly less than the 93015.

FREQUENCY INFORMATION

How was this service previously reported? Using 946220 . It included the simple and/or the complex pulmonary stress test.

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?

In 1997 the code 94620 was reported as being used 51,471 times .

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

December 1997

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code :9462x1 Tracking Number: WW2 Global Period: XXX Recommended RVW: 1.48

CPT Descriptor: Pulmonary stress testing; complex (including measurements of CO2 production, O2 uptake, and electrocardiographic recordings)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 66 year-old male has unexplained dyspnea which interferes with his ability to work and exercise. A complex pulmonary stress test is ordered after other studies fail to identify the cause of dyspnea.

Description of Pre-Service Work: The physician performs a brief history and a brief physical to determine if patient is fit to do the test. Time answering questions about the test is taken.

Description of Intra-Service Work: The physician supervises the entire procedure. The patient is hooked up to equipment, and complex stress test records the integration of cardiac and pulmonary function and the status of the patient's physical fitness. There is a measurement of CO2 production, O2 uptake, and electrocardiographic monitoring with recordings using a graded exercise protocol. The physician analyzes data collected, and is able to calculate such items as dyspnea index, an anaerobic threshold as a percentage of maximum uptake, and O2 consumption as it relates to cardiac output. The physician prepares a written interpretation of the test results.

Description of Post-Service Work: The physician discusses findings with the patient, devises plans for therapy and/or further testing and then communicates with referring physician.

SURVEY DATA:

Specialty: American College of Chest Physicians (ACCP) and American Thoracic Society (ATS)

Sample Size: 184 Response Rate: (%) 43/184 23% Initial Median RVW: 1.43
Final Median RVW: 1.48

Type of Sample (Circle One): Random panel, convenience. Explanation of sample size: Good Response

25th Percentile RVW: 1.15 75th Percentile RVW: 2 Low: 0.7 High: 4

Median Pre-Service Time: 15 Median Intra-Service Time: 30

25th Percentile Intra-Svc Time: 20 75th Percentile Intra-Svc Time: 40 Low: 10 High: 60

Median Post-Service Time: Total Time Number of Visits

Day of Procedure: 20 _____

ICU: _____

Other Hospital: _____

Office: _____

CPT Code: 9462x1

KEY REFERENCE SERVICE (S):

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
1	93015	Cardiovascular Stress test using maximal or submaximal treadmill or bicycle exercise, continous.	0.75
2)	99215	Office or other outpatient visit for the evaluation and management of an established patient, which requires at least two or these three key components: a comprehensive exam- medical decision making of high complexity. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 40 minutes face-to-face with the patient and/or family.	1.77

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.

INTENSITY/COMPLEXITY MEASURES

	<u>CPT Code</u> 9462x1	<u>Reference Service 1</u> 93015	<u>Reference Service 2</u> 99215
<u>Time Estimates</u>			
Median Pre-Time	15	15	7
Median Intra-Time	30	20	35
Median Post-Time	20	15	2
<u>Mental Effort and Judgement</u>			
The number of possible diagnosis and/or the number of management options that must be considered	4.07	3.37	3.22
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.14	2.03	3.22
Urgency of medical decision making	3.26	3.26	2.78
<u>Technical Skill/Physical Effort</u>			
Technical skill required	3.81	3.31	2.22
Physical effort required	2.67	2.03	2.22
<u>Psychological Stress</u>			
The risk of significant complications, morbidity and/or mortality	3.51	3.26	2.44
Outcome depends on the skill and judgement of physician	3.83	3.23	3.33
Estimated risk of malpractice suit with poor outcome	3.58	3.31	3.22

INTENSITY/COMPLEXITY MEASURES

<u>Time Segments</u>	<u>CPT Code</u>	<u>Reference Service 1</u>	<u>Reference Service 2</u>
	9462x1	93015	99215
Pre-Service intensity/complexity	3.58	3.03	2.75
Intra-Service intensity/complexity	3.81	3.31	3.75
Post-Service intensity/complexity	3.66	2.9	2.89

ADDITIONAL RATIONALE

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

The recommended RVW was pegged at the Median value of 1.48. The work for this code is substantially greater than the work for the reference service code 93015.

FREQUENCY INFORMATION

How was this service previously reported? It was reported as 94620.

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?

In 1997 the code 94620 was reported as being used 51,471 times .

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

December 1997

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS

Bronchoscopic Procedures

Sept 98

CPT Code 31622

CPT code 31622 was revised to describe: *Bronchoscopy: diagnostic, (flexible or rigid), with or without cell washing*. The code revision included the deletion of the “*or brushing*” component and was implemented to specifically indicate that “*brushing*” required more time (e.g. using fluoroscopic guidance) to perform than a bronchoscopy with washings.

The original code (31622, work RVU = 2.80) has not been surveyed since the Hsiao values were established in the early 1980's. Since that time, the work for that procedure has been increased significantly due to the fact that physicians are using conscious sedation with the bronchoscopy. The recommended work RVU was established at the 25% percentile in order to allow for a range between the diagnostic fiberoptic bronchoscopy (31622) and other bronchoscopy codes.

Given the modifications to the description and the physician work involved, the RUC recommended a slightly discounted value of 2.78. It was the consensus that 2.78 captured 80% of the work involved in the original code.

CPT Code 31623

As a subset to revised code 31622, a new code was created (CPT 31623) to report *Bronchoscopy: with brushing or protected brushings*. This procedure is performed using a brush that is sealed in a catheter. The catheter is then passed through the bronchoscope once it is in place and inserted into an area of a diseased lung, often using fluoroscopic guidance. The brush is then advanced beyond the catheter to obtain uncontaminated material for study and culture.

It was agreed that a physician work rvu of 2.88 was appropriate for this new code.

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

CPT Code 31624

Newly created code *31624 Bronchoscopy; With bronchial alveolar lavage* describes when a bronchoscope is introduced to perform bronchial alveolar lavage (BAL). Using BAL allows the recovery of cells as well as noncellular components from the epithelial surface of the lower respiratory tract. This differs tremendously from “washings” which refer only to the aspiration of secretions or small amounts of instilled saline from larger airways. This form of therapy affords an effective means to diagnose unusual infections as in patients with immune deficiency diseases and may be used to help guide therapy of chronic inflammatory or fibrotic disorders.

The RUC recommends a work relative unit of 2.88 for 31624.

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
▲31622	BB1	Bronchoscopy; diagnostic, (flexible or rigid), with or without cell washing or brushing	000	2.78
•31623	BB2	with brushing or protected brushings	000	2.88
•31624	BB3	with bronchial alveolar lavage	000	2.88
•32001	BB4	Total lung lavage (unilateral) <u>(For bronchoscopic bronchial alveolar lavage, use 31624)</u>	000	6.00 (Approved at May 1998 RUC)

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

CPT Code: **31622** Tracking Number: **B B 1** Global Period: 000 Recommended RVW: **3.1**

CPT Descriptor: Bronchoscopy ; diagnostic , (flexible or rigid) , with or without cell washing

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 72 year-old man undergoes a diagnostic fiberoptic bronchoscopy for evaluation of hemoptysis. His chest x-ray is normal..

Description of Pre-Service Work: The physician examines the patient to verify that he can undergo the procedure. He is then placed on supplemental oxygen in the endoscopy suite which has resuscitative equipment in place. An IV is started and the physician supervises the administration of conscious sedation while the patient receives inhaled topical anesthesia as he is properly monitored for pulse, blood pressure, SPO2, and ECG.

Description of Intra-Service Work: The physician inserts the bronchoscope through the upper airways noting any abnormalities. The vocal cords are visualized and the structure and function are noted. The bronchoscope is advanced into the tracheobronchial tree. The patient has mild erythema throughout the tracheobronchial tree. In the right lower lobe blood is seen coming from the right posterior basilar segment.. Sterile saline washings of this bronchus are obtained and sent for culture and cytologic examination.

Description of Post-Service Work: The physician examines the patient post-endoscopy and prior discharge from the facility to ascertain that no complications such as bleeding, plugging, or shortness of breath have occurred. The findings from the bronchoscopy are explained to the patient and their significant other. The results are communicated to the referring physician.

SURVEY DATA:

Specialty : American College of Chest Physicians (ACCP) and American Thoracic Society (ATS)

Sample Size: 184 Response Rate: (%): 46/184 25% Initial Median RVW: 3.16

Final Median RVW: 3.23

Type of Sample (Circle One): Random panel, convenience. Explanation of sample size: Good Response

25th Percentile RVW: 3.1 75th Percentile RVW: 3.3 Low: 2.8 High: 4

Median Pre-Service Time: 20 Median Intra-Service Time: 25

25th Percentile Intra-Svc Time: 20 75th Percentile Intra-Svc Time: 35 Low: 10 High: 70

Median Post-Service Time:	<u>Total Time</u>	<u>Number of Visits</u>
Day of Procedure:	<u>20</u>	<u> </u>
ICU:	<u> </u>	<u> </u>
Other Hospital:	<u> </u>	<u> </u>
Office:	<u> </u>	<u> </u>

CPT Code: 31622

KEY REFERENCE SERVICE (S):

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RW</u>
1)	31645	Bronchoscopy; with therapeutic aspiration of tracheobronchial tree, initial (eg, drainage of lung abcess)	3.16
2)	31625	Bronchoscopy ; with biopsy	3.37

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.

INTENSITY/COMPLEXITY MEASURES

	<u>CPT Code</u>	<u>Reference Service 1</u>	<u>Reference Service 2</u>
	31622	31645	31625
<u>Time Estimates</u>			
Median Pre-Time	20	20	20
Median Intra-Time	25	30	30
Median Post-Time	20	20	20
<u>Mental Effort and Judgement</u>			
The number of possible diagnosis and/ or the number of management options that must be considered	3.76	3.69	4
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.66	3.73	3.79
Urgency of medical decision making	3.76	3.71	3.82
<u>Technical Skill/Physical Effort</u>			
Technical skill required	4.07	3.89	4.24
Physical effort required	3.5	3.46	3.74
<u>Psychological Stress</u>			
The risk of significant complications, morbidity and/or mortality	3.67	3.78	4.18
Outcome depends on the skill and judgement of physician	3.9	3.89	4.32
Estimated risk of malpractice suit with poor outcome	3.65	3.76	3.85

INTENSITY/COMPLEXITY MEASURES

	<u>CPT Code</u>	<u>Reference Service 1</u>	<u>Reference Service 2</u>
	31622	31645	31625
<u>Time Segments</u>			
Pre-Service intensity/complexity	3.45	3.36	3.75
Intra-Service intensity/complexity	3.98	3.93	4.29
Post-Service intensity/complexity	3.32	3.31	3.62

ADDITIONAL RATIONALE

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

This code has not been surveyed since the Hsiao values were established in the early 1980's. Since that time, the work for this procedure has increased significantly due to the fact the physician is using conscious sedation with the bronchoscopy. The recommended RVW was pegged at the 25% in order to allow a spread between the diagnostic fiberoptic bronchoscopy (31622) and the other bronchoscopy codes.

FREQUENCY INFORMATION

How was this service previously reported? This code has been reported with code 31622.

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? In 1997 this code was reported 122,491 times. _____

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

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

31623

CPT Code: 3162x1 Tracking Number: BB2 Global Period: 000 Recommended RVW: 3.2

CPT Descriptor: Bronchoscopy; with brushing or protected brushings

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 70 year-old female has a persistent infiltrate in her right lower lobe which does not resolve despite several rounds of antibiotic therapy.

Description of Pre-Service Work: The physician examines the patient to verify that she can undergo the procedure. She is then placed on supplemental oxygen in the endoscopy suite which has resuscitative equipment in place. An IV is started and the physician supervises the administration of conscious sedation while the patient receives inhaled topical anesthesia as he is properly monitored for pulse, blood pressure, SPO2, and ECG.

Description of Intra-Service Work: The physician inserts the bronchoscope through the upper airway, noting any abnormalities. The vocal cords are visualized and the structure and function are noted. The bronchoscope is advanced into the tracheobronchial tree and all airways are visualized. A catheter is passed through the bronchoscope. Once there is assurance that the catheter is in the infiltrated area, the catheter's seal is broken and an uncontaminated brush is used to collect specimens for culture and sensitivity; or an unprotected brush is used to take samples for cytology and microscopic examinations. Several passes of the unprotected brush are made into the area of infiltrate.

Description of Post-Service Work: The physician examines the patient post-endoscopy and pre-discharge from the facility to ascertain that no complications such as bleeding, plugging, or shortness of breath have occurred. The findings from the bronchoscopy are explained to the patient and their significant other. The results are communicated to the referring physician.

SURVEY DATA:

Specialty: American College of Chest Physicians (ACCP) and American Thoracic Society (ATS)

Sample Size: 184 Response Rate: (%) 47/184 26% Initial Median RVW: 3.28 Final Median RVW: 3.3

Type of Sample (Circle One): RANDOM panel, convenience. Explanation of sample size: Good Response

25th Percentile RVW: 3.2 75th Percentile RVW: 3.37 Low: 2.7 High: 5

Median Pre-Service Time: 20 Median Intra-Service Time: 30

25th Percentile Intra-Svc Time: 21 75th Percentile Intra-Svc Time: 43.75 Low: 15 High: 90

Median Post-Service Time:	Total Time	Number of Visits
Day of Procedure:	<u>20</u>	_____
ICU:	_____	_____
Other Hospital:	_____	_____
Office:	_____	_____

CPT Code: 3162x1

KEY REFERENCE SERVICE (S):

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
1)	31645	Bronchoscopy; with therapeutic aspiration of tracheobronchial tree, initial (eg, drainage of lung abscess)	3.16
2)	31625	Bronchoscopy; with biopsy	3.37

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.

INTENSITY/COMPLEXITY MEASURES

	<u>CPT Code</u> 3162x1	<u>Reference Service 1</u> 31645	<u>Reference Service 2</u> 31625
<u>Time Estimates</u>			
Median Pre-Time	20	20	20
Median Intra-Time	30	30	30
Median Post-Time	20	20	20
<u>Mental Effort and Judgement</u>			
The number of possible diagnosis and/or the number of management options that must be considered	3.8	3.69	4
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.83	3.73	3.79
Urgency of medical decision making	3.63	3.71	3.82
<u>Technical Skill/Physical Effort</u>			
Technical skill required	4.09	3.89	4.24
Physical effort required	3.59	3.46	3.74
<u>Psychological Stress</u>			
The risk of significant complications, morbidity and/or mortality	3.78	3.78	4.18
Outcome depends on the skill and judgement of physician	3.78	3.89	4.32
Estimated risk of malpractice suit with poor outcome	3.78	3.76	3.85

INTENSITY/COMPLEXITY MEASURESCPT CodeReference
Service 1
31645Reference
Service 2Time Segments

Pre-Service intensity/complexity	3.48	3.36	3.75
Intra-Service intensity/complexity	3.91	3.93	4.29
Post-Service intensity/complexity	3.53	3.31	3.62

ADDITIONAL RATIONALE

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

The recommended RVW was pegged at the 25% in order to allow a spread between this code and the other bronchoscopy codes.

FREQUENCY INFORMATION

How was this service previously reported? Reported with the 31622

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? In 1997 the code 31622 was reported 122,491

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

December 1997

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

31624

CPT Code: 3162x2 Tracking Number: BB3 Global Period: 000 Recommended RVW:3.2

CPT Descriptor: Bronchoscopy; with bronchial alveolar lavage

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 50 year-old male with acquired immuno-deficiency syndrome has persistent pneumonia requiring a definitive etiologic diagnosis .

Description of Pre-Service Work: The physician examines the patient to verify that he can under g the procedure. He is then placed on supplemental oxygen in the endoscopy suite which ha resuscitative equipment in place. An IV is started and the physician supervises the administration c conscious sedation while the patient receives inhaled topical anesthesia as he is properly monitored for pulse, blood pressure, SPO 2, and ECG.

Description of Intra-Service Work: The physician inserts the bronchoscope through the upper-airway noting any abnormalities. The vocal cords are visualized and the structure and function are noted. Th bronchoscope is advanced to the tracheobronchial tree. The bronchoscope is then wedged into the are under study, and saline is inserted through the bronchoscope into the area and then aspirated into sterile syringe or trap. The saline is instilled in 20 ml aliquots . After each aliquot is infused, it i aspirated into one or more containers. Usually, the total volume infused by site is 100 ml to 150 ml Each aliquot may be kept separate and numbered in sequence. At the conclusion of the procedure th bronchoscope is removed.

Description of Post-Service Work: The physician examines the patient post-endoscopy and pre-discharge from the facility to ascertain that no complications such as bleeding, plugging, or shortness of breath have occurred. The findings from the bronchoscopy are explained to to the referring physician. .

SURVEY DATA:

Specialty: American College of Chest Physicians (ACCP) and American Thoracic Society (ATS)

Sample Size: 184 Response Rate: (%): 45/184 24% Initial Median RVW: 3.29 Final Median RVW: 3.3

Type of Sample (Circle One): Random panel, convenience. Explanation of sample size: Good Response

25th Percentile RVW: 3.2 75th Percentile RVW: 3.5 Low: 3 High: 4.8

Median Pre-Service Time: 20 Median Intra-Service Time: 30

25th Percentile Intra-Svc Time 15 75th Percentile Intra-Svc Time: 45 Low: 16 High: 120

Median Post-Service Time:	<u>Total Time</u>	<u>Number of Visits</u>
Day of Procedure:	<u>20</u>	_____
ICU:	_____	_____
Other Hospital:	_____	_____
Office:	_____	_____

CPT Code: 3162x2

KEY REFERENCE SERVICE (S):

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
1)	31645	Bronchoscopy; with therapeutic aspiration of tracheobronchial tree, initial (eg, drainage of lung abcess)	3.16
2)	31625	Bronchoscopy; with biopsy	3.37

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.

INTENSITY/COMPLEXITY MEASURES

<u>INTENSITY/COMPLEXITY MEASURES</u>	<u>CPT Code</u>	<u>Reference Service 1</u> <u>31645</u>	<u>Reference Service 2</u> <u>31625</u>
<u>Time Estimates</u>			
Median Pre-Time	20	20	20
Median Intra-Time	30	30	30
Median Post-Time	20	20	20
<u>Mental Effort and Judgement</u>			
The number of possible diagnosis and/or the number of management options that must be considered	3.7	3.69	4
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.66	3.73	3.79
Urgency of medical decision making	3.7	3.71	3.82
<u>Technical Skill/Physical Effort</u>			
Technical skill required	4.02	3.89	4.24
Physical effort required	3.49	3.46	3.74
<u>Psychological Stress</u>			
The risk of significant complications, morbidity and/or mortality	3.64	3.78	4.18
Outcome depends on the skill and judgement of physician	3.98	3.89	4.32
Estimated risk of malpractice suit with poor outcome	3.53	3.76	3.85

INTENSITY/COMPLEXITY MEASURESCPT CodeReferenceReferenceService 1Service 23162x23164531625Time Segments

Pre-Service intensity/complexity	3.53	3.36	3.75
Intra-Service intensity/complexity	3.55	3.93	4.29
Post-Service intensity/complexity	3.89	3.31	3.62

ADDITIONAL RATIONALE

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

The recommended RVW was pegged at the 25% in order to allow a spread between this code and the other bronchoscopy codes.

FREQUENCY INFORMATION

How was this service previously reported? Using code 31622.

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 code 31622 was reported 122,491 times in 1997.

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

December 1997

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS

Sept 98

Ventricular Assist Devices (VAD)

CPT codes 33975 *Implantation of ventricular assist device; single ventricular support* and 33976 *Implantation of ventricular assist; biventricular support* have both undergone significant changes in the amount of physician work required since they were last surveyed in 1993. The technology of VAD implementation has dramatically changed the level of work intensity during intraservice implantation and has also increased the post-operative time since patients are now being managed for months and even years with the device in place. The RUC initially brought the issue to the Health Care Financing Administration in its submission of Recommendations for CPT 1999. At that time, interim values were requested until additional data could be collected. In September 1998, the RUC reexamined survey data regarding proposed changes in work relative value units for these particular codes.

The survey responses and data both confirmed very significant changes in the physician time and work performed for VAD procedures as identified in CPT codes 33975 and 33976. The survey information supports the observations that physicians implanting these devices are spending significantly more time that involves greater work intensity in the operating room completing the intraservice implantation. In addition, they are also performing a tremendous amount of postoperative work that is currently not reflected in the work relative value units. Furthermore, the technology of VAD implantation has greatly changed and patients are being kept alive longer with newer devices in place.

To reflect these changes, the RUC reviewed again the work relative values for both CPT 33975 and CPT 33976. For CPT code 33975, the RUC accepted the survey median presented and agreed with survey respondents that a new work value of 39.00 accurately reflected the physician work involved in this procedure.

For CPT code 33976, it was the consensus of the RUC that because of the demonstrated increased risk and intra- and postoperative time spent with the patient, an RVU proportional to the relationship of the existing codes, i.e., a 10% increase in work for the biventricular implantation, was appropriate. This calculation results in a proposed work RVU of 43.00.

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code: 33975 Tracking Number: Global Period: 010 Recommended RVW: 39

CPT Descriptor: Implantation of ventricular assist device; single ventricle support

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey. A 59-year-old woman is evaluated for increasing dyspnea on exertion, which reveals coronary artery disease, severe mitral regurgitation, and a severely depressed ejection fraction of 18%. The patient deteriorates progressively and is evaluated for cardiac transplantation, Status I. Two weeks later, it is necessary to perform high-risk coronary artery bypass and mitral valve repair on her. After a rocky postoperative recovery and a 2 month inpatient rehabilitation program, her condition deteriorates once more with a low cardiac index and mixed venous oxygen saturation. She is now reassessed for placement of a left ventricular assist device (LVAD). Her creatinine is rising, she is intubated with poor oxygenation and PT and PTT increasing.

The patient is taken urgently to the operating room after her coagulation profile, oxygenation, and hemodynamic status are optimized. In the operating room a reoperative median sternotomy is performed and a properitoneal pocket is created. A reoperative median sternotomy is performed and a pro-peritoneal pocket is created. A subcutaneous tunnel is created for the driveline and then the dense pericardial adhesions are divided. The LVAD is placed and the patient weaned from cardiopulmonary bypass on multiple drips to assist the right ventricular function. The patient is transferred to the intensive care unit after careful hemostasis and aggressive correction of the patient's coagulopathy.

Over the next few days the patient is assessed frequently for management of coagulopathies and ongoing blood loss with the negative effects of infusion of blood products on right ventricular and pulmonary function. After 5 to 7 days in the ICU the patient is transferred to the step-down unit and then to the surgical floor to await transplantation. Because of her debilitated condition she requires nutritional and physical rehabilitation and frequent evaluations for pump function infections at the drive line. After sufficient rehabilitation, the patient is discharged with close and frequent monitoring of the pump and driveline by the surgical team.

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 (the majority of them are in extremis) prior to taking him/her to the operating room. Medical decision-making involves whether the patient has a chance of surviving the operation and thus entails a high level of judgment, intensity and risk on the part of the surgeon.

Description of Intra-Service Work: Since these patients are so unstable, induction of anesthesia requires the presence of the surgeon in the operating room. The patient is positioned, prepped, and draped. He is placed on cardiopulmonary bypass. In the majority of these patients reoperative median sternotomy is performed, as most of them have had a previous cardiac surgical procedure. The midline incision is extended to the umbilicus and a pro-peritoneal pocket is created. The driveline is tunneled through the subcutaneous tissue and then the heart is dissected out, dividing the dense adhesions. At each step, care is taken to maintain meticulous hemostasis, since these sites will not be visible after the device is placed. The patient's aorta and right atrium are cannulated and cardiopulmonary bypass initiated. The apex of the left ventricle is cored out and a Silastic cuff sewn to the edges of the cored ventricle. The inflow cannula of the LVAD is brought through an opening in the diaphragm and coupled with the Silastic cuff. Next the outflow graft is measured, a partial occlusion clamp applied to the aorta and the graft anastomosed to the aorta. The device is de-aired and confirmation of de-airing is confirmed by transesophageal cardiac ultrasound. The patient is then weaned from cardiopulmonary bypass. This requires, together with the anesthesia team, simultaneous management of the inotropes while assessing the heart, both visually and by transesophageal echocardiography. Following successful separation from bypass and decannulation, the incision is closed in layers.

Description of Post-Service Work: With the surgical team in attendance, the patient is transported to the intensive care unit. Aggressive management of bleeding and coagulopathy is balanced with judicious use of blood products, since they will sensitize the patient to allotransplant donors and can acutely cause right ventricular and pulmonary failure. The next few days require repeated daily assessment (minimum 4 visits) of the patient to plan the gradual weaning of inotropic and ventilatory support. Timing of chest tube and drain removal must be determined. The patient is then transferred to the step-down unit where daily monitoring of drains and drips is required. Once off all inotropes and all drains have been removed, a rehabilitation program is planned and overseen. The surgeon and his team follow the patient several times a week and then weekly to monitor the driveline site for infection, monitor the device for mechanical function, and all major organ functions, watching particularly for problems with coagulopathies and infection.

SURVEY DATA:

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

Sample Size: 20 Response Rate: (%): 55% Initial Median RVW: 39 Final Median RVW: 39

Type of Sample (Circle One): random, panel, convenience. Explanation of sample size: Only a few centers in U.S. insert and monitor left ventricular assist devices on a long-term basis and the sample had to be drawn from these centers.

25th Percentile RVW: 36 75th Percentile RVW: 60 Low: 35 High: 70

Median Pre-Service Time: 120 min Median Intra-Service Time: 330 min

25th Percentile Intra-Svc Time: 295 min 75th Percentile Intra-Svc Time: 405 min Low: 240 min High: 517 min

Median Post-Service Time:	<u>Total Time</u>	<u>Number of Visits</u>
Day of Procedure:	<u>180</u>	<u> </u>
ICU:	<u>435</u>	<u>10</u>
Other Hospital:	<u>105</u>	<u>15</u>
Office:	<u>N/A</u>	<u> </u>

KEY REFERENCE SERVICE (S):

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
1)	33860	Ascending aorta graft; with cardiopulmonary bypass, with or without valve suspension	33.96
2)	33412	Replacement, aortic valve; with transventricular aortic annulus enlargement (Konno procedure)	34.79
3)			
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.

INTENSITY/COMPLEXITY MEASURES

	<u>CPT Code</u>	<u>Reference Service 1</u>	<u>Reference Service 2</u>
	33975	33860	33412
<u>Time Estimates</u>			
Median Pre-Time	120 min	83 min	120 min
Median Intra-Time	330 min	360 min	360 min
Median Post-Time	780 min	200 min	240 min
<u>Mental Effort and Judgement</u>			
The number of possible diagnosis and/or the number of management options that must be considered	4.90	5.00	4.00
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.90	4.75	4.00
Urgency of medical decision making	4.91	4.80	3.50
<u>Technical Skill/Physical Effort</u>			
Technical skill required	4.64	4.80	5.00
Physical effort required	5.00	5.00	4.00
<u>Psychological Stress</u>			
The risk of significant complications, morbidity and/or mortality	5.00	5.00	4.00
Outcome depends on the skill and judgement of physician	4.64	4.80	5.00

Estimated risk of malpractice suit with poor outcome	3.91	4.00	3.50
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INTENSITY/COMPLEXITY MEASURES

CPT Code

Reference
Service 1

Reference
Service 2

Time Segments

Pre-Service intensity/complexity	4.82	4.80	3.50
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Intra-Service intensity/complexity	4.82	4.80	5.00
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Post-Service intensity/complexity	4.91	4.80	3.50
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ADDITIONAL RATIONALE

Describe the process by which your specialty society reached your final recommendation: A consensus committee met and discussed the survey results. We felt they had face validity in relation to the service performed and therefore we recommended the survey median of 39 RVWs.

FREQUENCY INFORMATION

How was this service previously reported? With CPT 33975 under a 90 day global period

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? There were 255 procedures reported under CPT 33975 in the 1996 Medicare National Claims History

Do many physicians perform this service across the United States? Yes No This service is performed in institutions across the United States. It is not a regionalized service. However, there are a small number of institutions and cardiothoracic surgeons performing the service. Cardiothoracic surgeons are the only physicians performing this service.

September 1998

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code: 33976 Tracking Number: Global Period: 010 Recommended RVW: 48

CPT Descriptor: Implantation of ventricular assist device; biventricular support

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: An 18-year-old male presents with increasing dyspnea and fatigue following a viral illness. Evaluation reveals dilated cardiomyopathy with an ejection fraction of 15%. The patient's condition deteriorates requiring hospitalization and the initiation of inotropes. He is listed as Status I for heart transplantation. Despite vigorous medical management, the patient develops signs of biventricular failure, with a pulsatile liver, ascites, pulmonary edema, jugular venous distention and lower extremity and sacral edema. His coagulation profile is abnormal, and his urine output less than 20 cc/hr, with a rising creatinine of 3.0. He is intubated with a pO₂ of 80 on FiO₂ of 100%, and has a mixed venous saturation of 37%.

The patient is taken urgently to the operating room after optimization of the coagulation profile, oxygenation, and hemodynamic status. In the operating room a median sternotomy is performed and the patient cannulated and cardiopulmonary bypass initiated. A preperitoneal pocket is created for a left ventricular assist device (LVAD), and a subcutaneous tunnel made for the driveline. The LVAD is placed and the patient weaned from cardiopulmonary bypass. Right ventricular distention and falling LVAD flow prevents separation from bypass. Cardiopulmonary flows are reduced to less than 1 liter. After combined drug intervention and "resting" the native heart, it is clear that right ventricular function will not permit separation from bypass. A right ventricular assist device (RVAD) is placed and the lines brought out through the skin. The patient is weaned successfully, albeit on high dose inotropes. The skin is closed, the sternum left open, and the patient transported to the ICU.

Over the next few days, judicious management corrects the coagulopathy and balances the ongoing blood loss with the negative effects of blood product infusion on right ventricular and pulmonary function. The open sternal wound requires frequent dressing changes. The patient is assessed frequently with gradual weaning from inotropes and the ventilator. He is stabilized but remains in the hospital awaiting transplant. Eventually the RVAD is removed thanks to aggressive postoperative management.

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, often on an urgent basis, to reassess the patient's condition (the majority of them are in extremis) prior to taking him/her to the operating room. Medical decision-making involves whether the patient has a chance of surviving the operation and thus entails a high level of judgment, intensity and risk on the part of the surgeon.

Description of Intra-Service Work: Since these patients are so unstable, induction of anesthesia requires the presence of the surgeon in the operating room. The patient is positioned, prepped, and draped. In the majority of these patients reoperative median sternotomy is performed, as most of them have had a previous cardiac surgical procedure. Patients with biventricular failure with resultant right ventricular enlargement may require exposure of the femoral vessels before the sternotomy is made. After the incisions, the patient is placed on cardiopulmonary bypass. The midline incision is extended to the umbilicus and a pre-peritoneal pocket is created. The driveline is tunneled through the subcutaneous tissue and then the heart is dissected out, dividing the dense adhesions. At each step, care is taken to maintain meticulous hemostasis, since these sites will not be visible after the device is placed. The patient's aorta and right atrium are cannulated and cardiopulmonary bypass initiated. The apex of the left ventricle is cored out and a Silastic cuff sewn to the edges of the cored ventricle. The inflow cannula of the LVAD is brought through an opening in the diaphragm and coupled with the Silastic cuff. Next the outflow graft is measured, a partial occlusion clamp applied to the aorta and the graft anastomosed to the aorta. The device is de-aired and confirmation of de-airing is confirmed by transesophageal cardiac ultrasound. Attempts to wean the patient from cardiopulmonary bypass that are unsuccessful due to inadequate right ventricular function dictate the need for biventricular assist. The RVAD is placed and the lines brought out through the skin. The patient is successfully weaned from cardiopulmonary bypass, albeit on high dose inotropes. This requires, together with the

anesthesia team, simultaneous management of the inotropes while assessing the heart, both visually and by transesophageal echocardiography. Following successful separation from bypass and decannulation, the incision is closed in layers, but the sternum is left open, and the patient transported to the intensive care unit.

Description of Post-Service Work. With the surgical team in attendance, the patient is transported to the intensive care unit. Aggressive management of bleeding and coagulopathy is balanced with judicious use of blood products, since they will sensitize the patient to allotransplant donors and can acutely cause right ventricular and pulmonary failure. Because of the open wound, frequent dressing changes are necessary, which in essence requires "bringing the operating room to the patient's bedside." Medical decision-making regarding whether the patient is sufficiently stable to undergo RVAD removal occurs at each contact. This will require returning to the operating room and repeating the weaning process described above. If the patient does not stabilize adequately, he/she will be managed in a precarious condition by the surgeon and his team until a donor heart becomes available. This will require repeated daily assessment (minimum 2 visits) of the surgical team who must also monitor the driveline for infections, the mechanical functioning of the device, and the functioning of the patient's major organ systems, all of which are affected by the presence of the biventricular assist device.

SURVEY DATA:

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

Sample Size: 20 Response Rate: (%) 55% Initial Median RVW: 39 Final Median RVW: 48

Type of Sample (Circle One): random, panel, convenience. Explanation of sample size: Only a few center in the U.S. insert and monitor ventricular assist devices on a long-term basis. The sample had to be drawn from this limited number of centers.

25th Percentile RVW: 36 75th Percentile RVW: 60 Low: 35 High: 80

Median Pre-Service Time: 120 min Median Intra-Service Time: 360 min

25th Percentile Intra-Svc Time: 345 min 75th Percentile Intra-Svc Time: 468min Low: 240 min High:

Median Post-Service Time:	<u>Total Time</u>	<u>Number of Visits</u>
Day of Procedure:	<u>200 min</u>	<u> </u>
ICU:	<u>725 min</u>	<u>10</u>
Other Hospital:	<u>225 min</u>	<u>20</u>
Office:	<u>N/A</u>	<u> </u>

KEY REFERENCE SERVICE (S):

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
1)	33860	Ascending aorta graft; with cardiopulmonary bypass, with or without valve suspension	33.96
2)	33412	Replacement, aortic valve, with transventricular aortic annulus enlargement (Konno procedure)	34.79

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.

INTENSITY/COMPLEXITY MEASURES

	<u>CPT Code</u> 33976	<u>Reference Service 1</u> 33860	<u>Reference Service 2</u> 33412
<u>Time Estimates</u>			
Median Pre-Time	120 min	83 min	120 min
Median Intra-Time	360 min	360 min	360 min
Median Post-Time	1150 min	200 min	240 min
<u>Mental Effort and Judgement</u>			
The number of possible diagnosis and/or the number of management options that must be considered	4.90	5.00	4.00
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.90	4.75	4.00
Urgency of medical decision making	4.90	4.80	3.50
<u>Technical Skill/Physical Effort</u>			
Technical skill required	4.70	4.80	5.00
Physical effort required	5.00	5.00	4.00
<u>Psychological Stress</u>			
The risk of significant complications, morbidity and/or mortality	5.00	5.00	4.00
Outcome depends on the skill and judgement of physician	4.70	4.80	5.00
Estimated risk of malpractice suit with poor outcome	3.80	3.29	3.00

INTENSITY/COMPLEXITY MEASURES

CPT Code

Reference
Service 1

Reference
Service 2

Time Segments

Pre-Service intensity/complexity	4.90	4.80	3.50
Intra-Service intensity/complexity	5.00	4.80	5.00
Post-Service intensity/complexity	4.90	4.80	3.50

ADDITIONAL RATIONALE

Describe the process by which your specialty society reached your final recommendation. A consensus committee met and discussed the survey results. Because of the small number of institutions involved, it was necessary to arbitrate the results of the surveys of the two codes. Rather than going with the recommended median of 39 for this code, because of the demonstrated increased risk and intra- and postoperative time spent with the patient, the committee recommended an RVW proportional to the relationship of the existing codes, i.e., a 25% increase in work for the biventricular implantation.

FREQUENCY INFORMATION

How was this service previously reported? With CPT 33976 and a 90 day global period

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? There were 85 procedures reported under CPT 33976 in the 1996 Medicare National Claims History

Do many physicians perform this service across the United States? Yes No. This service is performed in institutions across the United States. It is not a regionalized service. However, there are a small number of institutions and cardiothoracic surgeons performing the service. Cardiothoracic surgeons are the only physicians performing this service.

September 1998

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS
May 1998

Bypass Grafts

New CPT codes were added to reflect the extra work involved in harvesting and anastomosing vein segments for use as arterial bypass grafts from locations other than the actual bypass site. In developing the work value recommendation for all three add-on codes, the specialty society realized that a problem existed between the three codes because of their inter relationship and the CPT definition. CPT code 35500 is defined by anatomic site, whereas CPT codes 35682 and 35683 are defined in terms of numbers of segments. Therefore, the specialty society will request reconsideration by CPT for CPT code 35500.

The RUC also recommends that CPT code 35681 *Bypass graft; composite, prosthetic and vein (List separately in addition to code for primary procedure)* be assigned a work value of 3.93, which was the RUC recommended work RVU during the Five Year review. This recommended value was based on a survey of general and vascular surgeons. This procedure is listed separately in addition to the code for the primary procedure, which could be any graft procedures. This reduction will eliminate the possibility of a rank order anomaly within this family of add-on codes.

The RUC recommends that CPT code 35682 *Bypass graft; autogenous composite, two segments of veins from two locations (List separately in addition to code for primary procedure)* be assigned a work value of 7.20 based on a survey of 37 vascular surgeons. The recommendation of 7.20 is based on the 25th percentile of the survey results.

The RUC recommends that CPT code 35683 *Bypass graft; autogenous composite, three or more segments of vein from two or more locations (List separately in addition to code for primary procedure)* be assigned a work RVU of 8.50 which is also the 25th percentile of the survey respondents. CPT code 35683 was valued slightly higher than CPT code 35682. Code 35683 involves harvesting more separate pieces of vein in which each additional segments add at least one more microvascular anastomosis to the physician work.

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
•35500	CC1	Harvest of upper extremity vein, one segment, for lower extremity bypass procedure (List separately in addition to code for primary procedure) (For harvest of more than one vein segment, see 35682,35683)	ZZZ	Will request reconsideration by CPT
<u>Composite Grafts</u>				
<u>Codes 35682-35683 are used to report harvest and anastomosis of multiple vein segments from distant sites for use as arterial bypass graft conduits. These codes are intended for use when two or more vein segments are harvested from a limb other than that undergoing bypass. Add-on codes 35682 and 35683 are reported in addition to bypass graft codes 35501-35587.</u>				
▲35681		Bypass graft, composite, prosthetic and vein (List separately in addition to code for primary procedure) (List procedure 35681 separately in addition to code for primary procedure) (Do not report 35681 in addition to 35682,35683)	ZZZ	3.93 (Interim)
•35682	CC2	autogenous composite, two segments of veins from two locations (List separately in addition to code for primary procedure) (Do not report 35682 in addition to 35681,35683)	ZZZ	7.20
•35683	CC3	autogenous composite, three or more segments of vein from two or more locations (List separately in addition to code for primary procedure) (Do not report 35683 in addition to 35681,35682)	ZZZ	8.50

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

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

(April 1998)

CPT Code: 3568X1(CC2) Global Period: ZZZ Recommended RVW: 7.20
CPT Descriptor: Bypass graft; autogenous composite, two segments of veins from two locations (List separately in addition to code for primary procedure)

Vignette Used in Survey:

A 74-yr-old man with gangrene of the left great toe requires a femoral-anterior tibial bypass graft for limb salvage. He has previously undergone two coronary bypass operations and most of his greater saphenous vein has already been harvested. Preoperative duplex ultrasound reveals lesser saphenous veins in both calves, a short remaining segment of greater saphenous on the right, and a short segment of adequate arm vein. At operation, two segments are harvested and anastomosed to form a single long conduit. The bypass graft is completed. *[IMPORTANT NOTE: 3568X1 is an "add-on" code. In responding to this survey, please consider ONLY the ADDITIONAL work for harvesting and anastomosis of the two segments of vein. The preoperative and postoperative work, along with the preparation and closing of the bypass graft area, is separately billable using a different CPT code with a 90 day global and should not be considered for this survey.]*

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

Description of Total Add-on Work:

Prior to this operation a review of duplex ultrasound or other studies is necessary to determine the best suitable segments of vein to use for the bypass graft. Also, additional supervision of the positioning, prepping, and draping of the additional limb or limbs to be used for vein harvest is directly related to this add-on work. At each additional vein harvest site, the skin and soft tissue are dissected to expose the vein. Side branches are identified, ligated, and divided. Topical papaverine is often administered to prevent venospasm. Once adequate length is obtained, the veins are ligated at both ends and excised. The venous conduits are flushed with heparinized saline, gently distended, and tested for leaks. Very fine polypropylene suture is used to repair these as found, and the surgeon typically employs ocular loupe magnification to avoid reduction of the lumen by these sutures. In order to form a single long conduit, the ends of the two segments are beveled then sutured together, again using very fine suture and loupe magnification. The anastomosis is tested for leaks, and these are repaired as needed. This conduit is then employed for completion of the bypass graft (a separately billable CPT procedure). Directly related to this procedure is the achievement of hemostasis in the distant vein harvest sites, plus subcutaneous and skin closure of these sites, and application of sterile dressings. Wound care and analgesia required for the additional vein harvest sites also adds to the postoperative work.

CPT/Descriptor: 3568X1(CC2) Bypass graft; autogenous composite, two segments of veins from two locations (*List separately in addition to code for primary procedure*)

(04/98) Page 2

SURVEY DATA:

Specialty(s): The Society for Vascular Surgery
 Type of Sample: Random

Survey n:	127		PRE total min	INTRA total min	HOSP total min	OFF total min
Response:	36					
Rate %:	28%	RVW				
	low	3.00		45		
	25th%	7.20		60		
	MED	9.00	0	78	0	0
	75th%	10.00		90		
	high	29.53		180		

KEY REFERENCE SERVICE(S):

1998 RVW	Global	CPT	Descriptor
8.93	090	36821	Arteriovenous anastomosis, direct, any site (eg, Cimino type) (separate procedure)
9.13	090	34201	Embolectomy or thrombectomy, with or without catheter; femoropopliteal, aortoiliac artery, by leg incision

LOS and Time Estimates (Median)	Mean Intensity/Complexity Measures		
	3568X1(CC2)	36821	34201
LOS	n/a	0	3
PRE-service time	n/a	38	60
INTRA-service time	78	60	75
POST-service time	n/a	55	120
Mental Effort and Judgment			
The number of possible diagnosis and/or the number of management options that must be considered	3.68	2.43	3.15
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	3.26	2.61	3.15
Urgency of medical decision making	3.37	2.22	4.07
Technical Skill/physical Effort			
Technical skill required	4.08	3.39	3.41
Physical effort required	3.97	2.48	3.19
Psychological Stress			
The risk of significant complications, morbidity and/or mortality	4.08	2.48	3.78
Outcome depends on skill and judgment of physician	4.39	3.50	3.74
Estimated risk of malpractice suit with poor outcome	3.05	2.22	3.38
Time Segments			
PRE-service intensity/complexity	n/a	2.50	3.37
INTRA-service intensity complexity	3.97	2.96	3.37
POST-service intensity complexity	n/a	2.20	2.81

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

Overview:

As the surgical science of arterial bypass grafting matures, the supply of autogenous superficial vein, used as conduit for these grafts, has become a limiting factor. Thus far, no synthetic tubing has been developed that equals the long-term patency of autogenous vein in the setting where a bypass must extend from the groin to well below the knee. In fact, vascular surgeons now commonly extend these reconstructions well onto the foot, meaning that sometimes as much as 36" of continuous venous conduit is required. The routine autogenous conduit, greater saphenous vein, has never been in such demand. Patients undergo coronary bypass operations, re-do coronary bypass, lower extremity bypass, and re-do lower extremity bypass, all of which typically employ the greater saphenous, if available. At the time of the Harvard study, it was extremely rare for a

CPT/Descriptor: 3568X1(CC2) Bypass graft; autogenous composite, two segments of veins
 from two locations (*List separately in addition to code for primary procedure*) (04/98) Page 3

patient not to have a normal greater saphenous vein available for conversion to a bypass graft. Now it is quite common (especially in tertiary referral centers) to be searching the entire body for alternative source vein.

This is an add-on code for which the major portion of physician work is intra-service, that is, harvest of the veins from distant sites, performance of a microvascular anastomosis that is not hemodynamically restrictive, and subsequent closure of the distant incisions. The alternative vein is typically far more difficult to work with. In the case of arm vein, there are many more tiny branches that must be ligated, and the vein itself is vastly thinner and more friable than greater saphenous vein. Any miss-step in harvest or preparation can render arm vein unusable. Lesser saphenous vein, another typical alternative source conduit, is also very difficult to harvest due in this case due to its location directly on the posterior aspect of the calf.

The comparison service cited by 60% of respondents was CPT 36821, a procedure that carries a 90-day global. CPT 36821 has an RVW of 8.93. Respondents argued that CC2 has 18 more minutes of intra-service time than 36821 (78 vs. 60 min.) Counterbalancing that, 36821 carries more pre-service time than CC2, includes a discharge day management service, and also one office visit.

ADDITIONAL RATIONALE

The median survey RVW for this service is 9.00 with a median intra-service time of 78 minutes. For this service, there is actually small component of pre-service work that was not surveyed. The typical patient would require an additional 10 minutes for evaluation and positioning directly related to the harvesting operation ($10 \text{ min} * 2.2 * 0.9888 * 0.0103$) = 0.22 rvu. While the occasional patient will have significant extra post-service work related to poorly-healing distant vein harvest sites, the typical patient will go on to heal the extra harvest sites without incident. Subtracting 0.22 rvu for additional evaluation and positioning work from the median survey RVW of 9.00 leaves 8.78 rvu to be exclusively accounted for by intra-service work.

RVW extrapolation from 36821: As stated earlier, the comparison service cited by 60% of respondents was CPT 36821, a procedure that carries a 90-day global. Based on time differences and the RVW of 36821, an RVW for CC2 can be calculated as follows:

Begin with RVW for CPT 36821: 8.93 rvu
 add 18 min. intra-service time at IWPUT of 0.08 ($18 * 0.08$) = +1.44 rvu
 subtract pre-op scrub, dress, wait ($15 \text{ min} * 0.8 * 0.9888 * 0.0103$) = -0.12 rvu
 subtract difference in pre-op eval and positioning ($13 * 2.2 * 0.9888 * 0.0103$) = -0.29 rvu
 subtract discharge management 99238 ($1 * 1.28$) = -1.28 rvu
 subtract one office visit (99213 at discounted rate of 0.65) = -0.65 rvu
 Extrapolated RVW for CC2 = 8.03

IWPUT extrapolation: Intra-service work may be calculated as the median survey value (9.00) minus 0.22 rvu for a small amount of pre-service work, thus 8.78 rvu. Intra-operative intensity (IWPUT) would be 8.78 rvu / 78 intra-service minutes, for an IWPUT of 0.113. While the work is painstaking and requires great precision, this level of IWPUT seems slightly high. Using the 25th percentile RVW of 7.20, and subtracting 0.22 for pre-service work, the calculated IWPUT is $(7.20 - 0.22) / 78 \text{ min.} = 0.089 \text{ rvu/min.}$, a value that may be more reasonable for this service.

Based on the rationale presented herein, an RVW of 7.20 is recommended for CC2. This value is the 25th percentile survey value.

FREQUENCY INFORMATION

1. How was this service previously reported?

37799, unlisted vascular procedure.

2. How often do physicians in your specialty perform this service?

Commonly Sometimes Rarely

CPT/Descriptor: 3568X1(CC2) Bypass graft; autogenous composite, two segments of veins
from two locations (*List separately in addition to code for primary procedure*) (04/98) Page 4

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

In 1996, approximately 36,000 lower extremity revascularizations using venous conduit were performed. We estimate that a total of 10%, or 3,600 operations would require vein harvest from a distant site. Of these, the majority, perhaps 70% would use a single segment of vein harvested from a distant site. For the current service involving 2 vein segment harvest, we estimate that 20% of the 3,600, or 720 of these services might be performed annually.

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

Yes No

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

(April 1998)

CPT Code: 3568X2(CC3) **Global Period:** ZZZ **Recommended RVW:** 8.50**CPT Descriptor:** Bypass graft; autogenous composite, three or more segments of veins from two locations (List separately in addition to code for primary procedure)

Vignette Used in Survey:

A 74-year-old man with gangrene of the left great toe requires a femoral-anterior tibial bypass graft for limb salvage. He has previously undergone two coronary bypass operations and most of his greater saphenous vein has already been harvested. Preoperative duplex ultrasound reveals lesser saphenous veins in both calves, a short remaining segment of greater saphenous on the right, and a short segment of adequate arm vein. At operation, three segments are harvested and anastomosed to form a single long conduit. The bypass graft is completed. *[NOTE: 3568X2 is an "add-on" code. In responding to this survey, please consider ONLY the ADDITIONAL work for harvesting and anastomosis of the three segments of vein. The preoperative and postoperative work, along with the preparation and closing of the bypass graft area, is separately billable using a different CPT code with a 90 day global and should not be considered for this survey.]*

CLINICAL DESCRIPTION OF SERVICE (This work description was NOT provided on the survey.):**Description of Total Add-on Work:**

Prior to this operation a review of duplex ultrasound or other studies is necessary to determine the best suitable segments of vein to use for the bypass graft. Also, additional supervision of the positioning, prepping, and draping of the additional limb or limbs to be used for vein harvest is directly related to this add-on work. At each additional vein harvest site, the skin and soft tissue are dissected to expose the vein. Side branches are identified, ligated, and divided. Topical papaverine is typically administered to prevent venospasm. Once adequate length is obtained, the veins are ligated at both ends and excised. The venous conduits are flushed with heparinized saline, gently distended, and tested for leaks. Very fine polypropylene suture is used to repair these as found, and the surgeon typically employs ocular loupe magnification to avoid reduction of the lumen by these sutures. In order to form a single long conduit, the ends of each segment are beveled then sutured together, again using very fine suture and loupe magnification. The anastomoses are tested for leaks, and these are repaired as needed. This conduit is then employed for completion of the bypass graft (a separate CPT procedure). Directly related to this procedure is the achievement of hemostasis in the distant vein harvest sites, plus subcutaneous and skin closure of these sites, and application of sterile dressings. Wound care and analgesia required for the additional vein harvest sites also adds to the postoperative work.

CPT/Descriptor: 3568X2(CC3) Bypass graft; autogenous composite, three or more segments of veins from two locations (*List separately in addition to code for primary procedure*) (04/98) Page 2

SURVEY DATA:

Specialty(s): The Society for Vascular Surgery
 Type of Sample: Random

Survey n:	127		PRE total min	INTRA total min	HOSP total min	OFF total min
Response:	31					
Rate %:	24%	RVW				
	low	3.00		60		
	25th%	8.50		90		
	MED	10.50	0	90	0	0
	75th%	13.00		120		
	high	34.53		210		

KEY REFERENCE SERVICE(S):

1998 RVW	Global	CPT	Descriptor
8.93	090	36821	Arteriovenous anastomosis, direct, any site (eg, Cimino type) (separate procedure)
9.13	090	34201	Embolectomy or thrombectomy, with or without catheter; femoropopliteal, aortoiliac artery, by leg incision

LOS and Time Estimates (Median)	Mean Intensity/Complexity Measures		
	3568X2(CC3)	36821	34201
LOS	n/a	0	3
PRE-service time	n/a	38	60
INTRA-service time	90	60	75
POST-service time	n/a	55	120
Mental Effort and Judgment			
The number of possible diagnosis and/or the number of management options that must be considered	3.94	2.43	3.15
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	3.36	2.61	3.15
Urgency of medical decision making	3.39	2.22	4.07
Technical Skill/physical Effort			
Technical skill required	4.27	3.39	3.41
Physical effort required	4.30	2.48	3.19
Psychological Stress			
The risk of significant complications, morbidity and/or mortality	4.21	2.48	3.78
Outcome depends on skill and judgment of physician	4.48	3.50	3.74
Estimated risk of malpractice suit with poor outcome	2.97	2.22	3.38
Time Segments			
PRE-service intensity/complexity	n/a	2.50	3.37
INTRA-service intensity complexity	4.30	2.96	3.37
POST-service intensity complexity	n/a	2.20	2.81

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

Overview:

This is add-on code for which the major portion of physician work is intra-service, that is, harvest of veins from distant sites, performance of additional microvascular anastomoses that are not hemodynamically restrictive, and subsequent closure of several distant incisions. The single distinction between CC2 and CC3 is that CC3 involves harvesting more separate pieces of vein than CC2. CC2 is defined as two distant-site venous segments, while CC3 involves harvest of three or more segments. Each additional segment adds at least one more microvascular anastomosis to the physician's work, in addition to time-consuming opening and closing of the skin and soft tissue overlying the donor vein, tying the branches, etc.

As with CC2, the most frequently cited reference service for CC3 was CPT 36821, a procedure that carries a 90-day global.

CPT/Descriptor: 3568X2(CC3) Bypass graft; autogenous composite, three or more segments of veins
 from two locations (*List separately in addition to code for primary procedure*) (04/98) Page 3

CPT 36821 has an RVW of 8.93. Respondents argued that CC3 has 30 more minutes of intra-service time than 36821 (90 vs. 60 min.) Counterbalancing that, 36821 carries more pre-service time than CC3, includes a discharge day management service, and also one office visit.

ADDITIONAL RATIONALE

Median survey RVW is 10.50 rvu with a median intra-service time of 90 minutes.

As with CC2, CC3 carries an additional 10 minutes of pre-service preoperative evaluation and positioning worth approximately 0.22 rvu (=10 min*2.2*0.9888*0.0103). While the occasional patient will have significant extra post-service work related to poorly-healing distant vein harvest sites, the typical patient will go on to heal the extra harvest sites without incident. Subtracting 0.22 rvu for pre-service and 0 rvu for post-service work from the median survey RVW of 10.50 leaves 10.28 rvu to be exclusively accounted for by intra-service work.

Extrapolation of RVW for CC3 from 36821: Based on time differences and the RVW of 36821, an RVW for CC3 can be calculated as follows:

Begin with RVW for CPT 36821: 8.93 rvu
 add 30 min. intra-service time at IWPUT of 0.08 (30*0.08) = +2.40 rvu
 subtract pre-op scrub, dress, wait (15 min*0.8*0.9888*0.0103) = -0.12 rvu
 subtract difference in pre-op eval and positioning (13*2.2*0.9888*0.0103) = -0.29 rvu
 subtract discharge management 99238 (1*1.28) = -1.28 rvu
 subtract one office visit (99213 at discounted rate of 0.65) = -0.65 rvu
 Extrapolated RVW for CC3 = 8.99

Extrapolation of CC3 using IWPUT analysis: Intra-service work may be calculated as the median survey RVW (10.50) minus 0.22 rvu for a small amount of pre-service work, thus 10.28 rvu. Intra-operative intensity (IWPUT) would be 10.28 rvu / 90 intra-service minutes, for an IWPUT of 0.114. While the work is painstaking and requires great precision, this level of IWPUT seems slightly high. Using the 25th percentile RVW of 8.50, and subtracting 0.22 for pre-service work, the calculated IWPUT is (8.50-0.22) / 90 min. = 0.092 rvu/min, a value that may be more reasonable for this service.

Based on the rationale presented herein, an RVW of 8.50 is recommended for CC3. This value is the 25th percentile survey value.

FREQUENCY INFORMATION

1. How was this service previously reported?

37799, unlisted vascular procedure.

2. How often do physicians in your specialty perform this service?

Commonly Sometimes Rarely

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

In 1996, approximately 36,000 lower extremity revascularizations using venous conduit were performed. We estimate that a total of 10%, or 3,600 operations would require vein harvest from a distant site. Of these, the majority, perhaps 70% would use a single segment of vein harvested from a distant site, and 20% would require two segments. For the current service involving a 3 vein segment harvest, we estimate that 10% of the 3,600, or 360 of these services might be performed annually.

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

Yes No

The International Society for Cardiovascular Surgery / The Society for Vascular Surgery

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1997-1998

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RE: No survey data for CPT 3557X(CC1)

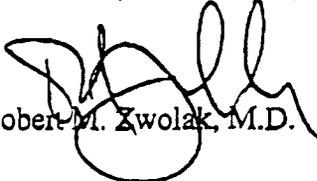
Dear Ms. Smith,

As you know, the CPT Editorial Panel recently defined three bypass graft codes, 3557X(CC1), 3568X1(CC2), and 3568X2(CC3), and these are slated for evaluation at the upcoming April meeting of the RUC. The Joint Council of the Society for Vascular Surgery / North American Chapter of the International Society for Cardiovascular Surgery indicated the intention to develop primary data for all three codes on the RUC's Level of Interest forms. Unfortunately, we have subsequently identified a problem related to the application of CC1. We believe the best solution is to refer CC1 back to CPT rather than to collect physician work survey information on a code that may need to be redefined.

The difficulty we encountered lies in the inter-relationship of CC1 with CC2 and CC3. All three are add-on codes designed to reflect the extra work involved in harvesting and anastomosing vein segments for use as arterial bypass grafts from locations other than the actual bypass site. While CC2 and CC3 are defined in terms of numbers of segments (two veins for CC2, three or more for CC3), CC1 is defined by anatomic site, that is, harvest of vein from the upper extremity. As we began to develop clinical vignettes for the RUC survey, several unanswerable questions arose. For instance, if a surgeon harvests two distant-site veins and one is an arm vein, would this be coded as CC2 alone, or CC2 plus CC1? Likewise, if one vein segment were harvested from each of two arms to then be used in a lower extremity bypass, would this be two CC1s or one CC2?

Our Government Relations Committee needs to convene and formulate a recommendation for the CPT Panel. One potential solution would be to redefine CC1 in terms of number of veins (e.g. one vein from a distant site) rather than having a site-specific definition, but the reasons for creating the current definition must first be reviewed. In the meantime, CC2 and CC3 comprise excellent and badly needed codes that deserve the RUC's work evaluation and subsequent implementation. I apologize to the RUC and to the CPT Editorial Panel for whatever inconvenience and unnecessary effort this problem has caused.

For the Government Relations Committee, SVS/ISCVS-NA,



Robert M. Zwolak, M.D.

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS

Microsurgery Add-On Codes

A new code was established, CPT 69990, to report *Use of operating microscope (List separately in addition to code for primary procedure)*. The code was created to reflect circumstances where a surgical microscope is employed for the microsurgical procedure. In addition to the creation of CPT 69990, there were two deletions of existing codes that were previously used to report these surgical circumstances. CPT deleted code 61712 *Skull or spine microsurgery (work RVU 3.49)* along with Code 64830 *Microrepair of nerve (work rvu = 3.10)* were omitted from CPT 1999.

The RUC used a weighted average approach in determining a work relative value for CPT code 69990. The RUC agreed that the weighted average of CPT codes 61712 and 64830 was an appropriate value (3.4670).

The RUC, therefore, recommends a work relative of 3.4670 for CPT code 69990.

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
61712		<p>Microdissection, intracranial or spinal procedure (list separately in addition to code for primary procedure)</p> <p>(Use 61712 when the surgical microscope is employed for the microdissection and the anatomical structures or pathology present are too small for adequate visualization with magnifying loupes or normal/corrected vision)</p> <p>(Use 61712 only with codes 61304, 61711, 62010, 62100, 63081, 63308, 63704, and 63710)</p>	ZZZ	N/A

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CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
		<u>(61712 has been deleted. Use 69990 when the surgical microscope is employed for the microsurgical procedure. Do not use 69990 for visualization with magnifying loupes or corrected vision)</u>		
64830		<p>Microdissection and/or microrrepair of nerve (list separately in addition to code for nerve repair)</p> <p><u>(64830 has been deleted. Use 69990 when the surgical microscope is employed for the microsurgical procedure. Do not use 69990 for visualization with magnifying loupes or corrected vision)</u></p>	ZZZ	N/A
•69990		<u>Use of an operating microscope (List separately in addition to code for primary procedure)</u>	ZZZ	3.47

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AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS

Arteriovenous Regional Chemotherapy Perfusion

A new code, CPT 36823, was developed to reflect *Insertion of arterial and venous cannula(s) for isolated extracorporeal circulation and regional chemotherapy perfusion to an extremity, with or without hyperthermia, with removal of cannula(s) and repair of arteriotomy venotomy sites*. The procedure represents a complex operative procedure frequently performed on patients with extremity lesions.

The procedure involves isolation of the main vascular supply to the arm or leg with cannulation of the artery and vein with this cannulas being used to establish a circuit with a membrane oxygenator perfusion pump (heart-lung machine). A tourniquet is then applied distal to the cannulation sites and the limb perfused with high doses of chemotherapy for a prescribed period (usually one or to hours). After completion of this perfusion period, both the tourniquet and the cannulas are removed and vascular repairs of the vessels are undertaken. The wounds are closed and the patient is taken to the recovery area. This procedure represents a unique combination of a highly invasive surgical procedure with chemotherapy supported by a membrane oxygenator/profusion device. The procedure was initially described in 1954 but has only become more commonly used since oxygenator/profusion pumps became available in the 1960's.

The procedure is similar in terms of intensity and work to CPT 35081 *Direct repair of aneurysm, false aneurysm, or excision (partial or total) and graft insertion, with or without patch graft; for aneurysm, false aneurysm and associated occlusive disease, abdominal aorta* (work RVU = 28.00). The intraoperative exposure of vessels and cannulation and repair is also similar to the dissection of major vessels in the groin.

The RUC reviewed the original survey results with particular emphasis on the post-operative care and the number of follow-up visits required after the procedure. It was the consensus that the intra-service time should be slightly decreased. The work

RVU of 21.00 represented the 25th percentile of the survey. The RUC agreed that this number appropriately valued the new procedure. The RUC, therefore, recommends acceptance of 21.00 as the work relative value unit for this new CPT code.

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
•36823	D1	Insertion of arterial and venous cannula(s) for isolated extracorporeal circulation and regional chemotherapy perfusion to an extremity, with or without hyperthermia, with removal of cannula(s) and repair of arteriotomy and venotomy sites	090	21.00

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

(September 1998)

CPT Code: 3682X (D1)

Global Period: 090

Recommended RVW: 28.00

CPT Descriptor: Insertion of arterial and venous cannula(s) for isolated extracorporeal circulation and regional chemotherapy perfusion to an extremity, with or without hyperthermia, with removal of cannulas) and repair of arteriotomy and venotomy sites

Vignette Used in Survey:

A 55-year-old male, two years status post-resection of an intermediate thickness malignant melanoma, returns with multiple in-transit metastases on his right, lower extremity. The patient is medically fit and there is no evidence of other metastatic disease. He is subsequently taken to the OR, where an isolated hyperthermic limb perfusion is performed. The patient is discharged on postoperative day 5.

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 and until the time of the procedure. This activity includes reviewing the previous work-up, including consulting with the referring physician, if necessary, and other health care professionals; and communicating with the patient (and/or the patient's family) to explain the operative risks and benefits and to obtain informed consent. Other preoperative services include scheduling the operation, 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, including selection of appropriate vascular cannulas, preparation and supervision of the extra-corporeal circuit, and associated chemotherapeutic medications. Assessment of patient size is required for optimal chemotherapeutic dose into the perfusion circuit. Measurements and positions of in-transit metastases are documented to facilitate evaluation of response to therapy.

Description of Intra-Service Work:

Under general anesthesia, incisions are made for the exposure of the perfusion vessels, (such as external iliac, femoral or popliteal) then the vessels are encircled with appropriate vascular instrumentation. Cannulas are then placed in position and manipulated beyond the proposed tourniquet site. The cannulas are connected to the perfusion circuit and management of intraoperative anticoagulation is initiated. The tourniquet is applied and perfusion begun. Cannulas frequently require manipulation to insure optimal flow rates. Once this stable perfusion circuit is established, the limb may be warmed to facilitate the chemotherapeutic effect which must be coordinated using sterile tissue warmers and invasive extremity temperature probes are routinely placed. Appropriate chemotherapeutic drugs are then administered. Evaluation of leakage rates from the perfusion circuit must be assessed. Following completion of the prescribed perfusion dose and time, the tourniquet is removed, as are the cannulas. The arteriotomy and venotomy are repaired. (Note that if nodal dissection is necessary, it is billed separately.) The anticoagulation is then managed with or without reversal, and the wounds are closed in layers over drains.

Description of Post-Service Work:

Post-service work begins after skin closure in the operating room and includes the application of sterile dressings, writing postoperative orders, completing the operative dictation, communicating with family and other health care professionals, and all hospital visits and services performed by the surgeon, wound and drain care, and managing antibiotics and analgesics. Discharge management includes the surgeon's final examination of the patient, education of patient and family regarding drain care and output measurements as well as activity limitations, instructions for continuing care, and preparation of discharge records. Additionally, all post-discharge office visits for 90 days after the day of operation are considered part of the postoperative work for this procedure including removal of sutures and drains, surveillance for complications and perfusion, and antibiotic and/or analgesic adjustments. Assessments of response are mandatory to this procedure.

SURVEY DATA:

Specialty(s): American College of Surgeons

Type of Sample: Random

Survey n: 24
 Response: 17
 Rate %: 71%

	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	28.00	75	230	30	1	20	4	80	25	4	80
low	15.00		120								
25th%	21.00		180								
75th%	32.44		300								
high	48.00		480								

KEY REFERENCE SERVICE(S):

<u>1998 RVW</u>	<u>Global</u>	<u>CPT</u>	<u>Descriptor</u>
28.01	090	35081	Direct repair of aneurysm, false aneurysm, or excision (partial or total) and graft insertion, with or without patch graft; for aneurysm, false aneurysm, and associated occlusive disease, abdominal aorta
34.25	090	47130	Hepatectomy, resection of liver; total right lobectomy

LOS and Time Estimates (Median)	Mean Intensity/Complexity Measures		
	3682X (D1)	35081	47130
LOS	7	7	8
PRE-service time	75	45	75
INTRA-service time	230	240	240
POST-service time	235	220	248
Mental Effort and Judgment			
The number of possible diagnosis and/or the number of management options that must be considered	3.35	4.25	4.40
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	4.12	4.33	4.20
Urgency of medical decision making	3.13	3.67	3.75
Technical Skill/physical Effort			
Technical skill required	4.65	5.00	5.00
Physical effort required	3.76	4.25	4.80
Psychological Stress			
The risk of significant complications, morbidity and/or mortality	4.53	4.50	4.80
Outcome depends on skill and judgment of physician	4.53	4.75	4.80
Estimated risk of malpractice suit with poor outcome	3.24	4.00	3.60
Time Segments			
PRE-service intensity/complexity	3.41	3.75	4.00
INTRA-service intensity complexity	4.41	4.25	4.80
POST-service intensity complexity	3.41	3.25	3.60

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

3682X (D1) is similar in terms of intensity and work to CPT 35081 (RVW 28.01). The intraoperative exposure of vessels and cannulation and repair is also similar to the dissection of major vessels in the groin. The median RVW of 28.00 is recommended.

ADDITIONAL RATIONALE:

1. Reasonability of low response rate: Regional chemoperfusion was developed in the late 1950's to treat regionally metastatic melanoma. Today, the treatment options for this stage of the disease have changed very little. Patients requiring D1 are referred to one of the half dozen institutions in the United States familiar with the procedure. Although the procedure may have an estimated annual frequency of 1000, only a few surgeons in the country actively perform D1. Consequently, the response rate for D1 is less than 30.

2. IWP/PUT: Based on the survey median times, the recommended RVW of 28.00 results in an IWP/PUT of 0.076, which is a reasonable average intensity for the 230 minutes of intraoperative work.

IWP/PUT calculation:

	Pre-op RVW calc*		Global RVWs for Post-operative Work**									
	eval, posit, etc	scrub, dress, etc	99291 @4.00	99233 @1.51	99232 @1.06	99231 @0.64	99238 @1.28	99215 @1.73	99214 @1.08	99213 @0.65	99212 @0.43	99211 @0.17
min / vis	50	25	0	1	2	3	1	0	0	4	0	0
RVWs	1.12	0.02	0	1.51	2.12	1.92	1.28	0	0	2.60	0	0

*Pre-op standards per Harvard Study: [scrub,dress rvw = time x 0.8 x 0.0103 x 0.988] [eval,posit,etc rvw = time x 2.2 x 0.0103 x 0.988]

**Note, per recent HCFA global RVW adjustments, office visits are not at 100% of face rvu values

Intra-RVW = Recommended RVW - (Pre+Post-op RVW) = 28.00 - 1.14 - 9.43 = 17.43

IWP/PUT = Intra-RVW / Intra-minutes = 17.43 / 230 = 0.076

FREQUENCY INFORMATION**1. How was this service previously reported?**

37799 Unlisted procedure, vascular surgery
96549 Unlisted chemotherapy procedure

2. How often do physicians in your specialty perform this service?

Commonly Sometimes Rarely

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

Approximately 1,000 cases annually.

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

Yes No

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS

Laparoscopic Procedures (Adrenalectomy, Splenectomy, Jejunostomy)

Adrenalectomy

CPT code 56321 was established to describe the procedure: *Laparoscopy, surgical: with adrenalectomy, partial or complete, or exploration of adrenal gland with or without biopsy, transabdominal, lumbar or dorsal*. Laparoscopy is not a new technology, but the application of this methodology to adrenalectomy is relatively new and was first reported in 1992.

CPT code 60540 *Adrenalectomy, partial or complete, or exploration of adrenal gland with or without biopsy, transabdominal, lumbar or dorsal (separate procedure) (work RVU = 17.03)* was used as a comparison code when evaluating the potential work relative value for the new code. CPT 56321 is more technically complex than an open adrenalectomy (CPT 60540). The laparoscopic suturing is made more difficult because of the lack of two-dimensional vision. With an open procedure, the surgeon has both the advantages of tactile information, as well as the ability to view the operative field from more than one restricted view. Similarly, the work need to repair bleeding and suturing of structures is increased due to the more complex and time consuming methods required of laparoscopic suturing.

The RUC evaluated the intensity and complexity measures for the laparoscopic and open adrenalectomy procedures and the differences in intra-operative times. It was the consensus that the work of a laparoscopic adrenalectomy was greater than that for an open procedure. In addition, the RUC reviewed the time intensity/complexity measures and agreed that the work of a laparoscopic adrenalectomy was more closely related to CPT code 43631 *Gastrectomy, partial, distal; with gastroduodenostomy* (work RVU = 19.66). This value is similar to the RVU for a gastrectomy and also represents the additional intra-operative time for a laparoscopic adrenalectomy versus the open adrenalectomy.

The RUC recommends a work relative value of 20.0 for CPT 56321.

Splenectomy

A CPT code (56345) *Laparoscopy, surgical; splenectomy* was developed in 1997 and has since that time been carrier priced. In 1998, the RUC reviewed survey data for this procedure code and was able to establish an appropriate work relative unit. CPT code 56345 was developed to adequately reflect new technology and equipment. These components are utilized to reduce postoperative pain and length of hospitalization.

As part of its analysis, the RUC considered existing CPT code 38100 *Splenectomy; total (separate procedure)*(work RVU= 13.01). CPT code 38100 describes an “open” procedure. For CPT code 56345, the intraoperative intra time is longer than that for CPT 38100 due to the maceration and tedious removal process of the spleen through laparoscopic equipment. Laparoscopic suturing is made more difficult due to the lack of two-dimensional vision and visualization of intra-abdominal structures in the left upper quadrant. With an open procedure, surgeons have both the advantage of tactile information, and the ability to view the operative field from more than one restricted view. Similarly, the work performed to stop bleeding and suturing of structures is increased due to the more complex and time consuming methods required for laparoscopic suturing.

The RUC recommends a work relative value unit of 17.00. This value represents the 75th percentile of the survey data. This value takes into account 90 minutes of additional intraoperative time and one less hospital day for the laparoscopic procedures versus the open procedure (CPT 31800).

Jejunostomy

Similar to CPT code 56345, *Laparoscopy, surgical; jejunostomy (eg for decompression or feeding)* (CPT 56347) was developed in 1997 and has been valued independently by individual carriers since its inception in 1998. This code also incorporates new equipment and technology which reduce patient pain and length of hospital stay.

CPT code 44300 *Enterostomy or cecostomy, tube (eg for decompression or feeding) (separate procedure)*(work RVU = 8.88) was used as a comparison code in the RUC process. The RUC reviewed survey information and agreed that new CPT code 56347 required more work, technical skill and effort introducing and manipulating the equipment within multiple, separate

trocar sites. As with the other two laparoscopic procedures previously detailed, the suturing for the surgical jejunostomy is more difficult due to the lack of two dimensional vision.

The RUC recommends a work relative value unit of 9.78 for CPT code 56347. This value represents the median survey result by physicians.

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
•56321	E1	Laparoscopy, surgical; with adrenalectomy, partial or complete, or exploration of adrenal gland with or without biopsy, transabdominal, lumbar or dorsal	090	20.00
56345	P7	Laparoscopy, surgical; splenectomy	090	17.00
56347	P4	Laparoscopy, surgical; jejunostomy (eg, for decompression or feeding)	090	9.78

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

(September 1998)

PT Code: 5633X (E1)

Global Period: 090

Recommended RVW: 20.00

CPT Descriptor: Laparoscopy, surgical; with adrenalectomy, partial or complete, or exploration of adrenal gland with or without biopsy, transabdominal, lumbar or dorsal

Vignette Used in Survey:

A 45-year-old male has poorly-controlled hypertension despite multi-drug therapy. Biochemical and imaging evaluations reveal a 3.5 cm pheochromocytoma of the right adrenal gland, and he is referred for consideration of adrenalectomy. Work-up has also disclosed mild hypertensive cardiomyopathy. After a discussion of the risks and benefits of adrenalectomy through both laparoscopic and open techniques, he desires to proceed with operation, preferably laparoscopically. Outpatient preparation with phenoxybenzamine is begun, and beta-blockade is later added for persistent ectopy. He is admitted the evening before operation for conversion to intravenous antihypertensive and beta-blocking agents and for hemodynamic monitoring during mechanical bowel preparation. Under general endotracheal anesthesia, using multiple laparoscopic ports and a lateral transperitoneal approach, the tumor-bearing right adrenal gland is identified. The gland is mobilized intact from surrounding tissues, with particular attention to avoid avulsion of the adrenal vein from the inferior vena cava, while coordinating operative activities with the anesthesiologist to minimize blood pressure lability. Adrenalectomy is completed laparoscopically. Final histopathology returns pheochromocytoma confined to the adrenal gland. He requires two ICU days for management of vasoactive and anti-arrhythmic medications. He is transferred to the floor on postoperative day two and is discharged to home on postoperative day four.

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 initial incision. The day prior to operation, the patient is admitted for conversion from oral antihypertensive and beta-blocking agents to intravenous infusions. Because of the risk of catecholamine crisis, mechanical bowel preparation is also accomplished in a monitored setting. Appropriate orders are written and the immediate potassium supplementation for patients with primary hyperaldosteronism or preoperative steroid supplementation for patients with Cushing's syndrome and those undergoing bilateral adrenalectomy.) The preoperative work-up is reviewed with particular attention to CT, MIBG, and other localizing studies. Patient and family questions are answered. On the day of operation, after changing to scrub clothes, the surgeon meets the patient in the Operating Room. After observing the induction of anesthesia, which may be lengthy to place invasive monitoring devices and to avoid hypertensive crisis, the surgeon supervises insertion of a nasogastric sump tube and Foley bladder catheter. The surgeon oversees lateral decubitus positioning of the patient, ensuring that all pressure points are properly padded to avoid neuropraxia. (Particular care in positioning is required with Cushing's syndrome patients because of disease-related skin friability.) The surgeon oversees application of lower extremity intermittent pneumatic compression devices. The surgeon verifies with the nursing staff that all necessary surgical instruments and supplies are readily available in the operative suite (eg, trans-laparoscopic and transcutaneous sonography equipment for the posterior retroperitoneal approach, ultrasonic scissors and aspirator for Cushing's syndrome patients). The surgeon scrubs and gowns. The abdomen is draped for both laparoscopic and potential open access.

Description of Intra-Service Work:

A short transverse incision is made lateral to the edge of the right rectus muscle below the costal margin and carried down to the peritoneum, which is then opened under direct vision. A 10-12 mm port is secured through a purse-string suture at this site. Low flow carbon dioxide insufflation is started and converted to high flow when peritoneal insufflation is confirmed; a pressure of about 15 torr is reached and maintained. The videolaparoscope is then inserted through the port. A second port is inserted in the anterior axillary line, under observation through the videolaparoscope, followed by a third port in the midaxillary line. Diagnostic (surgical) laparoscopic evaluation of the peritoneal cavity is performed. The operating table is hyperextended at the patient's waist to aid exposure. The right colon and right lobe of the liver are mobilized by dividing peritoneal ligaments as needed. Instruments are placed for liver retraction. The anesthesiologist is informed that peri-adrenal dissection is about to begin, so that prompt intervention for catecholamine crisis can be instituted as needed. The retroperitoneal space is opened overlying the superior aspect of the kidney and the adrenal gland, and an additional port is inserted in the posterior axillary line. After identification by inspection, the adrenal gland is mobilized by a combination of sharp and blunt dissection. (Adrenal gland visualization may be difficult in obese patients, particularly with Cushing's syndrome, and may require transcutaneous or laparoscopic ultrasonography in addition to considerable dissection). Hemostatic clips are placed and vessels divided as needed, with particular care being taken not to avulse the adrenal veins from the inferior vena cava. All adrenal attachments except the main adrenal vein are divided, and the anesthesiologist is notified that adrenalectomy is nearly complete so that preparations may be made to treat any post-tumor-removal hypotension. The adrenal vein is multiply clipped on either side of the proposed point of transection or is divided with a laparoscopic stapler, again with great care not to injure the inferior vena cava. A specimen bag is introduced through a port and the adrenal is placed within it. The bag is then withdrawn through a port if the specimen size permits. (If the specimen is large, one of the port sites can be enlarged just prior to the conclusion of the procedure and the bag extracted through that site.) The operative field is irrigated with care to avoid dislodging clips by irrigation or suction. Adequate hemostasis is confirmed, including specific visualization of the residual clipped/stapled end of the adrenal vein. The port sheaths are sequentially removed under observation through the videolaparoscope, then the final port is removed; fascia is closed at the port sites as needed. All skin sites are closed with subcuticular sutures.

Description of Post-Service Work:

Post-service work begins after skin closure in the operating room and includes the application of sterile dressings, writing postoperative orders, completing the operative dictation, communicating with family and other health care professionals, and all hospital visits and services performed by the surgeon, including ICU care and ventilator management as needed (particularly for pheochromocytoma patients and for cases of advanced Cushing's syndrome), as well as ordering and reviewing postoperative radiographs and laboratory studies, wound and drain care, and managing analgesics. Discharge day management includes the surgeon's final examination of the patient, instructions for outpatient follow-up including coordination with referring physicians, preparation of discharge records, confirming arrangements for outpatient testing following removal of hormone secreting tumors, and finalizing the program for outpatient weaning of antihypertensives, potassium supplements, aldosterone antagonists, or steroids. Additionally, all post-discharge office visits for the first 90 days after the day of operation are considered part of the postoperative work for this procedure including removal of sutures, ordering and evaluating periodic imaging and laboratory reports, and/or analgesic adjustments.

SURVEY DATA:

Specialty(s): American College of Surgeons
 Type of Sample: Random

Survey n: 45
 Response: 32
 Rate %: 71%

	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	20.00	70	180	30	1	30	2	40	25	2	30
low	17.03		90								
25th%	18.50		150								
75th%	22.25		210								
high	37.00		270								

KEY REFERENCE SERVICE(S):

1998 RVW	Global	CPT	Descriptor
19.66	090	43631	Gastrectomy, partial, distal; with gastroduodenostomy
17.03	090	60540	Adrenalectomy, partial or complete, or exploration of adrenal gland with or without biopsy, transabdominal, lumbar or dorsal (separate procedure);

LOS and Time Estimates (Median)	Mean Intensity/Complexity Measures		
	5633X (E1)	60540	43631
LOS	4	5	5
PRE-service time	70	60	45
INTRA-service time	180	130	180
POST-service time	155	173	160
Mental Effort and Judgment			
The number of possible diagnosis and/or the number of management options that must be considered	4.33	3.83	3.29
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	4.40	3.89	3.40
Urgency of medical decision making	3.70	3.56	3.40
Technical Skill/physical Effort			
Technical skill required	4.73	3.79	3.43
Physical effort required	4.00	3.50	3.50
Psychological Stress			
The risk of significant complications, morbidity and/or mortality	4.43	3.63	3.57
Outcome depends on skill and judgment of physician	4.60	4.00	3.80
Estimated risk of malpractice suit with poor outcome	3.60	3.44	3.40
Time Segments			
PRE-service intensity/complexity	4.00	3.67	3.20
INTRA-service intensity complexity	4.70	4.00	3.00
POST-service intensity complexity	3.50	3.33	3.20

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

5633X (E1) is more technically complex than an open adrenalectomy (CPT 60540). Laparoscopic suturing is made more difficult because of the lack of two dimensional vision. With an open procedure, the surgeon has both the advantage of tactile information, as well as the ability to view the operative field from more than one restricted view. Similarly, the work needed to take care of bleeding and suturing of structures is increased due to the more complex and time consuming methods required for laparoscopic suturing.

The survey intensity and complexity average measures for the laparoscopic and open adrenalectomy procedures and the difference in intraoperative time indicate that the survey respondents believed that the work of a laparoscopic adrenalectomy is greater than the open procedure. In addition, the time and intensity/complexity measures indicate that the work of a laparoscopic adrenalectomy is more closely related to a gastrectomy (CPT 43631). The median RVW of 20.00 is recommended. This value is similar to the RVW for a gastrectomy and takes into account the additional intraoperative time for a laparoscopic adrenalectomy versus the open adrenalectomy.

ADDITIONAL RATIONALE (eg, if recommended RVUs are based on an alternative method instead of the survey results):

IWP/PUT calculation for global procedure:

	Pre-op RVW calc*		Global RVWs for Post-operative Work**									
	eval, posit, etc	scrub, dress, etc	99291 @4.00	99233 @1.51	99232 @1.06	99231 @0.64	99238 @1.28	99215 @1.73	99214 @1.08	99213 @0.65	99212 @0.43	99211 @0.17
min / vis	45	25	0	1	1	1	1	0	0	2	0	0
RVWs	1.01	0.02	0	1.51	1.06	0.64	1.28	0	0	1.30	0	0

*Pre-op standards per Harvard Study: [scrub,dress rvw = time x 0.8 x 0.0103 x 0.0988] [eval,posit,etc rvw = time x 2.2 x 0.0103 x 0.988]

**Note, per recent HCFA global RVW adjustments, office visits are not at 100% of face rvu values

Intra-RVW = Recommended RVW - (Pre+Post-op RVW) = 20.00 - 6.82 = 13.18

IWP/PUT = Intra-RVW / Intra-minutes = 13.18 / 180 = 0.073

FREQUENCY INFORMATION**1. How was this service previously reported?**

Most are being reported as:

60540 Adrenalectomy, partial or complete, or exploration of adrenal gland with or without biopsy, transabdominal, lumbar or dorsal

The remainder are reported as:

60699 Unlisted procedure, endocrine system

56399 Unlisted procedure, laparoscopy, hysteroscopy

Current code 60540 will be reported by the new code about 30% of the time.

[20% (Mayo Clinic, JA vanHeerden, personal communication) to 100% (Cleveland Clinic, M Gagner, personal communication) of calendar year 1995 adrenalectomies were completed laparoscopically. Using an average value for these and other large series of cases yields a maximum of about 60% of adrenalectomies being done laparoscopically. Variations in patient referral patterns and in access to laparoscopic adrenalectomy technology and expertise will result in submaximal current utilization. This percentage should rise toward 60% as experience with this procedure accumulates.]

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?

1994 Medicare Part B data indicate about 1000 patients undergoing adrenalectomy annually. Because hormonally active adrenal tumors are more common in younger patients, about twice as many cases are found in patients <65 years. Thus, after allowing for unresectable cases and for pheochromocytomas discovered only at autopsy, the total volume of adrenalectomies is about 2500-3000/yr. (Overall in USA, pheochromocytoma incidence about 0.8/100,000 person-years annually, Cushing's disease due to primary adrenal causes 0.14/100,000, and adrenocortical carcinoma 1/1-2 million/year)

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

No

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

(September 1998)

T Code: 56345 (P7)

Global Period: 090

Recommended RVW: 17.00

CPT Descriptor: Laparoscopy, surgical; splenectomy

Vignette Used in Survey:

A 45-year-old female presented with easy bruisability and a platelet count of 20,000; the diagnosis of idiopathic thrombocytopenic purpura has been made. She is refractory to all forms of medical therapy and is referred for surgical evaluation. The surgical options are discussed and laparoscopic splenectomy performed. The patient is observed closely for bleeding and potential hematologic problems. She is discharged four days postoperatively.

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 cardiopulmonary, gastrointestinal, and hematologic status; reviewing previous CT scans and ultrasounds, pathology and laboratory studies; consulting with the referring physician, if necessary, and other health care professionals; and communicating with the patient (and/or the patient's family) to explain the operative risks and benefits and to obtain informed consent. Other preoperative services include 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:

Diagnostic laparoscopy is performed. The splenic flexure and gastrocolic omentum are mobilized. The spleen is mobilized from the peritoneal attachments, and the hilar vessels and short gastric vessels are ligated and divided. The spleen is placed in a bag, morcellated, and removed. Hemostasis is obtained, and the operative site is observed for bleeding. The trocar sites are inspected after removal of the trocars, and the wounds are closed.

Description of Post-Service Work:

Post-service work begins after skin closure in the operating room and includes the application of sterile dressings. Post-service work also includes monitoring the patient's stability in the recovery room; writing orders; communicating with the family and other health care professionals (including written and oral reports and orders); and all hospital visits and services performed by the surgeon, including ICU care and ventilator management, as necessary; careful monitoring of cardiopulmonary status; ordering and reviewing postoperative radiographs and laboratory studies; monitoring and care of the incision; monitoring, maintenance, and removal of all tubes and drains; and antibiotic and pain medication management. Discharge management includes the surgeon's final examination of the patient, instructions for 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; ordering and evaluating periodic imaging and laboratory reports, if needed; and antibiotic and pain medication adjustments.

SURVEY DATA

Specialty(s): American College of Surgeons
 Type of Sample: Random

Survey n: 42
 Response: 40
 Rate %: 95%

	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	15.55	60	180	30	0	0	3	45	15	2	30
low	13.21		75								
25th%	14.27		150								
75th%	17.00		180								
high	26.02		300								

KEY REFERENCE SERVICE(S):

1998 RVW	Global	CPT	Descriptor
13.01	090	38100	Splenectomy; total (separate procedure).
14.19	090	38115	Repair of ruptured spleen (splenorrhaphy) with or without partial splenectomy

LOS and Time Estimates (Median)	Mean Intensity/Complexity Measures		
	56345 (P7)	38100	38115
LOS	4	5	6
PRE-service time	60	60	60
INTRA-service time	180	90	120
POST-service time	120	125	180
Mental Effort and Judgment	4.18	3.44	3.78
Technical Skill/physical Effort	4.75	3.12	4.00
Psychological Stress	4.50	3.06	4.22

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

CPT 56345 (P7) intraoperative intra time is longer than the comparable open procedure (CPT 38100) due to the maceration and tedious removal process of the spleen through the laparoscopic equipment. The search for accessory spleens is more difficult and tedious laparoscopically. Laparoscopic suturing is made more difficult because of the lack of two dimensional vision and visualization of intra-abdominal structures in the left upper quadrant. With an open procedure, the surgeon has both the advantage of tactile information, as well as the ability to view the operative field from more than one restricted view. Similarly, the work needed to take care of bleeding and suturing of structures is increased due to the more complex and time consuming methods required for laparoscopic suturing.

The 75th percentile RVW of 17.00 is recommended. This value takes into account 90 minutes of additional intraoperative time and one less hospital day for the laparoscopic procedure (CPT 56345) versus the open procedure (CPT 38100). The additional rationale below presents the two approaches utilized to validate this recommendation.

ADDITIONAL RATIONALE

Rationales for RVW recommendation of 17.00:

1. IWPUT comparison:

Based on the survey median times, the recommended RVW of 17.00 results in an IWPUT of 0.061, which is a somewhat low, but reasonable "average" intensity for the 180 minutes of intraoperative work.

Pre-op RVW calc*			"Global Package" RVWs for Post-operative Work									
eval, posit, etc	scrub, dress, etc		99291 @4.00	99233 @1.51	99232 @1.06	99231 @0.64	99238 @1.28	99215 @1.73	99214 @1.08	99213 @0.65	99212 @0.43	99211 @0.17
min/vis	35	25	0	0	0	4	1	0	0	2	0	0
RVWs	0.78	0.02	0	0	0	2.56	1.28	0	0	1.30	0	0

*Pre-op standards per Harvard Study: [scrub,dress rvw = time x 0.8 x 0.0103 x 0.988] [eval,posit,etc rvw = time x 2.2 x 0.0103 x 0.988]

**Note, per recent HCFA global RVW adjustments, office visits are not at 100% of face rvu values

$$\text{Intra-RVW} = \text{Recommended RVW} - (\text{Pre+Post-op RVW}) = 17.00 - 5.94 = 11.06$$

$$\text{IWPUT} = \text{Intra-RVW} / \text{Intra-minutes} = 11.06 / 180 = 0.061$$

2. RVW & time comparison:

The addition of 4.00-6.00 rvu's for 90 minutes of additional intra-operative time (similar to 90 minutes for ICU codes 99291+99292), minus one hospital visit @0.64, compares well with the difference between the recommended RVW for CPT 56345 and the RVW for the open procedure (CPT 38100).

$$\text{RVU range} = 16.37-18.37 = [13.01 + (4.00 \text{ to } 6.00) - 0.64]$$

FREQUENCY INFORMATION

How was this service previously reported?

CPT 38100 Splenectomy; total (separate procedure)

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?

1996 Medicare utilization data indicate a frequency of approximately 2,000.

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

Yes No

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

(September 1998)

PT Code: 56347 (P4)

Global Period: 090

Recommended RVW: 9.78

CPT Descriptor: Laparoscopy, surgical; jejunostomy (eg, for decompression or feeding)

Vignette Used in Survey:

A 70-year-old male who has had a previous CVA presented with esophagogastric dysmotility and repeated episodes of pulmonary aspirations. The patient requires enteral feedings for long-term nutritional support. The operation is performed, and the patient is discharged two days postoperatively with instructions on wound care and enteral feeding procedures.

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 cardiopulmonary, gastrointestinal, and hematologic status; reviewing previous CT scans and ultrasounds, pathology and laboratory studies; consulting with the referring physician, if necessary, and other health care professionals; and communicating with the patient (and/or the patient's family) to explain the operative risks and benefits and to obtain informed consent. Other preoperative services include 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:

Under general anesthesia, diagnostic laparoscopy is performed, and the proximal jejunum is identified at the base of the transverse mesocolon. Fifty cm distal to the ligament of Treitz, the antimesenteric wall of the jejunum is grasped, and a purse-string suture is placed. An opening is made in the bowel, and a percutaneously placed small feeding tube is inserted into the bowel, advanced and secured. The jejunum is then sutured to the anterior abdominal wall. Meticulous hemostasis is maintained, trocar sites are observed, and the wounds are closed.

Description of Post-Service Work:

Post-service work begins after skin closure in the operating room and includes the application of sterile dressings. Post-service work also includes monitoring the patient's stability in the recovery room; writing orders; communicating with the family and other health care professionals (including written and oral reports and orders); and all hospital visits and services performed by the surgeon, including ICU care and ventilator management, as necessary; careful monitoring of cardiopulmonary status; ordering and reviewing postoperative radiographs and laboratory studies; monitoring and care of the incision; monitoring, maintenance, and removal of all tubes and drains; obtaining a nutritional assessment and initiating early postoperative enteral feedings; antibiotic and pain medication management. Discharge management includes the surgeon's final examination of the patient, instructions for 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; ordering and evaluating periodic imaging and laboratory reports, if needed; and antibiotic and pain medication adjustments.

SURVEY DATA

Specialty(s): American College of Surgeons
 Type of Sample: Random

Survey n: 42
 Response: 30
 Rate %: 71%

	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	9.78	60	75	15	0	0	2	30	20	2	30
low	5.50		30								
25th%	8.89		60								
75th%	11.11		90								
high	15.00		120								

KEY REFERENCE SERVICE(S):

1998 RVW	Global	CPT	Descriptor
8.88	090	44300	Enterostomy or cecostomy, tube (eg, for decompression or feeding) (separate procedure)
7.28	090	43830	Gastrostomy, temporary (tube, rubber or plastic) (separate procedure);

LOS and Time Estimates (Median)	Mean Intensity/Complexity Measures		
	56347 (P4)	44300	43830
LOS	4	4	4
PRE-service time	60	40	30
INTRA-service time	75	60	60
POST-service time	100	85	70
Mental Effort and Judgment	2.96	2.58	2.33
Technical Skill/physical Effort	3.58	2.58	2.33
Psychological Stress	3.00	2.26	2.08

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

The overall work of CPT 56347(P4) is most comparable to CPT 44300. CPT 56347 requires more technical skill and effort for introducing and manipulating the equipment within multiple, separate trocar sites. Laparoscopic suturing is made more difficult because of the lack of two dimensional vision. [With an open procedure, the surgeon has both the advantage of tactile information, as well as the ability to view the operative field from more than one restricted view.] Similarly, the work needed to take care of bleeding and suturing of structures is increased due to the more complex and time consuming methods required for laparoscopic suturing. The median RVW of 9.78 is recommended.

ADDITIONAL RATIONALE:**IWPUT calculation:**

	Pre-op RVW calc*		Global RVWs for Post-operative Work**									
	eval, posit, etc	scrub, dress, etc	99291 @4.00	99233 @1.51	99232 @1.06	99231 @0.64	99238 @1.28	99215 @1.73	99214 @1.08	99213 @0.65	99212 @0.43	99211 @0.17
min / vis	35	25	0	0	0	3	1	0	0	2	0	0
RVWs	0.78	0.02	0	0	0	1.92	1.28	0	0	1.30	0	0

*Pre-op standards per Harvard Study: [scrub,dress rvw = time x 0.8 x 0.0103 x 0.988] [eval,posit,etc rvw = time x 2.2 x 0.0103 x 0.988]

**Note, per recent HCFA global RVW adjustments, office visits are not at 100% of face rvu values

Intra-RVW = Recommended RVW - (Pre+Post-op RVW) = 9.78 - 5.30 = 4.48

IWPUT = Intra-RVW / Intra-minutes = 4.48 / 75 = 0.060

FREQUENCY INFORMATION

How was this service previously reported?

44300 Enterostomy or cecostomy, tube (eg, for decompression or feeding) (separate procedure) global=090

44015 Tube or needle catheter jejunostomy for enteral alimentation, intraoperative, any method (list separately in addition to primary procedure) global=zzz

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?

1996 Medicare utilization data indicate a frequency of approximately 500.

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

Yes No

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS

Sentinel Node Biopsy

The RUC evaluated proposed work values for new CPT code 38792 *Injection procedure; for identification of sentinel node*. Increased awareness and better understanding of the natural history of various malignancies and results of treatment have led to new concepts about lymph nodes sampling and staging of malignancies, i.e., breast and melanoma. New procedures, such as sentinel node biopsy, are outgrowths of that enhanced understanding. Current CPT terminology did not effectively describe sentinel node biopsy procedures. The addition of code 38792, along with several editorial changes to other related codes, will allow for an accurate description of the service and will provide for additional outcomes tracking.

The RUC considered CPT code 11900 *Injection, intralesional; up to and including seven lesions* (work RVU = .52) when determining an appropriate work value for the new code. It was the consensus that the time and complexity measurements for CPT 38792 were very similar to CPT 11900, and as such, should be valued at a similar rate.

The RUC, therefore, recommends acceptance of .52 as the work relative value unit for CPT code 38792.

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
▲38747	EE2	Abdominal lymphadenectomy, regional, including celiac, <u>gastric, portal, peripancreatic, with or without para-aortic and vena caval nodes</u> (<u>Report List separately in addition to code for primary procedure</u>)	ZZZ	4.89 (No Change)

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
▲38790		Injection procedure; for lymphangiography	000	1.29 (No Change)
•38792	EE3	for identification of sentinel node (For excision of sentinel node, see 38500-38542) (For nuclear medicine lymphatics and lymph gland imaging, use 78195)	000	.52
78195		Lymphatics and lymph glands imaging (For sentinel node injection, see 38792) (For sentinel node excision, see 38500 - 38542)	XXX	1.20 (No Change)

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

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

(September 1998)

CPT Code: 3879X (EE3)

Global Period: 000

Recommended RVW: 1.40

CPT Descriptor: Injection procedure; for identification of sentinel node

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey:

A 55-year-old female swimming coach recently underwent wide local excision of a pigmented skin lesion of the upper arm. Final pathology has returned a 1.0 mm thick superficial spreading malignant melanoma. There is no palpable axillary adenopathy or evidence for distant metastasis. Sentinel node biopsy is recommended and she elects to proceed. General anesthesia is induced. Approximately 3 cc of isosulfan is injected intradermally at several sites around the wide excision site. A separately billable sentinel node biopsy is then performed. During observation after injection, her hemodynamics remain stable and there is no physical evidence of local histamine release or other anaphylactic manifestation. *[In responding to this survey, please consider **ONLY** the work for the injection procedure (bolded text above), including any associated pre- and post-procedure work. The work for the node biopsy is separately billable using a different CPT code and should not be considered for this survey.]*

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

Description of Pre-Service Work:

A history of prior allergic reactions to vital dyes, food coloring, or radioisotopes is sought. Based upon the site of the primary tumor (or its excision site) and the location of the anticipated draining nodal basin, the site(s) for dye or tracer injection is chosen.

Description of Intra-Service Work:

The dye or tracer is injected intradermally and (for extremity primary lesions) the extremity is elevated. Care is taken to inject around the scar tissue to achieve adequate tracer concentration in the local lymphatic spaces.

Description of Post-Service Work:

The patient is observed for evidence of local histamine release and other allergic or anaphylactic manifestations. Dosimetry and/or radioactivity measurements are made if needed after radionuclide tracer use.

SURVEY DATA:

Specialty(s): American College of Surgeons
 Type of Sample: Random

Survey n: 46
 Response: 22
 Rate %: 48%

	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	1.40	15	10	10	0	0	0	0	0	0	0
low	1.10		2								
25th%	1.29		5								
75th%	1.52		15								
high	2.10		45								

KEY REFERENCE SERVICE(S):

1998 RVW	Global	CPT	Descriptor
1.29	000	38790	Injection procedure for lymphangiography
1.53	000	19030	Injection procedure only for mammary ductogram or galactogram

LOS and Time Estimates (Median)	Mean Intensity/Complexity Measures		
	3879X	38790	19030
LOS	0	0	0
PRE-service time	15	10	15
INTRA-service time	10	10	13
POST-service time	10	5	5
Mental Effort and Judgment			
The number of possible diagnosis and/or the number of management options that must be considered	2.27	2.10	2.25
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	2.50	2.20	2.50
Urgency of medical decision making	1.95	1.90	2.00
Technical Skill/physical Effort			
Technical skill required	2.14	2.40	2.38
Physical effort required	1.55	1.80	1.88
Psychological Stress			
The risk of significant complications, morbidity and/or mortality	1.64	1.80	1.50
Outcome depends on skill and judgment of physician	2.45	2.30	2.75
Estimated risk of malpractice suit with poor outcome	2.41	2.00	2.38
Time Segments			
PRE-service intensity/complexity	2.36	1.90	2.38
INTRA-service intensity complexity	2.18	2.20	2.38
POST-service intensity complexity	1.77	1.30	1.88

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

3879X (EE3) is slightly more intense than injection for lymphangiography (CPT 38790) because EE3 generally follows a positive local pathology report and requires precise injection in and around the biopsy or excised area for accurate placement of the tracer material in the lymphatic spaces.

3879X (EE3) is slightly less work than injection for mammary ductogram or galactogram (CPT 19030) because EE3 injection is not as deep/diffuse and does not require cannulation of a specific duct.

The median RVW of 1.40 is recommended. This value is midway between the relative work values for CPT codes 38790 and 19030 and is consistent with the discussion presented above.

ADDITIONAL RATIONALE (eg, if recommended RVUs are based on an alternative method instead of the survey results):

N/A

FREQUENCY INFORMATION

How was this service previously reported?

38790 Injection procedure for lymphangiography (RVW = 1.29; global = 000)

38999 Unlisted procedure, hemic or lymphatic system (by report)

78195 Lymphatics and lymph glands imaging (RVW = 1.20; global = XXX)

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?

Frequency will be nearly equal to that for sentinel node biopsies (approximately 108,000 potential candidates). There will be occasional technical failures and some patients will have complete regional lymphadenectomy rather than sentinel node biopsy based upon clinical or operative findings, so that the two numbers will not be exactly the same.

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

Yes No

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS

Ultrasound Bone Densitometry

A new CPT code was established to reflect innovative changes in bone densitometry procedures. CPT code 76977 was created to report *Ultrasound bone density measurement and interpretation, peripheral site(s), any method*

In general, bone densitometry is used in conjunction with evaluation and management services to determine whether a patient is at risk for osteoporosis. The services include obtaining a patient history to identify the presence of known risk factors for osteoporosis as well as all medications currently being taken by the patient. Unlike most methods of bone densitometry current in clinical use, ultrasound bone densitometry does not use ionizing radiation. Specifically, the intended use of ultrasound bone densitometry is to perform a quantitative ultrasound measurement of the calcaneus. This measurement can be used in conjunction with other clinical risk factors as an aid to the physicians in the diagnosis of osteoporosis and medical conditions leading to reduced bone density.

For comparison purposes, the RUC referred to CPT code 78890 *Generation of automated data; interactive process involving nuclear physician and or allied health professional personnel; simple manipulations and interpretation not to exceed 30 minutes.* (work RVU = .05). Given the similarity in the areas of time and complexity for physician work, the RUC agreed that the same work relative value unit was appropriate for the new code.

The RUC recommends a work relative value unit of .05 for new CPT code 76977.

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
•76977	AAI	Ultrasound bone density measurement and interpretation, peripheral site(s), any method	XXX	.05

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AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code: 7697X Tracking Number: AAA1 Global Period: XXX Recommended RVW: 0.22

CPT Descriptor: Ultrasound bone density measurement and interpretation, peripheral sites(s), any method

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey:

A thirty-five year-old woman with kidney stones secondary to hyperparathyroidism. Family history is positive for her father having osteoporosis.

A fifty-eight year-old male with corticosteroid dependent Rheumatoid Arthritis and rib fractures from playing golf.

A seventy year-old woman, who is considering estrogen replacement therapy for osteoporosis, is referred for therapy progress/disease-monitoring purposes.

A sixty-two year-old woman with a height loss and a family history of osteoporosis.

Description of Physician Work:

- | | |
|---------------------|---|
| Pre-Service Work: | • Review patient history |
| Intra-Service Work: | • Interprets results of study
• Compares results in relation to current diagnosis and future treatment, if appropriate |
| Post-Service Work: | • Dictate, correct, and sign report
• Discuss and communicate report/findings with referring physician(s) |

SURVEY DATA:

Specialty: American College of Radiology

Sample Size: 124 Response Rate (%): N=17 (14%) Median Initial RVW: 0.21 Median Final RVW: 0.21

Type of Sample (Circle One): random, panel, convenience.

Explanation of sample size: ACR Committees/Commissions

25th Percentile Final RVW: 0.18 75th Percentile Final RVW: 0.24 Low Final RVW: 0.05 High Final RVW: 0.36

Median Total-Service Time: 5 min

25th Percentile Total-Svc Time: 4.6 min 75th Percentile Total-Svc Time: 7.8 min Low: 2 min High: 30 min

KEY REFERENCE SERVICE(S):

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
1)	76075	Dual energy x-ray absorptiometry (DEXA), bone density study, one or more sites; axial skeleton (eg, hips, pelvis, spine)	0.30
2)	76076	Dual energy x-ray absorptiometry (DEXA), bone density study, one or more sites; appendicular skeleton (peripheral) (eg, radius, wrist, heel)	0.22

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.

INTENSITY/COMPLEXITY MEASURESCPT CodeReferenceReference

7697X

Service 1Service 2

76076

76075

Time Estimates

Median Total Physician (Minutes)	5.0	5.0	7.5
----------------------------------	-----	-----	-----

Mental Effort and Judgment (Mean)

The number of possible diagnosis and/or the number of management options that must be considered	2.1	2.1	2.5
--	-----	-----	-----

The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	2.2	2.1	2.3
--	-----	-----	-----

Urgency of medical decision making	1.1	1.0	1.1
------------------------------------	-----	-----	-----

Technical Skill/Physical Effort (Mean)

Technical skill required	2.2	2.3	2.1
--------------------------	-----	-----	-----

Physical effort required	1.7	1.75	1.4
--------------------------	-----	------	-----

INTENSITY/COMPLEXITY MEASURESCPT Code

7697X

ReferenceService 1

76076

ReferenceService 2

76075

Psychological Stress (Mean)

The risk of significant complications, morbidity and/or mortality	1.6	1.25	1.5
Outcome depends on the skill and judgement of physician	2.2	2.1	2.0
Estimated risk of malpractice suit with poor outcome	1.7	1.4	1.8

Time Segments(Mean)

Total-Service intensity/complexity	2.1	1.9	2.1
------------------------------------	-----	-----	-----

The number of times the respondents performed the procedure over the past year.

MeanMedian

28

0

Did the description of typical patient/service match your typical patient?

YesNo

N=12 (92.3%)

N=1 (7.6%)

ADDITIONAL RATIONALE

For example, if recommended RVUs are based on an alternative method instead of the survey results.

The RVWs and the Intensity/Complexity measures from the survey both rate code 7697X and 76076 to be comparable. Therefore, our recommended RVW for code 7697X is the same as that for code 76076 (0.22).

FREQUENCY INFORMATION

How was this service previously reported? 76999 (new technology)

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? Less than that frequency for 76076

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

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS

Pulmonary Function Procedures

Revised Code 94620

CPT code 94620 was revised to read: *Pulmonary stress testing; simple (eg, prolonged exercise test bronchospasm with pre- and post spirometry)*. The code descriptor for this procedure was modified by deleting the reference to “complex testing” and placing that procedure in a new code (see below, new code 94621). The change was instituted to ensure that the code would only be used to report “simple” stress testing. Simple and complex stress tests are vastly different in the amount of resources needed to perform them. One code cannot accurately describe two such disparate procedures.

The RUC used CPT code 93015 as a comparison code. CPT code 93015 describes: *Cardiovascular stress testing using maximal or submaximal treadmill or bicycle exercise, continuous electrocardiographic monitoring, and/or pharmacological stress; with physician supervision, with interpretation and report* (work RVU = .75). The RUC agreed that the physician work involved in 93015 was greater than that of 94620. It was the consensus that .67, representing 25% percentile, was an appropriate for the physician work being described under the new code.

New Code 94621

In conjunction with the revision to CPT code 94620, a new CPT code was created: 94621, *Pulmonary stress testing; complex (including measurements of CO₂ production, O₂ uptake, and electrocardiographic recordings)*.

Complex stress testing measures the integration of cardiac and pulmonary function and the status of physician fitness and includes measuring of CO₂ production, O₂ uptake, and electrocardiographic recordings of the patient’s response to the stress. The outputs of this panel of complex metabolic tests are then analyzed and interpreted by the physicians, and a report is generated.

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As with revised code, the RUC reviewed CPT codes 93015 and in addition 99215 *Of or other outpatient visits for the evaluation and management of an established patient which requires at least two of these key comments: a comprehensive exam medical decision making of high complexity. Counseling and/or coordination of care with other providers or agencies are provided constant with the nature of the problems(s) ad the present and or family needs. Usually the representing problem are eof moderate it high severity* (work RVU).

When developing a work relative value, The RUC evaluated the survey median of 1.48, and agreed that the physician work was substantially greater that that for CPT code 93015. The RUC accepted the survey median as an appropriate value, and recommends that a work relative of unit of 1.48 be accepted for the new CPT code.

CPT Code (•New)	Track- ing Number	CPT Descriptor	Global Period	Work RVU Recommendation
▲94060	WW6	Bronchospasm evaluation: spirometry as in 94010, before and after bronchodilator' (aerosol or parenteral) or exercise (For prolonged exercise test for bronchosapsm with pre and post spirometry, see 94620)	XXX	.31 (No Change)
▲94070	WW7	Prolonged postexposure evaluation of bronchospasm with multiple spirometric determinations after test dose of bronchodilator (aerosol only) antigen, exercise, cold air, methacholine or other chemical agent, with spirometry as in 94010 <u>subsequent spirometrics</u>	XXX	.60 (No Change)

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CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
▲94620	WW1	Pulmonary stress testing; simple (eg, prolonged exercise test bronchospasm with pre- and post spirometry) or complex	XXX	.67
•94621	WW2	complex (including measurements of CO ₂ production, O ₂ uptake, and electrocardiographic recordings)	XXX	1.48
•94014	WW3	Patient initiated spirometric recording per 30 day period of time; includes reinforced education, transmission of spirometric tracing, data capture, analysis of transmitted data, periodic recalibration and physician review and interpretation	XXX	.52 (Approved at May 1998 RUC Meeting)
•94015	WW4	recording (includes hook-up, reinforced education, data transmission, data capture, trend analysis, and periodic recalibration)	XXX	No physician work.
•94016	WW5	physician review and interpretation only	XXX	.52 (Approved at May 1998 RUC Meeting)

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AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code: 94620 Tracking Number: WW1 Global Period: XXX Recommended RVW: 67

CPT Descriptor: Pulmonary stress testing; simple (eg, prolonged exercise test for bronchospasm with pre- and post spirometry)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 65 year-old woman is seen because of dyspnea and cough after walking several city blocks. She has a normal physical examination and spirogram is normal.

or

A 65 year-old woman with documented COPD is evaluated for entrance into a pulmonary rehabilitation program.

Description of Pre-Service Work: A simple exercise test is performed with baseline spiogram. The physician performs a brief history and physical to determine if patient is fit to do test. Time answering questions about test is taken. A simple exercise test is performed with a baseline spiogram. She walks on a treadmill until dyspnea occurs and a repeat spiogram is obtained to evaluate for exercise induced bronchospasm.

or

A six minute walk is performed to evaluate distance, dyspnea, oxyhemoglobin desaturation and heart rate. The test is usually repeated after a rest period to eliminate learning bias (but billed as one test). NOTE: Brief exercise with pulse oximetry to document desaturation or to determine oxygen flow to prevent desaturation should be coded as 94761.

Description of Intra-Service Work: The physician analyzes the data and prepares a written interpretation of the test results.

Description of Post-Service Work: The physician discusses findings with the patient and devises plans for therapy and further testing, then communicates with the results referring physician.

SURVEY DATA:

Specialty: American College of Chest Physicians (ACCP) and American Thoracic Society (ATS)

Sample Size: 184 Response Rate: 44/184 24% Initial-Median RVW: 0.75
Final Median RVW: 0.75

Type of Sample (Circle One): random panel, convenience. Explanation of sample size: Good Response

25th Percentile RVW: 0.67 75th Percentile RVW: 1.05 Low: 0.3 High: 2.4

Median Pre-Service Time: 15 Median Intra-Service Time: 15

25th Percentile Intra-Svc Time: 10 75th Percentile Intra-Svc Time: 20 Low: 5 High: 60

Median Post-Service Time:	<u>Total Time</u>	<u>Number of Visits</u>
Day of Procedure:	<u>10</u>	_____
ICU:	_____	_____
Other Hospital:	_____	_____
Office:	_____	_____

CPT Code: 94620

KEY REFERENCE SERVICE (S):

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RW</u>
1)	93015	Cardiovascular Stress test using maximal or submaximal treadmill or bicycle exercise, continuous	0.75
2)	99214	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 detailed history, a detailed exam, 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 patient's and/or family's needs. Usually the presenting problems are of moderate to high severity. Physicians typically spend 25 minutes face-to-face with the patient.	1.10

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>INTENSITY/COMPLEXITY MEASURES</u>	<u>CPT Code</u> 94620	<u>Reference Service 1</u> 93015	<u>Reference Service 2</u> 99214
<u>Time Estimates</u>			
Median Pre-Time	15	15	5
Median Intra-Time	15	20	25
Median Post-Time	10	15	5
<u>Mental Effort and Judgement</u>			
The number of possible diagnosis and/or the number of management options that must be considered	2.95	2.33	3.22
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	2.98	3.25	3.22
Urgency of medical decision making	2.84	3.33	2.78
<u>Technical Skill/Physical Effort</u>			
Technical skill required	2.84	3.37	2.22
Physical effort required	2.17	2.03	2.22
<u>Psychological Stress</u>			
The risk of significant complications, morbidity and/or mortality	2.84	3.26	2.44
Outcome depends on the skill and judgement of physician	2.98	3.23	3.33
Estimated risk of malpractice suit with poor outcome	2.77	3.31	3.22

<u>INTENSITY/COMPLEXITY MEASURES</u>	<u>CPT Code</u>	<u>Reference Service 1</u>	<u>Reference Service 2</u>
<u>Time Segments</u>	<u>94620</u>	<u>93015</u>	<u>99214</u>
Pre-Service intensity/complexity	2.88	3.03	2.75
Intra-Service intensity/complexity	3.11	3.31	3.75
Post-Service intensity/complexity	3.05	2.9	2.89

ADDITIONAL RATIONALE

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

The recommended RVW was pegged at the 25% because the work appeared to be slightly less than the 93015.

FREQUENCY INFORMATION

How was this service previously reported? Using 946220 . It included the simple and/or the complex pulmonary stress test.

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?

In 1997 the code 94620 was reported as being used 51,471 times .

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

December 1997

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code :9462x1 Tracking Number: WW2 Global Period: XXX Recommended RVW: 1.48

CPT Descriptor: Pulmonary stress testing, complex (including measurements of CO2 production, O2 uptake, and electrocardiographic recordings)

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 66 year-old male has unexplained dyspnea which interferes with his ability to work and exercise. A complex pulmonary stress test is ordered after other studies fail to identify the cause of dyspnea.

Description of Pre-Service Work: The physician performs a brief history and a brief physical to determine if patient is fit to do the test. Time answering questions about the test is taken.

Description of Intra-Service Work: The physician supervises the entire procedure. The patient is hooked up to equipment, and complex stress test records the integration of cardiac and pulmonary function and the status of the patient's physical fitness. There is a measurement of CO2 production, O2 uptake, and electrocardiographic monitoring with recordings using a graded exercise protocol. The physician analyzes data collected, and is able to calculate such items as dyspnea index, an anaerobic threshold as a percentage of maximum uptake, and O2 consumption as it relates to cardiac output. The physician prepares a written interpretation of the test results.

Description of Post-Service Work: The physician discusses findings with the patient, devises plans for therapy and/or further testing and then communicates with referring physician.

SURVEY DATA:

Specialty: American College of Chest Physicians (ACCP) and American Thoracic Society (ATS)

Sample Size: 184 Response Rate: (%) 43/184 23% Initial Median RVW: 1.43
Final Median RVW: 1.48

Type of Sample (Circle One): Random panel, convenience. Explanation of sample size: Good Response

25th Percentile RVW: 1.15 75th Percentile RVW: 2 Low: 0.7 High: 4

Median Pre-Service Time: 15 Median Intra-Service Time: 30

25th Percentile Intra-Svc Time: 20 75th Percentile Intra-Svc Time: 40 Low: 10 High: 60

Median Post-Service Time:	<u>Total Time</u>	<u>Number of Visits</u>
Day of Procedure:	<u>20</u>	_____
ICU:	_____	_____
Other Hospital:	_____	_____
Office:	_____	_____

CPT Code: 9462x1

REFERENCE SERVICE(S):

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
1	93015	Cardiovascular Stress test using maximal or submaximal treadmill or bicycle exercise, continuous.	0.75
2)	99215	Office or other outpatient visit for the evaluation and management of an established patient, which requires at least two or these three key components: a comprehensive exam- medical decision making of high complexity. Counseling and/or coordination of care with other providers or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are of moderate to high severity. Physicians typically spend 40 minutes face-to-face with the patient and/or family.	1.77

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>INTENSITY/COMPLEXITY MEASURES</u>	<u>CPT Code</u> 9462x1	<u>Reference Service 1</u> 93015	<u>Reference Service 2</u> 99215
<u>Time Estimates</u>			
Median Pre-Time	15	15	7
Median Intra-Time	30	20	35
Median Post-Time	20	15	2
<u>Mental Effort and Judgement</u>			
The number of possible diagnosis and/or the number of management options that must be considered	4.07	3.37	3.22
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.14	2.03	3.22
<u>Urgency of medical decision making</u>	3.26	3.26	2.78
<u>Technical Skill/Physical Effort</u>			
Technical skill required	3.81	3.31	2.22
Physical effort required	2.67	2.03	2.22
<u>Psychological Stress</u>			
The risk of significant complications, morbidity and/or mortality	3.51	3.26	2.44
Outcome depends on the skill and judgement of physician	3.83	3.23	3.33
Estimated risk of malpractice suit with poor outcome	3.58	3.31	3.22

INTENSITY/COMPLEXITY MEASURES

<u>Segments</u>	<u>CPT Code</u>	<u>Reference Service 1</u>	<u>Reference Service 2</u>
	9462x1	93015	99215
Pre-Service intensity/complexity	3.58	3.03	2.75
Intra-Service intensity/complexity	3.81	3.31	3.75
Post-Service intensity/complexity	3.66	2.9	2.89

ADDITIONAL RATIONALE

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

The recommended RVW was pegged at the Median value of 1.48. The work for this code is substantially greater than the work for the reference service code 93015.

FREQUENCY INFORMATION

How was this service previously reported? It was reported as 94620.

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?

In 1997 the code 94620 was reported as being used 51,471 times .

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

December 1997

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS

Bronchoscopic Procedures

CPT Code 31622

CPT code 31622 was revised to describe: *Bronchoscopy: diagnostic, (flexible or rigid), with or without cell washing.* The code revision included the deletion of the “*or brushing*” component and was implemented to specifically indicate that “*brushing*” required more time (e.g. using fluoroscopic guidance) to perform than a bronchoscopy with washings.

The original code (31622, work RVU = 2.80) has not been surveyed since the Hsiao values were established in the early 1980's. Since that time, the work for that procedure has been increased significantly due to the fact that physicians are using conscious sedation with the bronchoscopy. The recommended work RVU was established at the 25% percentile in order to allow for a range between the diagnostic fiberoptic bronchoscopy (31622) and other bronchoscopy codes.

Given the modifications to the description and the physician work involved, the RUC recommended a slightly discounted value of 2.78. It was the consensus that 2.78 captured 80% of the work involved in the original code.

CPT Code 31623

As a subset to revised code 31622, a new code was created (CPT 31623) to report *Bronchoscopy: with brushing or protected brushings.* This procedure is performed using a brush that is sealed in a catheter. The catheter is then passed through the bronchoscope once it is in place and inserted into an area of a diseased lung, often using fluoroscopic guidance. The brush is then advanced beyond the catheter to obtain uncontaminated material for study and culture.

It was agreed that a physician work rvu of 2.88 was appropriate for this new code.

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CPT Code 31624

Newly created code *31624 Bronchoscopy; With bronchial alveolar lavage* describes when a bronchoscope is introduced to perform bronchial alveolar lavage (BAL). Using BAL allows the recovery of cells as well as noncellular components from the epithelial surface of the lower respiratory tract. This differs tremendously from “washings” which refer only to the aspiration of secretions or small amounts of instilled saline from larger airways. This form of therapy affords an effective means to diagnose unusual infections as in patients with immune deficiency diseases and may be used to help guide therapy of chronic inflammatory or fibrotic disorders.

The RUC recommends a work relative unit of 2.88 for 31624.

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
▲31622	BB1	Bronchoscopy; diagnostic, (flexible or rigid), with or without cell washing or brushing	000	2.78
•31623	BB2	with brushing or protected brushings	000	2.88
•31624	BB3	with bronchial alveolar lavage	000	2.88
•32001	BB4	Total lung lavage (unilateral) (For bronchoscopic bronchial alveolar lavage, use <u>31624</u>)	000	6.00 (Approved at May 1998 RUC)

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

CPT Code: 31622 Tracking Number: B B 1 Global Period: 000 Recommended RVW: **3.1**

CPT Descriptor: Bronchoscopy ; diagnostic , (flexible or rigid) , with or without cell washing

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 72 year-old man undergoes a diagnostic fiberoptic bronchoscopy for evaluation of hemoptysis. His chest x-ray is normal..

Description of Pre-Service Work: The physician examines the patient to verify that he can under go the procedure. He is then placed on supplemental oxygen in the endoscopy suite which has resuscitative equipment in place. An IV is started and the physician supervises the administration of conscious sedation while the patient receives inhaled topical anesthesia as he is properly monitored for pulse, blood pressure, SPO2, and ECG.

Description of Intra-Service Work: The physician inserts the bronchoscope through the upper airways noting any abnormalities. The vocal cords are visualized and the structure and function are noted. The bronchoscope is advanced into the tracheobronchial tree. The patient has mild erythema throughout the tracheobronchial tree. In the right lower lobe blood is seen coming from the right posterior basilar segment.. Sterile saline washings of this bronchus are obtained and sent for culture and cytologic examination.

Description of Post-Service Work: The physician examines the patient post-endoscopy and pre-discharge from the facility to ascertain that no complications such as bleeding, plugging, or shortness of breath have occurred. The findings from the bronchoscopy are explained to the patient and their significant other. The results are communicated to the referring physician.

SURVEY DATA:

Specialty :American College of Chest Physicians (ACCP) and American Thoracic Society (ATS)

Sample Size: 184 Response Rate: (%): 46/184 25% Initial Median RVW: 3.16

Final Median RVW: 3.23

Type of Sample (Circle One): Random panel,- convenience. Explanation of sample size:Good Response

25th Percentile RVW: 3.1 75th Percentile RVW: 3.3 Low: 2.8 High: 4

Median Pre-Service Time: 20 Median Intra-Service Time: 25

25th Percentile Intra-Svc Time: 20 75th Percentile Intra-Svc Time: 35 Low: 10 High: 70

Median Post-Service Time:	<u>Total Time</u>	<u>Number of Visits</u>
Day of Procedure:	<u>20</u>	<u> </u>
ICU:	<u> </u>	<u> </u>
Other Hospital:	<u> </u>	<u> </u>
Office:	<u> </u>	<u> </u>

CPT Code: 31622

KEY REFERENCE SERVICE (S):

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RW</u>
1)	31645	Bronchoscopy; with therapeutic aspiration of tracheobronchial tree, initial (eg, drainage of lung abscess)	3.16
2)	31625	Bronchoscopy; with biopsy	3.37

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>INTENSITY/COMPLEXITY MEASURES</u>	<u>CPT Code</u>	<u>Reference Service 1</u>	<u>Reference Service 2</u>
	<u>31622</u>	<u>31645</u>	<u>31625</u>
<u>Time Estimates</u>			
Median Pre-Time	20	20	20
Median Intra-Time	25	30	30
Median Post-Time	20	20	20
<u>Mental Effort and Judgement</u>			
The number of possible diagnosis and/ or the number of management options that must be considered	3.76	3.69	4
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.66	3.73	3.79
Urgency of medical decision making	3.76	3.71	3.82
<u>Technical Skill/Physical Effort</u>			
Technical skill required	4.07	3.89	4.24
Physical effort required	3.5	3.46	3.74
<u>Psychological Stress</u>			
The risk of significant complications, morbidity and/or mortality	3.67	3.78	4.18
Outcome depends on the skill and judgement of physician	3.9	3.89	4.32
Estimated risk of malpractice suit with poor outcome	3.65	3.76	3.85

<u>INTENSITY/COMPLEXITY MEASURES</u>	<u>CPT Code</u>	<u>Reference Service 1</u>	<u>Reference Service 2</u>
	<u>31622</u>	<u>31645</u>	<u>31625</u>
<u>Time Segments</u>			
Pre-Service intensity/complexity	3.45	3.36	3.75
Intra-Service intensity/complexity	3.98	3.93	4.29
Post-Service intensity/complexity	3.32	3.31	3.62

ADDITIONAL RATIONALE

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

This code has not been surveyed since the Hsiao values were established in the early 1980's. Since that time, the work for this procedure has increased significantly due to the fact the physician is using conscious sedation with the bronchoscopy. The recommended RVW was pegged at the 25% in order to allow a spread between the diagnostic fiberoptic bronchoscopy (31622) and the other bronchoscopy codes.

FREQUENCY INFORMATION

How was this service previously reported? This code has been reported with code 31622.

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? In 1997 this code was reported 122,491 times. _____

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

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code: 3162x1 Tracking Number: BB2 Global Period: 000 Recommended RVW: 3.2

CPT Descriptor: Bronchoscopy; with brushing or protected brushings

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 70 year-old female has a persistent infiltrate in her right lower lobe which does not resolve despite several rounds of antibiotic therapy.

Description of Pre-Service Work: The physician examines the patient to verify that she can under go the procedure. She is then placed on supplemental oxygen in the endoscopy suite which has resuscitative equipment in place. An IV is started and the physician supervises the administration of conscious sedation while the patient receives inhaled topical anesthesia as he is properly monitored for pulse, blood pressure, SPO2, and ECG.

Description of Intra-Service Work: The physician inserts the bronchoscope through the upper airway, noting any abnormalities. The vocal cords are visualized and the structure and function are noted. The bronchoscope is advanced into the tracheobronchial tree and all airways are visualized. A catheter is passed through the bronchoscope. Once there is assurance that the catheter is in the infiltrated area, the catheter's seal is broken and an uncontaminated brush is used to collect specimens for culture and sensitivity; or an unprotected brush is used to take samples for cytology and microscopic examinations. Several passes of the unprotected brush are made into the area of infiltrate.

Description of Post-Service Work: The physician examines the patient post-endoscopy and pre-discharge from the facility to ascertain that no complications such as bleeding, plugging, or shortness of breath have occurred. The findings from the bronchoscopy are explained to the patient and their significant other. The results are communicated to the referring physician.

SURVEY DATA:

Specialty: American College of Chest Physicians (ACCP) and American Thoracic Society (ATS)

Sample Size: 184 Response Rate: (%): 47/184 26% Initial Median RVW: 3.28 Final Median RVW: 3.3

Type of Sample (Circle One): RANDOM panel, convenience. Explanation of sample size: Good Response

25th Percentile RVW: 3.2 75th Percentile RVW: 3.37 Low: 2.7 High: 5

Median Pre-Service Time: 20 Median Intra-Service Time: 30

25th Percentile Intra-Svc Time: 21 75th Percentile Intra-Svc Time: 43.75 Low: 15 High: 90

Median Post-Service Time:	Total Time	Number of Visits
Day of Procedure:	20	_____
ICU:	_____	_____
Other Hospital:	_____	_____
Office:	_____	_____

CPT Code: 3162x1

KEY REFERENCE SERVICE (S):

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
1)	31645	Bronchoscopy; with therapeutic aspiration of tracheobronchial tree, initial (eg, drainage of lung abscess)	3.16
2)	31625	Bronchoscopy; with biopsy	3.37

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.

INTENSITY/COMPLEXITY MEASURES

	<u>CPT Code</u> 3162x1	<u>Reference Service 1</u> 31645	<u>Reference Service 2</u> 31625
<u>Time Estimates</u>			
Median Pre-Time	20	20	20
Median Intra-Time	30	30	30
Median Post-Time	20	20	20
<u>Mental Effort and Judgement</u>			
The number of possible diagnosis and/or the number of management options that must be considered	3.8	3.69	4
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.83	3.73	3.79
Urgency of medical decision making	3.63	3.71	3.82
<u>Technical Skill/Physical Effort</u>			
Technical skill required	4.09	3.89	4.24
Physical effort required	3.59	3.46	3.74
<u>Psychological Stress</u>			
The risk of significant complications, morbidity and/or mortality	3.78	3.78	4.18
Outcome depends on the skill and judgement of physician	3.78	3.89	4.32
Estimated risk of malpractice suit with poor outcome	3.78	3.76	3.85

INTENSITY/COMPLEXITY MEASURESCPT CodeReference
Service 1
31645Reference
Service 2Time Segments

Pre-Service intensity/complexity	3.48	3.36	3.75
Intra-Service intensity/complexity	3.91	3.93	4.29
Post-Service intensity/complexity	3.53	3.31	3.62

ADDITIONAL RATIONALE

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

The recommended RVW was pegged at the 25% in order to allow a spread between this code and the other bronchoscopy codes.

FREQUENCY INFORMATION

How was this service previously reported? Reported with the 31622

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? In 1997 the code 31622 was reported 122,491

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

December 1997

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code: 3162x2 Tracking Number: BB3 Global Period: 000 Recommended RVW: 3.2

CPT Descriptor: Bronchoscopy; with bronchial alveolar lavage

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 50 year-old male with acquired immuno-deficiency syndrome has a persistent pneumonia requiring a definitive etiologic diagnosis.

Description of Pre-Service Work: The physician examines the patient to verify that he can under go the procedure. He is then placed on supplemental oxygen in the endoscopy suite which has resuscitative equipment in place. An IV is started and the physician supervises the administration of conscious sedation while the patient receives inhaled topical anesthesia as he is properly monitored for pulse, blood pressure, SPO 2, and ECG.

Description of Intra-Service Work: The physician inserts the bronchoscope through the upper-airways noting any abnormalities. The vocal cords are visualized and the structure and function are noted. The bronchoscope is advanced to the tracheobronchial tree. The bronchoscope is then wedged into the area under study, and saline is inserted through the bronchoscope into the area and then aspirated into a sterile syringe or trap. The saline is instilled in 20 ml aliquots. After each aliquot is infused, it is aspirated into one or more containers. Usually, the total volume infused by site is 100 ml to 150 ml. Each aliquot may be kept separate and numbered in sequence. At the conclusion of the procedure the bronchoscope is removed.

Description of Post-Service Work: The physician examines the patient post-endoscopy and pre-discharge from the facility to ascertain that no complications such as bleeding, plugging, or shortness of breath have occurred. The findings from the bronchoscopy are explained to the referring physician.

SURVEY DATA:

Specialty: American College of Chest Physicians (ACCP) and American Thoracic Society (ATS)

Sample Size: 184 Response Rate: (%) 45/184 24% Initial Median RVW: 3.29 Final Median RVW: 3.3

Type of Sample (Circle One): Random panel, convenience. Explanation of sample size: Good Response

25th Percentile RVW: 3.2 75th Percentile RVW: 3.5 Low: 3 High: 4.8

Median Pre-Service Time: 20 Median Intra-Service Time: 30

25th Percentile Intra-Svc Time 15 75th Percentile Intra-Svc Time: 45 Low: 16 High: 120

Median Post-Service Time: Total Time Number of Visits

Day of Procedure: 20

ICU:

Other Hospital:

Office:

CPT Code: 3162x2

KEY REFERENCE SERVICE (S):

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
1)	31645	Bronchoscopy; with therapeutic aspiration of tracheobronchial tree, initial (eg, drainage of lung abcess)	3.16
2)	31625	Bronchoscopy; with biopsy	3.37

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>INTENSITY/COMPLEXITY MEASURES</u>	<u>CPT Code</u>	<u>Reference Service 1</u> <u>31645</u>	<u>Reference Service 2</u> <u>31625</u>
<u>Time Estimates</u>			
Median Pre-Time	20	20	20
Median Intra-Time	30	30	30
Median Post-Time	20	20	20
<u>Mental Effort and Judgement</u>			
The number of possible diagnosis and/or the number of management options that must be considered	3.7	3.69	4
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	3.66	3.73	3.79
<u>Urgency of medical decision making</u>			
3.7	3.71	3.82	
<u>Technical Skill/Physical Effort</u>			
Technical skill required	4.02	3.89	4.24
Physical effort required	3.49	3.46	3.74
<u>Psychological Stress</u>			
The risk of significant complications, morbidity and/or mortality	3.64	3.78	4.18
Outcome depends on the skill and judgement of physician	3.98	3.89	4.32
Estimated risk of malpractice suit with poor outcome	3.53	3.76	3.85

INTENSITY/COMPLEXITY MEASURES

<u>Time Segments</u>	<u>CPT Code</u> 3162x2	<u>Reference</u> <u>Service 1</u> 31645	<u>Reference</u> <u>Service 2</u> 31625
Pre-Service intensity/complexity	3.53	3.36	3.75
Intra-Service intensity/complexity	3.55	3.93	4.29
Post-Service intensity/complexity	3.89	3.31	3.62

ADDITIONAL RATIONALE

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

The recommended RVW was pegged at the 25% in order to allow a spread between this code and the other bronchoscopy codes.

FREQUENCY INFORMATION

How was this service previously reported? Using code 31622.

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 code 31622 was reported 122,491 times in 1997.

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

December 1997

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS

Ventricular Assist Devices (VAD)

CPT codes 33975 *Implantation of ventricular assist device; single ventricular support* and 33976 *Implantation of ventricular assist; biventricular support* have both undergone significant changes in the amount of physician work required since they were last surveyed in 1993. The technology of VAD implementation has dramatically changed the level of work intensity during intraservice implantation and has also increased the post-operative time since patients are now being managed for months and even years with the device in place. The RUC initially brought the issue to the Health Care Financing Administration in its submission of Recommendations for CPT 1999. At that time, interim values were requested until additional data could be collected. In September 1998, the RUC reexamined survey data regarding proposed changes in work relative value units for these particular codes.

The survey responses and data both confirmed very significant changes in the physician time and work performed for VAD procedures as identified in CPT codes 33975 and 33976. The survey information supports the observations that physicians implanting these devices are spending significantly more time that involves greater work intensity in the operating room completing the intraservice implantation. In addition, they are also performing a tremendous amount of postoperative work that is currently not reflected in the work relative value units. Furthermore, the technology of VAD implantation has greatly changed and patients are being kept alive longer with newer devices in place.

To reflect these changes, the RUC reviewed again the work relative values for both CPT 33975 and CPT 33976. For CPT code 33975, the RUC accepted the survey median presented and agreed with survey respondents that a new work value of 39.00 accurately reflected the physician work involved in this procedure.

For CPT code 33976, it was the consensus of the RUC that because of the demonstrated increased risk and intra-and postoperative time spent with the patient, an RVU proportional to the relationship of the existing codes, i.e., a 10% increase in work for the biventricular implantation, was appropriate. This calculation results in a proposed work RVU of 43.00.

The RUC recommends acceptance of a revised work RVU of 39.00 for CPT code 33975, and a new work relative value unit of 49.00 for the CPT code 33976.

CPT Code (•New)	CPT Descriptor	Global Period	Work RVU Recommendation
33975	Implantation of ventricular assist device; single ventricle support	010	39.00
33976	biventricular support	010	43.00

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code: 33975 Tracking Number: Global Period: 010 Recommended RVW: 39

CPT Descriptor: Implantation of ventricular assist device; single ventricle support

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: A 59-year-old woman is evaluated for increasing dyspnea on exertion, which reveals coronary artery disease, severe mitral regurgitation, and a severely depressed ejection fraction of 18%. The patient deteriorates progressively and is evaluated for cardiac transplantation, Status I. Two weeks later, it is necessary to perform high-risk coronary artery bypass and mitral valve repair on her. After a rocky postoperative recovery and a 2 month inpatient rehabilitation program, her condition deteriorates once more with a low cardiac index and mixed venous oxygen saturation. She is now reassessed for placement of a left ventricular assist device (LVAD). Her creatinine is rising, she is intubated with poor oxygenation and PT and PTT increasing.

The patient is taken urgently to the operating room after her coagulation profile, oxygenation, and hemodynamic status are optimized. In the operating room a reoperative median sternotomy is performed and a properitoneal pocket is created. A reoperative median sternotomy is performed and a pro-peritoneal pocket is created. A subcutaneous tunnel is created for the driveline and then the dense pericardial adhesions are divided. The LVAD is placed and the patient weaned from cardiopulmonary bypass on multiple drips to assist the right ventricular function. The patient is transferred to the intensive care unit after careful hemostasis and aggressive correction of the patient's coagulopathy.

Over the next few days the patient is assessed frequently for management of coagulopathies and ongoing blood loss with the negative effects of infusion of blood products on right ventricular and pulmonary function. After 5 to 7 days in the ICU the patient is transferred to the step-down unit and then to the surgical floor to await transplantation. Because of her debilitated condition she requires nutritional and physical rehabilitation and frequent evaluations for pump function infections at the drive line. After sufficient rehabilitation, the patient is discharged with close and frequent monitoring of the pump and driveline by the surgical team.

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 (the majority of them are in extremis) prior to taking him/her to the operating room. Medical decision-making involves whether the patient has a chance of surviving the operation and thus entails a high level of judgment, intensity and risk on the part of the surgeon.

Description of Intra-Service Work: Since these patients are so unstable, induction of anesthesia requires the presence of the surgeon in the operating room. The patient is positioned, prepped, and draped. He is placed on cardiopulmonary bypass. In the majority of these patients reoperative median sternotomy is performed, as most of them have had a previous cardiac surgical procedure. The midline incision is extended to the umbilicus and a pro-peritoneal pocket is created. The driveline is tunneled through the subcutaneous tissue and then the heart is dissected out, dividing the dense adhesions. At each step, care is taken to maintain meticulous hemostasis, since these sites will not be visible after the device is placed. The patient's aorta and right atrium are cannulated and cardiopulmonary bypass initiated. The apex of the left ventricle is cored out and a Silastic cuff sewn to the edges of the cored ventricle. The inflow cannula of the LVAD is brought through an opening in the diaphragm and coupled with the Silastic cuff. Next the outflow graft is measured, a partial occlusion clamp applied to the aorta and the graft anastomosed to the aorta. The device is de-aired and confirmation of de-airing is confirmed by transesophageal cardiac ultrasound. The patient is then weaned from cardiopulmonary bypass. This requires, together with the anesthesia team, simultaneous management of the inotropes while assessing the heart, both visually and by transesophageal echocardiography. Following successful separation from bypass and decannulation, the incision is closed in layers.

Description of Post-Service Work: With the surgical team in attendance, the patient is transported to the intensive care unit. Aggressive management of bleeding and coagulopathy is balanced with judicious use of blood products, since they will sensitize the patient to allotransplant donors and can acutely cause right ventricular and pulmonary failure. The next few days require repeated daily assessment (minimum 4 visits) of the patient to plan the gradual weaning of inotropic and ventilatory support. Timing of chest tube and drain removal must be determined. The patient is then transferred to the step-down unit where daily monitoring of drains and drips is required. Once off all inotropes and all drains have been removed, a rehabilitation program is planned and overseen. The surgeon and his team follow the patient several times a week and then weekly to monitor the driveline site for infection, monitor the device for mechanical function, and all major organ functions, watching particularly for problems with coagulopathies and infection.

SURVEY DATA:

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

Sample Size: 20 Response Rate: (%): 55% Initial Median RVW: 39 Final Median RVW: 39

Type of Sample (Circle One): random, panel, convenience. Explanation of sample size: Only a few centers in U.S. insert and monitor left ventricular assist devices on a long-term basis and the sample had to be drawn from these centers.

25th Percentile RVW: 36 75th Percentile RVW: 60 Low: 35 High: 70

Median Pre-Service Time: 120 min Median Intra-Service Time: 330 min

25th Percentile Intra-Svc Time: 295 min 75th Percentile Intra-Svc Time: 405 min Low: 240 min High: 517 min

Median Post-Service Time:	<u>Total Time</u>	<u>Number of Visits</u>
Day of Procedure:	<u>180</u>	<u> </u>
ICU:	<u>435</u>	<u>10</u>
Other Hospital:	<u>105</u>	<u>15</u>
Office:	<u>N/A</u>	<u> </u>

KEY REFERENCE SERVICE (S):

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RW</u>
1)	33860	Ascending aorta graft; with cardiopulmonary bypass, with or without valve suspension	33.96
2)	33412	Replacement, aortic valve; with transventricular aortic annulus enlargement (Konno procedure)	34.79
3)			
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.

INTENSITY/COMPLEXITY MEASURES

	<u>CPT Code</u> 33975	<u>Reference Service 1</u> 33860	<u>Reference Service 2</u> 33412
<u>Time Estimates</u>			
Median Pre-Time	120 min	83 min	120 min
Median Intra-Time	330 min	360 min	360 min
Median Post-Time	780 min	200 min	240 min
<u>Mental Effort and Judgement</u>			
The number of possible diagnosis and/or the number of management options that must be considered	4.90	5.00	4.00
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.90	4.75	4.00
Urgency of medical decision making	4.91	4.80	3.50
<u>Technical Skill/Physical Effort</u>			
Technical skill required	4.64	4.80	5.00
Physical effort required	5.00	5.00	4.00
<u>Psychological Stress</u>			
The risk of significant complications, morbidity and/or mortality	5.00	5.00	4.00
Outcome depends on the skill and judgement of physician	4.64	4.80	5.00

Estimated risk of malpractice suit with poor outcome	3.91	4.00	3.50
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INTENSITY/COMPLEXITY MEASURES

CPT Code

Reference
Service 1

Reference
Service 2

Time Segments

Pre-Service intensity/complexity	4.82	4.80	3.50
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Intra-Service intensity/complexity	4.82	4.80	5.00
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Post-Service intensity/complexity	4.91	4.80	3.50
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ADDITIONAL RATIONALE

Describe the process by which your specialty society reached your final recommendation: A consensus committee met and discussed the survey results. We felt they had face validity in relation to the service performed and therefore we recommended the survey median of 39 RVWs.

FREQUENCY INFORMATION

How was this service previously reported? With CPT 33975 under a 90 day global period

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? There were 255 procedures reported under CPT 33975 in the 1996 Medicare National Claims History

Do many physicians perform this service across the United States? Yes No This service is performed in institutions across the United States. It is not a regionalized service. However, there are a small number of institutions and cardiothoracic surgeons performing the service. Cardiothoracic surgeons are the only physicians performing this service.

September 1998

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

CPT Code: 33976 Tracking Number: Global Period: 010 Recommended RVW: 48

CPT Descriptor: Implantation of ventricular assist device; biventricular support

CLINICAL DESCRIPTION OF SERVICE:

Vignette Used in Survey: An 18-year-old male presents with increasing dyspnea and fatigue following a viral illness. Evaluation reveals dilated cardiomyopathy with an ejection fraction of 15%. The patient's condition deteriorates requiring hospitalization and the initiation of inotropes. He is listed as Status I for heart transplantation. Despite vigorous medical management, the patient develops signs of biventricular failure, with a pulsatile liver, ascites, pulmonary edema, jugular venous distention and lower extremity and sacral edema. His coagulation profile is abnormal, and his urine output less than 20 cc/hr, with a rising creatinine of 3.0. He is intubated with a pO₂ of 80 on FiO₂ of 100%, and has a mixed venous saturation of 37%.

The patient is taken urgently to the operating room after optimization of the coagulation profile, oxygenation, and hemodynamic status. In the operating room a median sternotomy is performed and the patient cannulated and cardiopulmonary bypass initiated. A preperitoneal pocket is created for a left ventricular assist device (LVAD), and a subcutaneous tunnel made for the driveline. The LVAD is placed and the patient weaned from cardiopulmonary bypass. Right ventricular distention and falling LVAD flow prevents separation from bypass. Cardiopulmonary flows are reduced to less than 1 liter. After combined drug intervention and "resting" the native heart, it is clear that right ventricular function will not permit separation from bypass. A right ventricular assist device (RVAD) is placed and the lines brought out through the skin. The patient is weaned successfully, albeit on high dose inotropes. The skin is closed, the sternum left open, and the patient transported to the ICU.

Over the next few days, judicious management corrects the coagulopathy and balances the ongoing blood loss with the negative effects of blood product infusion on right ventricular and pulmonary function. The open sternal wound requires frequent dressing changes. The patient is assessed frequently with gradual weaning from inotropes and the ventilator. He is stabilized but remains in the hospital awaiting transplant. Eventually the RVAD is removed thanks to aggressive postoperative management.

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, often on an urgent basis, to reassess the patient's condition (the majority of them are in extremis) prior to taking him/her to the operating room. Medical decision-making involves whether the patient has a chance of surviving the operation and thus entails a high level of judgment, intensity and risk on the part of the surgeon.

Description of Intra-Service Work: Since these patients are so unstable, induction of anesthesia requires the presence of the surgeon in the operating room. The patient is positioned, prepped, and draped. In the majority of these patients reoperative median sternotomy is performed, as most of them have had a previous cardiac surgical procedure. Patients with biventricular failure with resultant right ventricular enlargement may require exposure of the femoral vessels before the sternotomy is made. After the incisions, the patient is placed on cardiopulmonary bypass. The midline incision is extended to the umbilicus and a pre-peritoneal pocket is created. The driveline is tunneled through the subcutaneous tissue and then the heart is dissected out, dividing the dense adhesions. At each step, care is taken to maintain meticulous hemostasis, since these sites will not be visible after the device is placed. The patient's aorta and right atrium are cannulated and cardiopulmonary bypass initiated. The apex of the left ventricle is cored out and a Silastic cuff sewn to the edges of the cored ventricle. The inflow cannula of the LVAD is brought through an opening in the diaphragm and coupled with the Silastic cuff. Next the outflow graft is measured, a partial occlusion clamp applied to the aorta and the graft anastomosed to the aorta. The device is de-aired and confirmation of de-airing is confirmed by transesophageal cardiac ultrasound. Attempts to wean the patient from cardiopulmonary bypass that are unsuccessful due to inadequate right ventricular function dictate the need for biventricular assist. The RVAD is placed and the lines brought out through the skin. The patient is weaned from cardiopulmonary bypass, albeit on high dose inotropes. This requires, together with the

anesthesia team, simultaneous management of the inotropes while assessing the heart, both visually and by transesophageal echocardiography. Following successful separation from bypass and decannulation, the incision is closed in layers, but the sternum is left open, and the patient transported to the intensive care unit.

Description of Post-Service Work: With the surgical team in attendance, the patient is transported to the intensive care unit. Aggressive management of bleeding and coagulopathy is balanced with judicious use of blood products, since they will sensitize the patient to allotransplant donors and can acutely cause right ventricular and pulmonary failure. Because of the open wound, frequent dressing changes are necessary, which in essence requires "bringing the operating room to the patient's bedside." Medical decision-making regarding whether the patient is sufficiently stable to undergo RVAD removal occurs at each contact. This will require returning to the operating room and repeating the weaning process described above. If the patient does not stabilize adequately, he/she will be managed in a precarious condition by the surgeon and his team until a donor heart becomes available. This will require repeated daily assessment (minimum 2 visits) of the surgical team who must also monitor the driveline for infections, the mechanical functioning of the device, and the functioning of the patient's major organ systems, all of which are affected by the presence of the biventricular assist device.

SURVEY DATA:

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

Sample Size: 20 Response Rate: (%): 55% Initial Median RVW: 39 Final Median RVW: 48

Type of Sample (Circle One): random, panel, convenience. Explanation of sample size: Only a few center in the U.S. insert and monitor ventricular assist devices on a long-term basis. The sample had to be drawn from this limited number of centers.

25th Percentile RVW: 36 75th Percentile RVW: 60 Low: 35 High: 80

Median Pre-Service Time: 120 min Median Intra-Service Time: 360 min

25th Percentile Intra-Svc Time: 345 min 75th Percentile Intra-Svc Time: 468 min Low: 240 min High:

Median Post-Service Time:	<u>Total Time</u>	<u>Number of Visits</u>
Day of Procedure:	<u>200 min</u>	<u> </u>
ICU:	<u>725 min</u>	<u>10</u>
Other Hospital:	<u>225 min</u>	<u>20</u>
Office:	<u>N/A</u>	<u> </u>

KEY REFERENCE SERVICE (S):

	<u>CPT Code</u>	<u>CPT Descriptor</u>	<u>RVW</u>
1)	33860	Ascending aorta graft; with cardiopulmonary bypass, with or without valve suspension	33.96
2)	33412	Replacement, aortic valve; with transventricular aortic annulus enlargement (Konno procedure)	34.79

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.

INTENSITY/COMPLEXITY MEASURES

	<u>CPT Code</u>	<u>Reference Service 1</u>	<u>Reference Service 2</u>
	33976	33860	33412
<u>Time Estimates</u>			
Median Pre-Time	120 min	83 min	120 min
Median Intra-Time	360 min	360 min	360 min
Median Post-Time	1150 min	200 min	240 min
<u>Mental Effort and Judgement</u>			
The number of possible diagnosis and/or the number of management options that must be considered	4.90	5.00	4.00
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be reviewed and analyzed	4.90	4.75	4.00
Urgency of medical decision making	4.90	4.80	3.50
<u>Technical Skill/Physical Effort</u>			
Technical skill required	4.70	4.80	5.00
Physical effort required	5.00	5.00	4.00
<u>Psychological Stress</u>			
The risk of significant complications, morbidity and/or mortality	5.00	5.00	4.00
Outcome depends on the skill and judgement of physician	4.70	4.80	5.00
Estimated risk of malpractice suit with poor outcome	3.80	3.29	3.00

INTENSITY/COMPLEXITY MEASURES

CPT Code

Reference
Service 1

Reference
Service 2

Time Segments

Pre-Service intensity/complexity	4.90	4.80	3.50
Intra-Service intensity/complexity	5.00	4.80	5.00
Post-Service intensity/complexity	4.90	4.80	3.50

ADDITIONAL RATIONALE

Describe the process by which your specialty society reached your final recommendation. A consensus committee met and discussed the survey results. Because of the small number of institutions involved, it was necessary to arbitrate the results of the surveys of the two codes. Rather than going with the recommended median of 39 for this code, because of the demonstrated increased risk and intra- and postoperative time spent with the patient, the committee recommended an RVW proportional to the relationship of the existing codes, i.e., a 25% increase in work for the biventricular implantation.

FREQUENCY INFORMATION

How was this service previously reported? With CPT 33976 and a 90 day global period

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? There were 85 procedures reported under CPT 33976 in the 1996 Medicare National Claims History

Do many physicians perform this service across the United States? Yes No. This service is performed in institutions across the United States. It is not a regionalized service. However, there are a small number of institutions and cardiothoracic surgeons performing the service. Cardiothoracic surgeons are the only physicians performing this service.

September 1998

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS

Bypass Grafts

35550
CPT code 35550 was established to reflect *Harvest of upper extremity vein, one segment, for lower extremity bypass procedure (List separately in addition to code for primary procedure)*. CPT 35550 was created as part of a series of codes that included 35682 and 35683. Values for these codes were proposed as part of the RUC's recommendations for CPT 1999.

In determining an appropriate work relative value for CPT 35550, the RUC referenced CPT codes 36821 *Arteriovenous anastomosis, direct, any site (eg Cimino type) (separate procedure)* (work RVU = 8.93) and CPT 34201 *Embolectomy or thrombectomy, with or without catheter; femoropopliteal, aortoiliac artery, by a leg incision* (work RVU = 9.13) for reference services. However, in surveying for CPT code 35550, respondents noted many differences. CPT 36821 has an equal intraservice time of 60 minutes, but it is a 90 day global service with 30 minutes of pre-service and 48 minutes of post-service time. All intensity comparisons between these two codes listed 35550 as being substantially more intense and complex. Thus, the RVW for CPT 35550 was adjusted downward from the 8.93 rvus assigned to CPT 36821 (based on time), but then increased slightly based on greater intensity. Less urgency of decision making occurs when performing 35550 as compared with that of CPT 34201, but greater skill is required to harvest the vein safely.

The RUC agreed with the following analysis:

Building Block Analysis

Begin with RVW for CPT 36821 of 8.93.

Subtract pre-service work of scrub, dress, wait (15 min*0.8*0.989*0.0103 = -0.12 rvu

Subtract pre-service eval and positioning (15 min*2.2*0.9898*0.0103) = -0.34 rvu

Subtract discharge management (99238) -1.28 rvu

Subtract one office visit (99213) at discounted rate of 0.65) = -0.65

Final extrapolated RVW for 35550 = 8.93-0.12-0.34-1.28-.065 = 6.54

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

The RUC accepted the rank order analysis compared to CPT codes 35682 and 35683, which were evaluated at the April 1999 RUC meeting. The rationale and comparisons resulted in a relative value unit based on the 25th survey percentile. This value was 6.45

The RUC recommends an acceptance of a work rvu of 6.45 for CPT code 35550.

CPT Code (•New)	Track- ing Number	CPT Descriptor	Global Period	Work RVU Recommendation
•35550 0	CC1	Harvest of upper extremity vein, one segment, for lower extremity bypass procedure (List separately in addition to code for primary procedure) (For harvest of more than one vein segment, see <u>35682, 35683</u>)	ZZZ	6.45
<p><u>Composite Grafts</u> Codes 35682 and 35683 are used to report harvest and anastomosis of multiple vein segments from distant sites for use as arterial bypass graft conduits. These codes are intended for use when two or more vein segments are harvested from a limb other than that undergoing bypass. Add-on codes 35682 and 35683 are reported in addition to bypass graft codes 35501-35587.</p>				
▲35681		Bypass graft, composite, prosthetic and vein (List separately in addition to code for primary procedure) (List procedure 35681 separately in addition to code for primary procedure) (Do not report 35681 in addition to 35682, 35683)	ZZZ	8.05 (No Change)

•35682	CC2	autogenous composite, two segments of veins from two locations (List separately in addition to code for primary procedure) <u>(Do not report 35682 in addition to 35681, 35683)</u>	ZZZ	7.20 (Submitted in May 1998)
•35683	CC3	autogenous composite, three or more segments of vein from two or more locations (List separately in addition to code for primary procedure) <u>(Do not report 35683 in addition to 35681, 35682)</u>	ZZZ	8.50 (Submitted in May 1998)

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AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

(September 1998)

CPT Code: 35500 (CC1)

Global Period: ZZZ

Recommended RVW: 6.45

CPT Descriptor: Harvest of upper extremity vein, one segment, for lower extremity bypass procedure
(List separately in addition to code for primary procedure)
(For harvest of more than one vein segment, see 35682, 35683)

Vignette Used in Survey: A 74-year-old man with gangrene of the left great toe requires a femoral-anterior tibial bypass graft for limb salvage. He has previously undergone two coronary bypass operations and most of his greater saphenous vein has already been harvested. Preoperative duplex ultrasound reveals a long segment of adequate arm vein. At surgery the arm vein is dissected, harvested, branches tied, tested for leaks, and leaks repaired. The bypass graft is completed using the arm vein conduit. [Important note: 35500 is an "add-on" code. In responding to this survey, please consider ONLY THE ADDITIONAL work for harvesting and preparing the arm vein. The performance of the actual bypass graft is separately billable using a different CPT code and should not be considered for this survey.]

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

Description of Total Add-on Work:

Intra-service work involved in harvest of upper extremity vein includes dissection of the overlying skin and soft tissue for the length of conduit required. There is no "typical" length. Often the incision extends from shoulder to wrist. Alternatively a long conduit may be obtained with an incision extending down the arm over the basilic vein, medial to lateral over the antecubital vein, then back up the arm over the cephalic vein. Vein side branches are identified, ligated, and divided. Topical papaverine is administered to prevent venospasm. Once adequate length is obtained, the vein is ligated at both ends and excised. The vein is flushed with heparinized saline, gently distended, and tested for leaks. #7-0 polypropylene sutures are used to repair leaks, and the surgeon wears ocular loupe magnification to perform these maneuvers. The vein is transferred to the bypass site on the leg, and the bypass surgery is completed. Thereafter attention returns to the arm vein harvest site. Closure entails irrigation, routine hemostasis maneuvers, suture of the subcutaneous tissue, skin closure with sutures or staples, and application of a dressing. Although the arm wounds are occasionally problematic, the typical patient has no postoperative wound problems related to arm vein harvest.

SURVEY DATA:

Specialty(s): The Society for Vascular Surgery
Type of Sample: Random

Survey n:	69		PRE	INTRA	HOSP	OFF
Response:	36		total	total	total	total
Rate %:	52%	RVW	min	min	min	min
	low	2.20		30		
	25th%	6.45		60		
	MED	8.45	n/a	60	n/a	n/a
	75th%	10.00		83		
	high	12.00		120		

KEY REFERENCE SERVICE(S):

<u>1998 RVW</u>	<u>Global</u>	<u>CPT</u>	<u>Descriptor</u>
8.93	090	36821	Arteriovenous anastomosis, direct, any site (eg, Cimino type) (separate procedure)
9.13	090	34201	Embolectomy or thrombectomy, with or without catheter, femoropopliteal, aortoiliac artery, by leg incision

LOS and Time Estimates (Median)	Mean Intensity/Complexity Measures		
	35500 (CC1)	34201	36821
PRE-service time	n/a	60	30
INTRA-service time	60	83	60
POST-service time	n/a	115	48
Mental Effort and Judgment			
The number of possible diagnosis and/or the number of management options that must be considered	3.58	3.35	2.93
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	3.28	3.25	2.47
Urgency of medical decision making	3.31	4.30	2.60
Technical Skill/physical Effort			
Technical skill required	4.14	3.45	3.53
Physical effort required	3.75	3.25	2.73
Psychological Stress			
The risk of significant complications, morbidity and/or mortality	3.78	3.90	2.93
Outcome depends on skill and judgment of physician	4.33	3.70	3.53
Estimated risk of malpractice suit with poor outcome	3.22	3.30	2.60
Time Segments			
PRE-service intensity/complexity	n/a	3.82	2.73
INTRA-service intensity complexity	3.94	3.45	2.93
POST-service intensity complexity	n/a	3.18	2.45

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

Overview: As the surgical science of arterial bypass grafting matures, the supply of autogenous superficial vein, used as conduit for these grafts, has become a limiting factor. Thus far, no synthetic tubing has been developed that equals the long-term patency of autogenous vein in the setting where a bypass must extend from the groin to well below the knee. In fact, vascular surgeons now commonly extend these reconstructions onto the foot, meaning that as much as 36" of continuous venous conduit is required. The greater saphenous vein is the conduit of choice for these bypasses, but it is also used for coronary bypass operations, and re-do coronary bypass. At the time of the Harvard studies, it was extremely rare for a patient not to have adequate greater saphenous vein for use in bypass grafting. Now it is quite common to undertake a "whole-body" search for suitable alternative venous conduit. Arm vein is far more difficult to work with than greater saphenous. Many tiny branches must be ligated, and the vein has the consistency of wet tissue paper. Any miss-step during the harvest can render arm vein unusable.

Relationship to key references: Unfortunately there are no good clinically relevant CPT codes to serve as comparable references. Harvest of multiple distant site vein segments for bypass graft (CC2 and CC3) would be the best choice, but these two codes were evaluated at the April, 1998 RUC and are yet to be valued by HCFA. Respondents to this survey, chose CPT 36821 (creation of an arteriovenous anastomosis for dialysis) and CPT 34201 (embolectomy or thrombectomy of arteries through a leg incision) most often as reference services.

Relationship to key references: (cont.)

CPT 36821 bears little clinical relationship to CC1. CPT 36821 has an equal intraservice time of 60 minutes, but is a 90 day global service with 30 minutes of pre-service and 48 minutes of post-service time. All intensity comparisons between these two codes listed CC1 as being substantially more intense/complex. Thus, the RVW for CC1 must be adjusted downward from the 8.93 rvus assigned to CPT 36821 based on time, but then adjusted back up somewhat based on greater intensity.

CPT 34201 bears no clinical relationship to CC1. Respondents most likely chose it for the similarity of intra-service time (83 min for 34201 and 60 minutes for CC1). CPT 34201 is a 90 day global service, carrying 60 minutes of pre-service time and 115 minutes of post-service time. Based on time alone, the RVW of CC1 must be adjusted downwards from the 9.13 rvus of CPT 34201 to account for 23 minutes less intra-time as well as the pre and post service time. Comparison of intensity between CPT 34201 and CC1 is mixed. Less urgency of decision making occurs with CC1, but greater skill is required to harvest the vein safely.

ADDITIONAL RATIONALE**Building block from 36821:**

Begin with RVW for CPT 36821 of 8.93

Subtract pre-service work of scrub, dress, wait (15 min*0.8*0.989*0.0103) = -0.12 rvu

Subtract pre-service eval and positioning (15 min*2.2*0.989*0.0103) = -0.34 rvu

Subtract discharge management (99238) -1.28 rvu

Subtract one office visit (99213 at discounted rate of 0.65) = -0.65

Final extrapolated RVW for CC1 = 8.93-0.12-0.34-1.28-0.65= 6.54

IWPUT analysis:

Median RVW and median intra-time = 8.45 / 60 = 0.140

25th percentile RVW and 25th percentile time = 6.45 / 60 = 0.107

Rank order analysis compared to CC2 and CC3 evaluated at April RUC:

CPT		Median Intra Time	Global	RVW
CC1	Harvest of upper extremity vein, one segment, for lower extremity bypass procedure	60	ZZZ	6.45 (recommended)
CC2	Bypass graft; autogenous composite, two segments of veins from two locations	78	ZZZ	7.20
CC3	Bypass graft; autogenous composite, three or more segments of veins from two locations	90	ZZZ	8.50

Conclusion: Based on the rationale and comparisons, we recommend an RVW at the 25th survey percentile: 6.45 rvus.

FREQUENCY INFORMATION**1. How was this service previously reported?**

CPT 37799 Unlisted vascular procedure

2. How often do physicians in your specialty perform this service?

Commonly Sometimes Rarely

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

Less than 2,000.

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

Yes No

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS

Bypass Grafts

CPT code 35550 was established to reflect *Harvest of upper extremity vein, one segment, for lower extremity bypass procedure (List separately in addition to code for primary procedure)*. CPT 35550 was created as part of a series of codes that included 35682 and 35683. Values for these codes were proposed as part of the RUC's recommendations for CPT 1999.

In determining an appropriate work relative value for CPT 35550, the RUC referenced CPT codes 36821 *Arteriovenous anastomosis, direct, any site (eg Cimino type) (separate procedure)* (work RVU = 8.93) and CPT 34201 *Embolectomy or thrombectomy, with or without catheter; femoropopliteal, aortoiliac artery, by a leg incision* (work RVU = 9.13) for reference services. However, in surveying for CPT code 35550, respondents noted many differences. CPT 36821 has an equal intraservice time of 60 minutes, but it is a 90 day global service with 30 minutes of pre-service and 48 minutes of post-service time. All intensity comparisons between these two codes listed 35550 as being substantially more intense and complex. Thus, the RVW for CPT 35550 was adjusted downward from the 8.93 rvus assigned to CPT 36821 (based on time), but then increased slightly based on greater intensity. Less urgency of decision making occurs when performing 35550 as compared with that of CPT 34201, but greater skill is required to harvest the vein safely.

The RUC agreed with the following analysis:

Building Block Analysis

Begin with RVW for CPT 36821 of 8.93.

Subtract pre-service work of scrub, dress, wait (15 min*0.8*0.989*0.0103 = -0.12 rvu

Subtract pre-service eval and positioning (15 min*2.2*0.9898*0.0103) = -0.34 rvu

Subtract discharge management (99238) -1.28 rvu

Subtract one office visit (99213) at discounted rate of 0.65 = -0.65

Final extrapolated RVW for 35550 = 8.93-0.12-0.34-1.28-.065 = 6.54

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The RUC accepted the rank order analysis compared to CPT codes 35682 and 35683, which were evaluated at the April 1999 RUC meeting. The rationale and comparisons resulted in a relative value unit based on the 25th survey percentile. This value was 6.45

The RUC recommends an acceptance of a work rvu of 6.45 for CPT code 35550.

CPT Code (•New)	Track- ing Number	CPT Descriptor	Global Period	Work RVU Recommendation
•35550	CC1	Harvest of upper extremity vein, one segment, for lower extremity bypass procedure (List separately in addition to code for primary procedure) <u>(For harvest of more than one vein segment, see 35682, 35683)</u>	ZZZ	6.45
<p><u>Composite Grafts</u> Codes 35682 and 35683 are used to report harvest and anastomosis of multiple vein segments from distant sites for use as arterial bypass graft conduits. These codes are intended for use when two or more vein segments are harvested from a limb other than that undergoing bypass. Add-on codes 35682 and 35683 are reported in addition to bypass graft codes 35501-35587.</p>				
▲35681		<p><u>Bypass graft, composite, prosthetic and vein (List separately in addition to code for primary procedure)</u></p> <p>(List procedure 35681 separately in addition to code for primary procedure)</p> <p>(Do not report 35681 in addition to 35682, 35683)</p>	ZZZ	8.05 (No Change)

•35682	CC2	<p>autogenous composite, two segments of veins from two locations (List separately in addition to code for primary procedure)</p> <p><u>(Do not report 35682 in addition to 35681, 35683)</u></p>	ZZZ	<p>7.20 (Submitted in May 1998)</p>
•35683	CC3	<p>autogenous composite, three or more segments of vein from two or more locations (List separately in addition to code for primary procedure)</p> <p><u>(Do not report 35683 in addition to 35681, 35682)</u></p>	ZZZ	<p>8.50 (Submitted in May 1998)</p>

AMA/SPECIALTY SOCIETY RVS UPDATE PROCESS
SUMMARY OF RECOMMENDATION

(September 1998)

CPT Code: 35500(CC1)

Global Period: ZZZ

Recommended RVW: 6.45

CPT Descriptor: Harvest of upper extremity vein, one segment, for lower extremity bypass procedure
(List separately in addition to code for primary procedure)
(For harvest of more than one vein segment, see 35682, 35683)

Vignette Used in Survey: A 74-year-old man with gangrene of the left great toe requires a femoral-anterior tibial bypass graft for limb salvage. He has previously undergone two coronary bypass operations and most of his greater saphenous vein has already been harvested. Preoperative duplex ultrasound reveals a long segment of adequate arm vein. At surgery the arm vein is dissected, harvested, branches tied, tested for leaks, and leaks repaired. The bypass graft is completed using the arm vein conduit. [Important note: 35500 is an "add-on" code. In responding to this survey, please consider ONLY THE ADDITIONAL work for harvesting and preparing the arm vein. The performance of the actual bypass graft is separately billable using a different CPT code and should not be considered for this survey.]

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

Description of Total Add-on Work:

Intra-service work involved in harvest of upper extremity vein includes dissection of the overlying skin and soft tissue for the length of conduit required. There is no "typical" length. Often the incision extends from shoulder to wrist. Alternatively a long conduit may be obtained with an incision extending down the arm over the basilic vein, medial to lateral over the antecubital vein, then back up the arm over the cephalic vein. Vein side branches are identified, ligated, and divided. Topical papaverine is administered to prevent venospasm. Once adequate length is obtained, the vein is ligated at both ends and excised. The vein is flushed with heparinized saline, gently distended, and tested for leaks. #7-O polypropylene sutures are used to repair leaks, and the surgeon wears ocular loupe magnification to perform these maneuvers. The vein is transferred to the bypass site on the leg, and the bypass surgery is completed. Thereafter attention returns to the arm vein harvest site. Closure entails irrigation, routine hemostasis maneuvers, suture of the subcutaneous tissue, skin closure with sutures or staples, and application of a dressing. Although the arm wounds are occasionally problematic, the typical patient has no postoperative wound problems related to arm vein harvest.

SURVEY DATA:

Specialty(s): The Society for Vascular Surgery

Type of Sample: Random

Survey n:	69	RVW	PRE total min	INTRA total min	HOSP total min	OFF total min
Response:	36			30		
Rate %:	52%			60		
low		2.20		60	n/a	n/a
25th%		6.45		83		
MED		8.45	n/a	120		
75th%		10.00				
high		12.00				

KEY REFERENCE SERVICE(S):

1998 RVW	Global	CPT	Descriptor
8.93	090	36821	Arteriovenous anastomosis, direct, any site (eg, Cimino type) (separate procedure)
9.13	090	34201	Embolectomy or thrombectomy, with or without catheter; femoropopliteal, aortoiliac artery, by leg incision

LOS and Time Estimates (Median)	Mean Intensity/Complexity Measures		
	35500 (CC1)	34201	36821
PRE-service time	n/a	60	30
INTRA-service time	60	83	60
POST-service time	n/a	115	48
Mental Effort and Judgment			
The number of possible diagnosis and/or the number of management options that must be considered	3.58	3.35	2.93
The amount and/or complexity of medical records, diagnostic tests, and/or other information that must be obtained reviewed and analyzed	3.28	3.25	2.47
Urgency of medical decision making	3.31	4.30	2.60
Technical Skill/physical Effort			
Technical skill required	4.14	3.45	3.53
Physical effort required	3.75	3.25	2.73
Psychological Stress			
The risk of significant complications, morbidity and/or mortality	3.78	3.90	2.93
Outcome depends on skill and judgment of physician	4.33	3.70	3.53
Estimated risk of malpractice suit with poor outcome	3.22	3.30	2.60
Time Segments			
PRE-service intensity/complexity	n/a	3.82	2.73
INTRA-service intensity complexity	3.94	3.45	2.93
POST-service intensity complexity	n/a	3.18	2.45

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

Overview: As the surgical science of arterial bypass grafting matures, the supply of autogenous superficial vein, used as conduit for these grafts, has become a limiting factor. Thus far, no synthetic tubing has been developed that equals the long-term patency of autogenous vein in the setting where a bypass must extend from the groin to well below the knee. In fact, vascular surgeons now commonly extend these reconstructions onto the foot, meaning that as much as 36" of continuous venous conduit is required. The greater saphenous vein is the conduit of choice for these bypasses, but it is also used for coronary bypass operations, and re-do coronary bypass. At the time of the Harvard studies, it was extremely rare for a patient not to have adequate greater saphenous vein for use in bypass grafting. Now it is quite common to undertake a "whole-body" search for suitable alternative venous conduit. Arm vein is far more difficult to work with than greater saphenous. Many tiny branches must be ligated, and the vein has the consistency of wet tissue paper. Any miss-step during the harvest can render arm vein unusable.

Relationship to key references: Unfortunately there are no good clinically relevant CPT codes to serve as comparable references. Harvest of multiple distant site vein segments for bypass graft (CC2 and CC3) would be the best choice, but these two codes were evaluated at the April, 1998 RUC and are yet to be valued by HCFA. Respondents to this survey, chose CPT 36821 (creation of an arteriovenous anastomosis for dialysis) and CPT 34201 (embolectomy or thrombectomy of arteries through a leg incision) most often as reference services.

Relationship to key references: (cont.)

CPT 36821 bears little clinical relationship to CC1. CPT 36821 has an equal intraservice time of 60 minutes, but is a 90 day global service with 30 minutes of pre-service and 48 minutes of post-service time. All intensity comparisons between these two codes listed CC1 as being substantially more intense/complex. Thus, the RVW for CC1 must be adjusted downward from the 8.93 rvus assigned to CPT 36821 based on time, but then adjusted back up somewhat based on greater intensity.

CPT 34201 bears no clinical relationship to CC1. Respondents most likely chose it for the similarity of intra-service time (83 min for 34201 and 60 minutes for CC1). CPT 34201 is a 90 day global service, carrying 60 minutes of pre-service time and 115 minutes of post-service time. Based on time alone, the RVW of CC1 must be adjusted downwards from the 9.13 rvus of CPT 34201 to account for 23 minutes less intra-time as well as the pre and post service time. Comparison of intensity between CPT 34201 and CC1 is mixed. Less urgency of decision making occurs with CC1, but greater skill is required to harvest the vein safely.

ADDITIONAL RATIONALE**Building block from 36821:**

Begin with RVW for CPT 36821 of 8.93

Subtract pre-service work of scrub, dress, wait (15 min*0.8*0.989*0.0103) = -0.12 rvu

Subtract pre-service eval and positioning (15 min*2.2*0.989*0.0103) = - 0.34 rvu

Subtract discharge management (99238) -1.28 rvu

Subtract one office visit (99213 at discounted rate of 0.65) = -0.65

Final extrapolated RVW for CC1 = 8.93-0.12-0.34-1.28-0.65= 6.54

IWPUT analysis:

Median RVW and median intra-time = 8.45 / 60 = 0.140

25th percentile RVW and 25th percentile time = 6.45 / 60 = 0.107

Rank order analysis compared to CC2 and CC3 evaluated at April RUC:

CPT		Median Intra Time	Global	RVW
CC1	Harvest of upper extremity vein, one segment, for lower extremity bypass procedure	60	ZZZ	6.45 (recommended)
CC2	Bypass graft; autogenous composite, two segments of veins from two locations	78	ZZZ	7.20
CC3	Bypass graft; autogenous composite, three or more segments of veins from two locations	90	ZZZ	8.50

Conclusion: Based on the rationale and comparisons, we recommend an RVW at the 25th survey percentile: 6.45 rvus.

FREQUENCY INFORMATION**1. How was this service previously reported?**

CPT 37799 Unlisted vascular procedure

2. How often do physicians in your specialty perform this service?

Commonly Sometimes Rarely

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

Less than 2,000.

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

Yes No

TABLE 1
Reference Service List
Vascular Surgery
The Society for Vascular Surgery

CPT	1998 Descriptor	Work-RVU*	Global
93880	Duplex scan of extracranial arteries; complete bilateral study	0.60	XXX
36625	Arterial catheterization or cannulation for sampling, monitoring or transfusion (separate procedure); cutdown	2.11	000
35700	Reoperation, femoral-popliteal or femoral (popliteal) -anterior tibial, posterior tibial, peroneal artery or other distal vessels, more than one month after original operation (List separately in addition to code for primary procedure)	3.08	ZZZ
35390	Reoperation, carotid, thromboendarterectomy, more than one month after original operation (List separately in addition to code for primary procedure) (Use 35390 only with 35301)	3.19	ZZZ
37206	Transcatheter placement of an intravascular stent(s), (non-coronary vessel), percutaneous; each additional vessel	4.13	ZZZ
33572	Coronary endarterectomy, open, any method, of left anterior descending, circumflex, or right coronary artery performed in conjunction with coronary artery bypass graft procedure, each vessel (list separately in addition to primary procedure)	4.45	ZZZ
35474	Transluminal balloon angioplasty, percutaneous; femoral-popliteal	7.36	000
37205	Transcatheter placement of an intravascular stent(s), (non-coronary vessel), percutaneous; initial vessel	8.28	000
36821	Arteriovenous anastomosis, direct, any site (eg, Cimino type) (separate procedure)	8.93	090
15100	Split graft, trunk, scalp, arms, legs, hands, and/or feet (except multiple digits); 100 sq cm or less, or each one percent of body area of infants and children (except 15050)	9.05	090
34201	Embolectomy or thrombectomy, with or without catheter; femoropopliteal, aortoiliac artery, by leg incision	9.13	090
27880	Amputation, leg, through tibia and fibula;	11.85	090

*These 1998 Work-RVUs are taken from the Medicare Payment Schedule published in the *Federal Register* on October 31, 1997. CPT five-digit codes, two-digit number modifiers, and descriptions only are copyright by the American Medical Association. No payment schedules, fee schedules, relative value units, scales, conversion factors, or components thereof are included in CPT. The AMA is not recommending that any specific relative values, fees, payment schedules, or relative listings be attached to CPT. Any relative value scales or relative listings assigned to CPT codes are not those of the AMA, and the AMA is not recommending use of these relative values.

AMA/SPECIALTY SOCIETY RVS UPDATE COMMITTEE
SUMMARY OF RECOMMENDATIONS

Microsurgery Add-On Codes

A new code was established, CPT 69990, to report *Use of operating microscope (List separately in addition to code for primary procedure)*. The code was created to reflect circumstances where a surgical microscope is employed for the microsurgical procedure. In addition to the creation of CPT 69990, there were two deletions of existing codes that were previously used to report these surgical circumstances. CPT deleted code 61712 *Skull or spine microsurgery (work RVU 3.49)* along with Code 64830 *Microrepair of nerve (work rvu = 3.10)* were omitted from CPT 1999.

The RUC used a weighted average approach in determining a work relative value for CPT code 69990. The RUC agreed that the weighted average of CPT codes 61712 and 64830 was an appropriate value (3.4670).

The RUC, therefore, recommends a work relative of 3.4670 for CPT code 69990.

CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
61712		<p>Microdissection, intracranial or spinal procedure (list separately in addition to code for primary procedure)</p> <p>(Use 61712 when the surgical microscope is employed for the microdissection and the anatomical structures or pathology present are too small for adequate visualization with magnifying loupes or normal/corrected vision)</p> <p>(Use 61712 only with codes 61304, 61711, 62010, 62100, 63081, 63308, 63704, and 63710)</p>	ZZZ	N/A

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CPT Code (•New)	Tracking Number	CPT Descriptor	Global Period	Work RVU Recommendation
		<u>(61712 has been deleted. Use 69990 when the surgical microscope is employed for the microsurgical procedure. Do not use 69990 for visualization with magnifying loupes or corrected vision)</u>		
64830		Microdissection and/or microrepair of nerve (list separately in addition to code for nerve repair) <u>(64830 has been deleted. Use 69990 when the surgical microscope is employed for the microsurgical procedure. Do not use 69990 for visualization with magnifying loupes or corrected vision)</u>	ZZZ	N/A
•69990		<u>Use of an operating microscope (List separately in addition to code for primary procedure)</u>	ZZZ	3.47

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Sherry L. Smith
Director, Physician Payment Systems
515 N. State St.
Chicago, IL 60610

July 23, 1998

Dear Sherry:

I am writing to advise you of a consensus recommendation for the Microsurgery Add-on codes to be discussed at the September 1998 meeting of the RUC. We have reviewed this issue with Orthopedics, Plastic Surgery, Hand Surgery and Neurosurgery and all are agreed that a weighted average of the work values for the two current codes (61712 and 64830) would be an acceptable new work RVU to use for the new microdissection code (69990).

The calculation of the weighted average for the codes follows:

CPT	Frequency	Work RVU	Weighted Average
	HCFA 8/98	MFS 1998	
61712	17509	3.49	3.4670
64830	1093	3.10	

Since there is so little change in the work value for the combined code, it appears that it would have very little impact on budget neutrality, and since it does not threaten the pool of potential resources in other specialties, should be approved with little argument.

We recommend a new work RVU for the Microdissection Add-on code of 3.47.

Sincerely,



Robert E. Florin, M.D., AANS and CNS
Alan Morris, M.D., AAOS
Stephen Hahler, M.D., ASPRS
Dan Nagle, Hand Surgery