COPYRIGHT © BY THE JOURNAL OF BONE AND JOINT SURGERY, INCORPORATED KOHRING ET AL. OPERATIVE EXPERIENCE DURING ORTHOPAEDIC RESIDENCY COMPARED WITH EARLY PRACTICE IN THE U.S. http://dx.doi.org/10.2106/JBJS.17.01115 Page 1

Appendix Table 1. The Adult Top 25 Most Commonly Performed CPT Codes by Residents

	Appendix Table 1. The Adult Top 25 Most Commonly Performed CPT Codes by Residents								
Rank	CPT Code	CPT Code Category	CPT Code Description	Practitioner %	Resident % <sup>a</sup>	Relative Rate			
1	27447	Femur/ Knee repair, Revision and/or Reconstruction	Total knee arthroplasty	3.25	6.01	1.85			
2	27130	Pelvis/ Hip Repair, Revision and/or Reconstruction	Total hip arthroplasty	2.72	4.13	1.52			
3	29881	Femur/ Knee Arthroscopy	Arthroscopy, knee, surgical; with meniscectomy (medial OR lateral, including any meniscal shaving) including debridement/shaving of articular cartilage (chondroplasty), same or separate compartment(s), when performed	3.39	3.41	1.01			
4	20680	Other Musculoskeletal - Intro or Removal	Removal of implant, deep (eg, buried wire, pin, screw, metal band, nail, rod or plate)	2.34	2.41	1.03			
5	29826	Shoulder Arthroscopy	Arthroscopy, shoulder, surgical; decompression of subacromial space with partial acromioplasty, with coracoacromial ligament (ie, arch) release, when performed (List separately in addition to code for primary procedure)	2.61	2.31	0.89			
6	64721	Nervous System Spine & Spinal Cord Neuroplasty	Neuroplasty and/or transposition; median nerve at carpal tunnel	3.21	1.99	0.62			
7	11012	Integumentary System - Incision/Excision	Debridement including removal of foreign material at the site of an open fracture and/or an open dislocation (eg, excisional debridement); skin, subcutaneous tissue, muscle fascia, muscle, and bone	1.73	1.62	0.94			
8	29827	Shoulder Arthroscopy	Arthroscopy, shoulder, surgical; with rotator cuff repair	2.22	1.62	0.73			
9	29888	Femur/ Knee Arthroscopy	Arthroscopically aided anterior cruciate ligament repair/augmentation or reconstruction	1.43	1.56	1.09			
10	29877	Femur/ Knee Arthroscopy	Arthroscopy, knee, surgical; debridement/shaving of articular cartilage (chondroplasty)	0.96	1.51	1.57			
11	27245	Pelvis/ Hip Trauma - Fracture and/or	Treatment of intertrochanteric, peritrochanteric, or	2.62	1.29	0.49			

COPYRIGHT © BY THE JOURNAL OF BONE AND JOINT SURGERY, INCORPORATED KOHRING ET AL.

OPERATIVE EXPERIENCE DURING ORTHOPAEDIC RESIDENCY COMPARED WITH EARLY PRACTICE IN THE U.S.

Rank	CPT Code	CPT Code Category	CPT Code Description	Practitioner %	Resident % <sup>a</sup>	Relative Rate
		Dislocation	subtrochanteric femoral fracture; with intramedullary implant, with or without interlocking screws and/or cerclage			
12	27506	Femur/Knee Trauma - Fracture and/ or Dislocation	Open treatment of femoral shaft fracture, with or without external fixation, with insertion of intramedullary implant, with or without cerclage and/or locking screws	0.66	1.24	1.89
13	11044	Integumentary System - Incision/Excision	Debridement, bone (includes epidermis, dermis, subcutaneous tissue, muscle and/or fascia, if performed); first 20 sq cm or less	0.93	1.15	1.24
14	27759	Leg/ Ankle Trauma - Fracture and/or Dislocation	Open treatment of tibial shaft fracture (with or without fibular fracture) by intramedullary implant, with or without interlocking screws and/or cerclage.	0.77	1.15	1.49
15	27814	Leg/ Ankle Trauma - Fracture and/or Dislocation	Open treatment of bimalleolar ankle fracture (eg, lateral and medial malleoli, or lateral and posterior malleoli, or medial and posterior malleoli), includes internal fixation, when performed	0.90	1.11	1.23
16	26055	Hand/Fingers Incision	Tendon sheath incision (eg, for trigger finger)	1.30	1.05	0.81
17	27236	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Open treatment of femoral fracture, proximal end, neck, internal fixation or prosthetic replacement (direct fracture exposure).	1.61	0.87	0.54
18	29880	Femur/ Knee Arthroscopy	Arthroscopy, knee, surgical; for infection, lavage and drainage with meniscectomy (medial AND lateral, including any meniscal shaving) including debridement/ shaving of articular cartilage, same or separate compartment(s), when performed	0.84	0.87	1.03
19	29870	Femur/ Knee Arthroscopy	Arthroscopy, knee, diagnostic, with or without synovial biopsy	0.17	0.81	4.89
20	22614	Spine Arthrodesis/ Posterior	Arthrodesis, posterior or posterolateral technique, single level; each additional	0.37	0.80	2.14

Copyright © by The Journal of Bone and Joint Surgery, Incorporated Kohring et al. Operative Experience During Orthopaedic Residency Compared with Early Practice in the U.S. http://dx.doi.org/10.2106/JBJS.17.01115 Page 3

Rank	CPT Code	CPT Code Category	CPT Code Description	Practitioner %	Resident % <sup>a</sup>	Relative Rate
			vertebral segment (List separately in addition to code for primary procedure)			
21	27792	Leg/ Ankle Trauma - Fracture and/or Dislocation	Open treatment of distal fibular fracture (lateral malleolus), with or without internal or external fixation.	0.98	0.75	0.76
22	29824	Shoulder Arthroscopy	Arthroscopy, shoulder, surgical;capsulorrhaphy with debridement, extensive	1.03	0.70	0.68
23	22612	Spine Arthrodesis/ Posterior	Arthrodesis, posterior or posterolateral technique, single level; lumbar (with lateral transverse technique, when performed)	0.59	0.69	1.17
24	20690	Other Musculoskeletal - Intro or Removal	Application of a uniplane (pins or wires in 1 plane), unilateral, external fixation system	0.76	0.66	0.88
25	23472	Shoulder Repair Revision and/or Reconstruction	Arthroplasty, glenohumeral joint; total shoulder (glenoid and proximal humeral replacement)	0.61	0.66	1.08
			Summary Statistics	Sum: 38.00	Sum: 40.37	Avg: 1.26

<sup>&</sup>lt;sup>a</sup> Sorted by this column.

Copyright © by The Journal of Bone and Joint Surgery, Incorporated Kohring et al. Operative Experience During Orthopaedic Residency Compared with Early Practice in the U.S. http://dx.doi.org/10.2106/JBJS.17.01115 Page 4

## Appendix Table 2. The Adult Top 25 Most Commonly Performed CPT Codes by Practitioners

		CDT Code				Dolotico
Rank	CPT Code	CPT Code Category	CPT Code Description	Practitioner % <sup>a</sup>	Resident %	Relative Rate
1	29881	Femur/ Knee Arthroscopy	Arthroscopy, knee, surgical; with meniscectomy (medial OR lateral, including any meniscal shaving) including debridement/shaving of articular cartilage (chondroplasty), same or separate compartment(s), when performed	3.39	3.41	1.01
2	27447	Femur/ Knee repair, Revision and/or Reconstruction	Total knee arthroplasty	3.25	6.01	1.85
3	64721	Nervous System Spine & Spinal Cord Neuroplasty	Neuroplasty and/or transposition; median nerve at carpal tunnel	3.21	1.99	0.62
4	27130	Pelvis/ Hip Repair, Revision and/or Reconstruction	Total hip replacement	2.72	4.13	1.52
5	27245	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Treatment of intertrochanteric, peritrochanteric, or subtrochanteric femoral fracture; with intramedullary implant, with or without interlocking screws and/or cerclage	2.62	1.29	0.49
6	29826	Shoulder Arthroscopy	Arthroscopy, shoulder, surgical; decompression of subacromial space with partial acromioplasty, with coracoacromial ligament (ie, arch) release, when performed (List separately in addition to code for primary procedure)	2.61	2.31	0.89
7	20680	Other Musculoskeletal - Intro or Removal	Removal of implant, deep (eg, buried wire, pin, screw, metal band, nail, rod or plate)	2.34	2.41	1.03
8	29827	Shoulder Arthroscopy	Arthroscopy, shoulder, surgical; with rotator cuff repair	2.22	1.62	0.73
9	11012	Integumentary System - Incision/Excision	Debridement including removal of foreign material at the site of an open fracture and/or an open dislocation (eg, excisional debridement); skin, subcutaneous tissue, muscle fascia, muscle, and bone	1.73	1.62	0.94
10	27236	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Open treatment of femoral fracture, proximal end, neck, internal fixation or prosthetic	1.61	0.87	0.54

COPYRIGHT © BY THE JOURNAL OF BONE AND JOINT SURGERY, INCORPORATED KOHRING ET AL.

OPERATIVE EXPERIENCE DURING ORTHOPAEDIC RESIDENCY COMPARED WITH EARLY PRACTICE IN THE U.S.

Rank	CPT Code	CPT Code Category	CPT Code Description	Practitioner % <sup>a</sup>	Resident %	Relative Rate
11	29888	Femur/ Knee Arthroscopy	replacement  Arthroscopically aided anterior cruciate ligament repair/augmentation or reconstruction	1.43	1.56	1.09
12	26055	Hand/Fingers Incision	Tendon sheath incision (eg, for trigger finger).	1.30	1.05	0.81
13	63047	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decom pression of Neural Elements or Excision of Herniated Intervertebral Disc	Laminectomy, facetectomy and foraminotomy (unilateral or bilateral with decompression of spinal cord, cauda equina and /or nerve root(s), (e.g., spinal or lateral recess stenosis), single vertebral segment, lumbar	1.05	0.52	0.49
14	29824	Shoulder Arthroscopy	Arthroscopy, shoulder, surgical;capsulorrhaphy with debridement, extensive	1.03	0.70	0.68
15	27792	Leg/ Ankle Trauma - Fracture and/or Dislocation	Open treatment of distal fibular fracture (lateral malleolus), with or without internal or external fixation.	0.98	0.75	0.76
16	29823	Shoulder Arthroscopy	Arthroscopy, shoulder, surgical;capsulorrhaphy with debridement, limited	0.96	0.45	0.47
17	29877	Femur/ Knee Arthroscopy	Arthroscopy, knee, surgical; for infection, lavage and drainage debridement/shaving of articular cartilage	0.96	1.51	1.57
18	11044	Integumentary System - Incision/Excision	Debridement, bone (includes epidermis, dermis, subcutaneous tissue, muscle and/or fascia, if performed); first 20 sq cm or less	0.93	1.15	1.24
19	23430	Shoulder Repair Revision and/or Reconstruction	Tenodesis of long tendon of biceps	0.91	0.32	0.35
20	25609	Forearm/ Wrist Fracture and/or Dislocation	Open treatment of distal radial intra-articular fracture or epiphyseal separation with internal fixation of 3 fragments	0.91	0.60	0.66
21	27814	Leg/ Ankle Trauma - Fracture and/or Dislocation	Open treatment of bimalleolar ankle fracture, with or without internal or external fixation.	0.90	1.11	1.23
22	11043	Integumentary System -	Debridement, muscle and/or fascia (includes epidermis,	0.87	0.64	0.73

Copyright © by The Journal of Bone and Joint Surgery, Incorporated Kohring et al. Operative Experience During Orthopaedic Residency Compared with Early Practice in the U.S. http://dx.doi.org/10.2106/JBJS.17.01115

Rank	CPT Code	CPT Code Category	CPT Code Description	Practitioner % <sup>a</sup>	Resident %	Relative Rate
		Incision/Excision	dermis, and subcutaneous tissue, if performed); first 20 sq cm or less			
23	29822	Shoulder Arthroscopy	Arthroscopy, shoulder, surgical;capsulorrhaphy with synovectomy, complete	0.86	0.56	0.65
24	29880	Femur/ Knee Arthroscopy	Arthroscopy, knee, surgical; for infection, lavage and drainage with meniscectomy (medial AND lateral, including any meniscal shaving) including debridement/ shaving of articular cartilage, same or separate compartment(s), when performed	0.84	0.87	1.03
25	63030	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decom pression of Neural Elements or Excision of Herniated Intervertebral Disc	Laminotomy (hemilaminectomy). with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or excision of herniated intervertebral disc, including open and edoscopically assisted approaches, 1 interspace, lumbar	0.79	0.34	0.43
			Summary Statistics	Sum: 40.42	Sum: 37.79	Avg: 1.51

<sup>&</sup>lt;sup>a</sup> Sorted by this column.

COPYRIGHT © BY THE JOURNAL OF BONE AND JOINT SURGERY, INCORPORATED KOHRING ET AL. OPERATIVE EXPERIENCE DURING ORTHOPAEDIC RESIDENCY COMPARED WITH EARLY PRACTICE IN THE U.S. http://dx.doi.org/10.2106/JBJS.17.01115 Page 7

## Appendix Table 3. The Pediatric Top 25 Most Commonly Performed CPT Codes by Residents

	Residents								
Rank	CPT Code	CPT Code Category	CPT Code Description	Practitioner %	Resident % <sup>a</sup>	Relative Rate			
1	20680	Other Musculoskeletal - Intro or Removal	Removal of implant, deep (eg, buried wire, pin, screw, metal band, nail, rod or plate)	4.97	5.19	1.04			
2	24538	Humerus/ Elbow Fracture and/or Dislocation	Percutaneous skeletal fixation of supracondylar or transcondylar humeral fracture, with or without intercondylar extension	7.58	4.75	0.63			
3	27606	Leg/Ankle Incision	Tenotomy, percutaneous, Achilles tendon	0.69	2.05	2.95			
4	27506	Femur/Knee Trauma - Fracture and/ or Dislocation	Open treatment of femoral shaft fracture, with or without external fixation, with insertion of intramedullary implant, with or without cerclage and/or locking screws	1.13	1.62	1.43			
5	22802	Spine Arthrodesis/ Deformity	Arthrodesis, posterior, for spinal deformity, with or without cast; 7 to 12 vertebral segments	0.54	1.50	2.76			
6	22843	Spine Instrumentation	Posterior non-segmental instrumentation 7 to 12 vertebral segments	0.54	1.49	2.79			
7	29888	Femur/ Knee Arthroscopy	Arthroscopically aided anterior cruciate ligament repair/augmentation or reconstruction	4.08	1.49	0.36			
8	27685	Leg/ Ankle Repair, Revision, and/or Reconstruction	Lengthening or shortening of tendon, leg or ankle; single tendon	0.36	1.39	3.86			
9	27001	Pelvis/ Hip Incision	Tenotomy, adductor of hip, subcutaneous, open.	0.45	1.07	2.37			
10	27165	Pelvis/ Hip Repair, Revision and/or Reconstruction	Osteotomy, intertrochanteric or subtrochanteric including internal or external fixation and/or cast	0.38	1.05	2.74			
11	29881	Femur/ Knee Arthroscopy	Arthroscopy, knee, surgical; with meniscectomy (medial OR lateral, including any meniscal shaving) including debridement/shaving of articular cartilage (chondroplasty), same or separate compartment(s), when performed	2.84	1.02	0.36			
12	22614	Spine Arthrodesis/ Posterior	Arthrodesis, posterior or posterolateral technique, single level; each additional vertebral segment (List	0.04	1.01	28.01			

COPYRIGHT © BY THE JOURNAL OF BONE AND JOINT SURGERY, INCORPORATED KOHRING ET AL.

OPERATIVE EXPERIENCE DURING ORTHOPAEDIC RESIDENCY COMPARED WITH EARLY PRACTICE IN THE U.S.

Rank	CPT Code	CPT Code Category	CPT Code Description	Practitioner %	Resident %ª	Relative Rate
			separately in addition to code for primary procedure)			
13	22804	Spine Arthrodesis/ Deformity	Arthrodesis, posterior, for spinal deformity, with or without cast; 13 or more vertebral segments	0.40	0.95	2.39
14	27176	Pelvis/ Hip Repair, Revision and/or Reconstruction	Treatment of slipped femoral epiphysis; by traction, without reduction by single or multiple pinning, in situ	0.85	0.94	1.11
15	22844	Spine Instrumentation	Posterior segmental instrumentation (eg, pedicle fixation, dual rods with multiple hooks and sublaminar wires); 13 or more vertebral segments	0.40	0.92	2.32
16	11012	Integumentary System - Incision/Excision	Debridement including removal of foreign material at the site of an open fracture and/or an open dislocation (eg, excisional debridement); skin, subcutaneous tissue, muscle fascia, muscle, and bone	2.26	0.91	0.40
17	27095	Pelvis/ Hip Introduction or Removal	Injection procedure for hip arthrography; with anesthesia.	0.76	0.87	1.15
18	27687	Leg/ Ankle Repair, Revision, and/or Reconstruction	Injection procedure for hip arthrography; with anesthesia.	0.40	0.87	2.18
19	28300	Foot/ Toes Repair, Revision and/or Reconstruction	Gastrocnemius recession	0.35	0.86	2.50
20	20930	Other Musculoskeletal - Intro or Removal	Osteotomy; calcaneus (eg, Dwyer or Chambers type procedure), with or without internal fixation	0.61	0.83	1.36
21	24579	Humerus/ Elbow Fracture and/or Dislocation	Open treatment of humeral condylar fracture, medial or lateral, with or without internal or external fixation.	1.38	0.83	0.60
22	27450	Femur/ Knee repair, Revision and/or Reconstruction	Osteotomy, femur, shaft or supracondylar; with fixation	0.19	0.82	4.34
23	20936	Other Musculoskeletal - Intro or Removal	Autograft for spine surgery (includes harvesting the graft); local (eg, ribs, spinous process, or laminar fragments) obtained from same incision	0.56	0.78	1.39
24	11044	Integumentary System -	Debridement, bone (includes epidermis, dermis,	0.79	0.77	0.98

Copyright © by The Journal of Bone and Joint Surgery, Incorporated Kohring et al. Operative Experience During Orthopaedic Residency Compared with Early Practice in the U.S. http://dx.doi.org/10.2106/JBJS.17.01115 Page 9

Rank	CPT Code	CPT Code Category	CPT Code Description	Practitioner %	Resident % <sup>a</sup>	Relative Rate
		Incision/Excision	subcutaneous tissue, muscle and/or fascia, if performed); first 20 sq cm or less			
25	25575	Forearm/ Wrist Fracture and/or Dislocation	Open treatment of radial and ulnar shaft fractures with internal fixation of radius and ulna	1.38	0.73	0.53
			Summary Statistics	Sum: 33.93	Sum: 34.71	Avg: 2.82

<sup>&</sup>lt;sup>a</sup> Sorted by this column.

Copyright © by The Journal of Bone and Joint Surgery, Incorporated Kohring et al. Operative Experience During Orthopaedic Residency Compared with Early Practice in the U.S. http://dx.doi.org/10.2106/JBJS.17.01115 Page 10

## Appendix Table 4. The Pediatric Top 25 Most Commonly Performed CPT Codes by Practitioners

	Practitioners Palada								
Rank	CPT Code	CPT Code Category	CPT Code Description	Practitioner % <sup>a</sup>	Resident %	Relative Rate			
1	24538	Humerus/ Elbow Fracture and/or Dislocation	Percutaneous skeletal fixation of supracondylar or transcondylar humeral fracture, with or without intercondylar extension	7.58	4.75	0.63			
2	20680	Other Musculoskeletal - Intro or Removal	Removal of implant, deep (eg, buried wire, pin, screw, metal band, nail, rod or plate)	4.97	5.19	1.04			
3	29888	Femur/ Knee Arthroscopy	Arthroscopically aided anterior cruciate ligament repair/augmentation or reconstruction	4.08	1.49	0.36			
4	29881	Femur/ Knee Arthroscopy	Arthroscopy, knee, surgical; with meniscectomy (medial OR lateral, including any meniscal shaving) including debridement/shaving of articular cartilage (chondroplasty), same or separate compartment(s), when performed	2.84	1.02	0.36			
5	11012	Integumentary System - Incision/Excision	Debridement including removal of foreign material at the site of an open fracture and/or an open dislocation (eg, excisional debridement); skin, subcutaneous tissue, muscle fascia, muscle, and bone	2.26	0.91	0.40			
6	29882	Femur/ Knee Arthroscopy	Arthroscopy, knee, surgical; for infection, lavage and drainage with meniscus repair (medial OR lateral)	2.25	0.58	0.26			
7	25606	Forearm/ Wrist Fracture and/or Dislocation	Percutaneous skeletal fixation of distal radial fracture or epiphyseal separation	1.93	0.53	0.28			
8	24579	Humerus/ Elbow Fracture and/or Dislocation	Open treatment of humeral condylar fracture, medial or lateral, with or without internal or external fixation.	1.38	0.83	0.60			
9	25575	Forearm/ Wrist Fracture and/or Dislocation	Open treatment of radial and ulnar shaft fractures with internal fixation of radius and ulna	1.38	0.73	0.53			
10	26727	Hand/Fingers Fracture and/or Dislocation	Percutaneous skeletal fixation of unstable phalangeal shaft fracture, proximal or middle phalanx, finger or thumb, with manipulation, each.	1.31	0.25	0.19			

Copyright @ by The Journal of Bone and Joint Surgery, Incorporated Kohring et al.

 $Operative\ Experience\ During\ Orthopaedic\ Residency\ Compared\ with\ Early\ Practice\ in\ the\ U.S.$ 

http://dx.doi.org/10.2106/JBJS.17.01115

Rank	CPT Code	CPT Code Category	CPT Code Description	Practitioner % <sup>a</sup>	Resident %	Relative Rate
11	27506	Femur/Knee Trauma - Fracture and/ or Dislocation	Open treatment of femoral shaft fracture, with or without external fixation, with insertion of intramedullary implant, with or without cerclage and/or locking screws.	1.13	1.62	1.43
12	29806	Shoulder Arthroscopy	Arthroscopy, shoulder, diagnostic, with or without synovial biopsy	1.04	0.18	0.17
13	26055	Hand/Fingers Incision	Tendon sheath incision (eg, for trigger finger).	0.95	0.73	0.77
14	23515	Shoulder Fracture and/or Dislocation	Open treatment of clavicular fracture, includes internal fixation, when performe	0.90	0.19	0.21
15	27176	Pelvis/ Hip Repair, Revision and/or Reconstruction	Treatment of slipped femoral epiphysis; by traction, without reduction by single or multiple pinning, in situ	0.85	0.94	1.11
16	27792	Leg/ Ankle Trauma - Fracture and/or Dislocation	Open treatment of distal fibular fracture (lateral malleolus), with or without internal or external fixation.	0.81	0.27	0.34
17	11044	Integumentary System - Incision/Excision	Debridement, bone (includes epidermis, dermis, subcutaneous tissue, muscle and/or fascia, if performed); first 20 sq cm or less	0.79	0.77	0.98
18	11043	Integumentary System - Incision/Excision	Debridement, muscle and/or fascia (includes epidermis, dermis, and subcutaneous tissue, if performed); first 20 sq cm or less	0.78	0.43	0.55
19	27095	Pelvis/ Hip Introduction or Removal	Injection procedure for hip arthrography; with anesthesia.	0.76	0.87	1.15
20	27827	Leg/ Ankle Trauma - Fracture and/or Dislocation	Open treatment of fracture of weight bearing articular surface/ portion of distal tibia (eg, pilon or tibial plafond), with internal or external fixation; of tibia only.	0.76	0.39	0.52
21	25111	Forearm/Wrist Excision	Excision of ganglion, wrist (dorsal or volar); primary	0.73	0.23	0.31
22	27606	Leg/Ankle Incision	Tenotomy, Achilles tendon, subcutaneous (separate procedure); general anesthesia.	0.69	2.05	2.95
23	29877	Femur/ Knee Arthroscopy	Arthroscopy, knee, surgical; debridement/shaving of articular cartilage	0.69	0.38	0.55

Copyright © by The Journal of Bone and Joint Surgery, Incorporated Kohring et al. Operative Experience During Orthopaedic Residency Compared with Early Practice in the U.S. http://dx.doi.org/10.2106/JBJS.17.01115

Rank	CPT Code	CPT Code Category	CPT Code Description	Practitioner % <sup>a</sup>	Resident %	Relative Rate
			(chondroplasty)			
24	29875	Femur/ Knee Arthroscopy	Arthroscopy, knee, surgical; for infection, lavage and drainage with synovectomy, limited	0.68	0.31	0.46
25	24575	Humerus/ Elbow Fracture and/or Dislocation	Open treatment of humeral epicondylar fracture, medial or lateral, with or without internal or external fixation.	0.65	0.35	0.53
			Summary Statistics	Sum: 42.19	Sum: 25.99	Avg: 0.67

<sup>&</sup>lt;sup>a</sup> Sorted by this column.

Copyright © by The Journal of Bone and Joint Surgery, Incorporated Kohring et al. Operative Experience During Orthopaedic Residency Compared with Early Practice in the U.S. http://dx.doi.org/10.2106/JBJS.17.01115 Page 13

Appendix Table 5. All CPT Codes Used in the Adult Data Analysis Listed with Corresponding CPT Code Descriptions Listed by CPT Code Numeric Order

	Corresponding CPT Code Descriptions Listed by CPT Code Numeric Order							
CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate			
10060	Integumentary System Incision & Drainage	Incision and drainage of abscess; simple or single	0.12	0.04	0.39			
10061	Integumentary System Incision & Drainage	Incision and drainage of abscess; complicated or multiple	0.13	0.03	0.25			
10080	Integumentary System Incision & Drainage	Incision and drainage of pilonidal cyst; simple or single	0.00	0.00	0.86			
10120	Integumentary System Incision & Drainage	Incision and removal of foreign body, subcutaneous tissues; simple	0.09	0.02	0.28			
10121	Integumentary System Incision & Drainage	Incision and removal of foreign body, subcutaneous tissues; complicated	0.06	0.02	0.30			
10140	Integumentary System Incision & Drainage	Incision and drainage of hematoma, seroma or fluid collection	0.08	0.03	0.43			
10160	Integumentary System Incision & Drainage	Puncture aspiration of abscess, hematoma, bulla, or cyst	0	0	0.98			
10180	Integumentary System Incision & Drainage	Incision and drainage, complex, postoperative wound infection	0.27	0.15	0.57			
11000	Integumentary System Debridement	Debridement of extensive eczematous or infected skin; up to 10% of body surface	0.01	0	0.57			
11001	Integumentary System Debridement	Debridement of extensive eczematous or infected skin; each additional 10% of the body surface, or part thereof (List separately in addition to code for primary procedure)	0	0	6.42			
11004	Integumentary System Debridement	Debridement of skin, subcutaneous tissue, muscle, and fascia for necrotizing soft tissue infection; external genitalia and perineum	0	0	0.99			
11005	Integumentary System Debridement	Debridement of skin, subcutaneous tissue, muscle, and fascia for necrotizing soft tissue infection; abdominal wall, with or without fascial closure	0.00	0.00	Inf			
11006	Integumentary System Debridement	Debridement of skin, subcutaneous tissue, muscle, and fascia for necrotizing soft tissue infection; external genitalia, perineum, and abdominal wall, with or	0.00	0.00	1.60			

Copyright @ by The Journal of Bone and Joint Surgery, Incorporated Kohring et al.

Operative Experience During Orthopaedic Residency Compared with Early Practice in the U.S. http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		without fascial closure			
11010	Integumentary System - Incision/Excision	Debridement including removal of foreign material at the site of an open fracture and/or an open dislocation (eg, excisional debridement); skin and subcutaneous tissues	0.21	0.23	1.08
11011	Integumentary System - Incision/Excision	Debridement including removal of foreign material at the site of an open fracture and/or an open dislocation (eg, excisional debridement); skin, subcutaneous tissue, muscle fascia, and muscle	0.20	0.36	1.82
11012	Integumentary System - Incision/Excision	Debridement including removal of foreign material at the site of an open fracture and/or an open dislocation (eg, excisional debridement); skin, subcutaneous tissue, muscle fascia, muscle, and bone	1.73	1.62	0.94
11040	Integumentary System Debridement		0.01	0.02	2.75
11041	Integumentary System Debridement		0.01	0.03	5.51
11042	Integumentary System - Incision/Excision	Debridement, subcutaneous tissue (includes epidermis and dermis, if performed); first 20 sq cm or less	0.53	0.24	0.45
11043	Integumentary System - Incision/Excision	Debridement, muscle and/or fascia (includes epidermis, dermis, and subcutaneous tissue, if performed); first 20 sq cm or less	0.87	0.64	0.73
11044	Integumentary System - Incision/Excision	Debridement, bone (includes epidermis, dermis, subcutaneous tissue, muscle and/or fascia, if performed); first 20 sq cm or less	0.93	1.15	1.24
11045	Integumentary System Debridement	Debridement, subcutaneous tissue (includes epidermis and dermis, if performed); each additional 20 square cm, or part thereof 20 sq cm or less	0.04	0.00	0.03
11046	Integumentary System Debridement	Debridement, muscle and/or fascia (includes epidermis, dermis, and subcutaneous;	0.10	0.00	0.02

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		each additional 20 square cm, or part thereof 20 sq cm or less tissue, if performed); first 20 sq cm or less			
11047	Integumentary System Debridement	Debridement, muscle and/or fascia (includes epidermis, dermis, and subcutaneous; each additional 20 square cm, or part thereof	0.07	0.00	0.03
11760	Integumentary System - Incision/Excision	20 sq cm or less	0.23	0.11	0.48
11900	Integumentary System Introduction	tissue, if performed); first 20 sq cm or less	0.00	0.00	0.24
11971	Integumentary System Introduction	Removal of tissue expander(s) without insertion of prosthesis	0.00	0.00	0.78
11981	Integumentary System Introduction	Insertion, non-biodegradable drug delivery implant	0.35	0.12	0.36
11982	Integumentary System Introduction	Removal, non-biodegradable drug delivery implant	0.17	0.04	0.23
11983	Integumentary System Introduction	Removal with reinsertion, non- biodegradable drug delivery implant	0.11	0.03	0.32
12001	Integumentary System Repair-Simple	Simple repair of superficial wounds of scalp, neck, axillae, external genitalia, trunk and/ or extremeities; 2.5 cm or less	0.06	0.04	0.58
12002	Integumentary System Repair-Simple	Simple repair of superficial wounds of scalp, neck, axillae, external genitalia, trunk and/ or extremeities; 2.6 - 7.5 cm	0.07	0.06	0.83
12004	Integumentary System Repair-Simple	Simple repair of superficial wounds of scalp, neck, axillae, external genitalia, trunk and/ or extremeities; 7.6 - 12.5 cm	0.02	0.02	1.10
12005	Integumentary System Repair-Simple	Simple repair of superficial wounds of scalp, neck, axillae, external genitalia, trunk and/ or extremeities; 12.6 - 20.0 cm	0.02	0.01	0.69
12006	Integumentary System Repair-Simple	Simple repair of superficial wounds of scalp, neck, axillae, external genitalia, trunk and/ or extremeities; 20.1 - 30.0 cm	0.01	0.01	0.87
12007	Integumentary System Repair-Simple	Simple repair of superficial wounds of scalp, neck, axillae, external genitalia, trunk and/ or extremeities; over 30 cm	0.00	0.01	1.44
12011	Integumentary System Repair-Simple	Simple repair of superficial wounds of scalp, neck, axillae,	0.00	0.00	3.32

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		external genitalia, trunk and/ or extremeities; over 30 cm			
12013	Integumentary System Repair-Simple	Simple repair of superficial wounds of face, ears, eyelids, nose, lips, and/or mucous membranes; 2.6 to 5.0 cm	0.00	0.00	Inf
12014	Integumentary System Repair-Simple	Simple repair of superficial wounds of face, ears, eyelids, nose, lips, and/or mucous membranes; 5.1 to 7.5 cm	0.00	0.00	Inf
12015	Integumentary System Repair-Simple	Simple repair of superficial wounds of face, ears, eyelids, nose, lips, and/or mucous membranes; 7.6 to 12.5 cm	0.00	0.00	2.67
12016	Integumentary System Repair-Simple	Simple repair of superficial wounds of face, ears, eyelids, nose, lips, and/or mucous membranes; 12.6 to 20.0 cm	0.00	0.00	Inf
12017	Integumentary System Repair-Simple	Simple repair of superficial wounds of face, ears, eyelids, nose, lips, and/or mucous membranes; 20.0 to 30.0 cm	0.00	0.00	0.96
12018	Integumentary System Repair-Simple	Simple repair of superficial wounds of face, ears, eyelids, nose, lips, and/or mucous membranes; over 30.0 cm	0.00	0.00	1.82
12020	Integumentary System Repair-Simple	Treatment of superficial wound dehiscence; simple closure	0.04	0.01	0.24
12021	Integumentary System Repair-Simple	Treatment of superficial wound dehiscence; with packing	0.00	0.00	0.59
12031	Integumentary System Repair-Intermediate	Repair, intermediate, wounds of scalp, axillae, trunk and/or extremities excluding hands and feel; 2.5 cm or less	0.02	0.01	0.41
12032	Integumentary System Repair-Intermediate	Repair, intermediate, wounds of scalp, axillae, trunk and/or extremities excluding hands and feel; 2.6 to 7.5 cm	0.06	0.05	0.76
12034	Integumentary System Repair-Intermediate	Repair, intermediate, wounds of scalp, axillae, trunk and/or extremities excluding hands and feel; 7.6 to 12.5 cm	0.04	0.04	0.98
12035	Integumentary System Repair-Intermediate	Repair, intermediate, wounds of scalp, axillae, trunk and/or extremities excluding hands and feel; 12.6 to 20.0 cm	0.04	0.04	1.05
12036	Integumentary System Repair-Intermediate	Repair, intermediate, wounds of scalp, axillae, trunk and/or extremities excluding hands	0.02	0.02	1.12

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		and feel; 20.1 to 30.0 cm			
12037	Integumentary System Repair-Intermediate	Repair, intermediate, wounds of scalp, axillae, trunk and/or extremities excluding hands and feel; over 30.0 cm	0.01	0.01	1.14
12041	Integumentary System Repair-Intermediate	Repair, intermediate, wounds of neck, hands, feet, and/ or external genitalia; 2.5 cm or less	0.01	0.01	1.39
12042	Integumentary System Repair-Intermediate	Repair, intermediate, wounds of neck, hands, feet, and/ or external genitalia; 2.6 to 7.5 cm	0.02	0.03	1.68
12044	Integumentary System Repair-Intermediate	Repair, intermediate, wounds of neck, hands, feet, and/ or external genitalia; 7.6 to 12.5n cm	0.01	0.01	1.32
12045	Integumentary System Repair-Intermediate	Repair, intermediate, wounds of neck, hands, feet, and/ or external genitalia; 12.6 to 20.0 cm	0.00	0.01	1.60
12046	Integumentary System Repair-Intermediate	Repair, intermediate, wounds of neck, hands, feet, and/ or external genitalia; 20.1 to 30.0 cm	0.00	0.00	2.14
12047	Integumentary System Repair-Intermediate	Repair, intermediate, wounds of neck, hands, feet, and/ or external genitalia; over 30.0 cm	0.00	0.00	Inf
12051	Integumentary System Repair-Intermediate	Repair, intermediate, wounds of face, ears, eyelids, nose, lips and/or mucous membranes; 2.5 cm or less	0.00	0.00	1.18
12052	Integumentary System Repair-Intermediate	Repair, intermediate, wounds of face, ears, eyelids, nose, lips and/or mucous membranes; 2.6 to 5.0 cm	0.00	0.00	1.93
12054	Integumentary System Repair-Intermediate	Repair, intermediate, wounds of face, ears, eyelids, nose, lips and/or mucous membranes;7.6 to 12.5 cm	0.00	0.00	1.50
12055	Integumentary System Repair-Intermediate	Repair, intermediate, wounds of face, ears, eyelids, nose, lips and/or mucous membranes; 12.6 to 20.0 cm	0.00	0.00	0.46
13100	Integumentary System Repair-Complex	Repair, complex, trunk; 1.1 to 2.5 cm	0.00	0.00	0.78
13101	Integumentary System Repair-Complex	Repair, complex, trunk; 2.6 to 7.5 cm	0.01	0.01	0.66
13102	Integumentary System Repair-Complex	Repair, complex, trunk; each additional 5 cm or less	0.00	0.00	2.66

COPYRIGHT © BY THE JOURNAL OF BONE AND JOINT SURGERY, INCORPORATED KOHRING ET AL.

OPERATIVE EXPERIENCE DURING ORTHOPAEDIC RESIDENCY COMPARED WITH EARLY PRACTICE IN THE U.S. http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
13120	Integumentary System Repair-Complex	Repair, complex, scalp, arms, legs; 1.1 to 2.5 cm	0.02	0.01	0.42
13121	Integumentary System Repair-Complex	Repair, complex, scalp, arms, legs; 2.6 to 7.5 cm	0.14	0.07	0.52
13122	Integumentary System Repair-Complex	Repair, complex, scalp, arms, legs; each additional 5 cm or less	0.07	0.06	0.88
13131	Integumentary System Repair-Complex	Repair, complex, forehead, cheeks, chin, nouth, neck, axillae, genitalia, hands, feet; 1.1 cm to 2.5 cm	0.02	0.01	0.38
13132	Integumentary System Repair-Complex	Repair, complex, forehead, cheeks, chin, nouth, neck, axillae, genitalia, hands, feet; 2.6 to 7.5 cm	0.05	0.02	0.46
13133	Integumentary System Repair-Complex	Repair, complex, forehead, cheeks, chin, nouth, neck, axillae, genitalia, hands, feet; each additional 5 cm or less	0.02	0.01	0.44
13152	Integumentary System Repair-Complex	Repair, complex, eyelids, nose, ears and/ or lips; 2.6 to 7.5 cm	0.00	0.00	0.37
13160	Integumentary System Repair-Complex	Secondary closure of surgical wound or dehiscence, extensive or complicated	0.25	0.09	0.36
15002	Integumentary System Skin Grafts	Surgical preparation or creation of recipient site by excision of open wounds, burn eschar, or scar, or incisional release of scar contracture, trunk, arms, legs; first 100 sq cm or 1% of bady area for infants and children	0.05	0.02	0.38
15003	Integumentary System Skin Grafts	Surgical preparation or creation of recipient site by excision of open wounds, burn eschar, or scar, or incisional release of scar contracture, trunk, arms, legs; each additional 100 sq cm or each additional 1% of bady area for infants and children	0.01	0.01	2.06
15004	Integumentary System Skin Grafts	Surgical preparation or creation of recipient site by excision of open wounds, burn eschar, or scar, or incisional release of scar contracture, face, scalp, eyelids,mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits; first 100 sq cm or 1% of	0.05	0.01	0.17

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		bady area for infants and children			
15005	Integumentary System Skin Grafts	Surgical preparation or creation of recipient site by excision of open wounds, burn eschar, or scar, or incisional release of scar contracture, face, scalp, eyelids,mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits; each additional 100 sq cm or each additional 1% of bady area for infants and children	0.00	0.00	2.10
15040	Integumentary System Skin Grafts	Harvest of skin for tissue cultured autograft, 100 sq cm or less	0.00	0.00	2.99
15050	Integumentary System Skin Grafts	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	0.01	0.00	0.21
15100	Integumentary System Skin Grafts	Split-thickness autograft, trunk, arms, legs,; first 100 sq cm or less, or 1% of body area of infants and children	0.12	0.17	1.46
15101	Integumentary System Skin Grafts	Split-thickness autograft, trunk, arms, legs; each additional 100 sq cm or less, or each additional 1% of body area of infants and children	0.03	0.07	2.77
15110	Integumentary System Skin Grafts	Epidermal autograft, trunk, arms, legs; first 100 sq cm or less, or 1% of body area of infants and children	0.00	0.00	Inf
15111	Integumentary System Skin Grafts	Epidermal autograft, trunk, arms, legs; each additional 100 sq cm or less, or each additional 1% of body area of infants and children	0.00	0.01	22.03
15115	Integumentary System Skin Grafts	Epidermal autograft, face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits; first 100 sq cm or less, or 1% of body area of infants and children	0.00	0.00	1.44
15116	Integumentary System Skin Grafts	Epidermal autograft, face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits;	0.00	0.00	Inf

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		each additional 100 sq cm or less, or each additional 1% of body area of infants and children			
15120	Integumentary System Skin Grafts	Split thickness autograft, face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits; first 100 sq cm or less, or 1% of body area of infants and children	0.02	0.03	1.53
15121	Integumentary System Skin Grafts	Split thickness autograft, face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits; each additional 100 sq cm or less, or each additional 1% of body area of infants and children	0.00	0.01	10.27
15130	Integumentary System Skin Grafts	Dermal autograft, trunk, arms, legs; first 100 sq cm or less, or 1% of body area of infants and children	0.00	0.00	Inf
15131	Integumentary System Skin Grafts	Dermal autograft, trunk, arms, legs; each additional 100 sq cm or less, or each additional 1% of body area of infants and children	0.00	0.00	Inf
15135	Integumentary System Skin Grafts	Dermal autograft, face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits; first 100 sq cm or less, or 1% of body area of infants and children	0.00	0.00	1.46
15170	Integumentary System Skin Grafts		0.00	0.00	Inf
15171	Integumentary System Skin Grafts		0.00	0.00	Inf
15175	Integumentary System Skin Grafts		0.00	0.00	Inf
15200	Integumentary System Skin Grafts	Full thickness graft, free, including direct closure of donor site, trunk; 20 sq cm or less	0.00	0.00	4.44
15201	Integumentary System Skin Grafts	Full thickness graft, free, including direct closure of donor site, trunk; each additional 20 sq cm or part thereof	0.00	0.00	Inf
15220	Integumentary System Skin Grafts	Full thickness graft, free, including direct closure of	0.01	0.01	0.72

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		donor site, scalp, arms and/ or legs; 20 sq cm or less			
15221	Integumentary System Skin Grafts	Full thickness graft, free, including direct closure of donor site, scalp arms and/ or legs; each additional 20 sq cm or part thereof	0.00	0.00	5.78
15240	Integumentary System Skin Grafts	Full thickness graft, free, including direct closure of donor site, forehead, cheeks, chin, mouth, neck, axillae, genitalia,hands and/or feet; 20 sq cm or less	0.03	0.02	0.63
15241	Integumentary System Skin Grafts	Full thickness graft, free, including direct closure of donor site, forehead, cheeks, chin, mouth, neck, axillae, genitalia,hands and/or feet; each additional 20 sq cm or part thereof	0.00	0.00	4.38
15260	Integumentary System Skin Grafts	Full thickness graft, free, including direct closure of donor site, nose, ears, eyelids and/ or lips; 20 sq cm or less	0.00	0.00	Inf
15271	Integumentary System Skin Grafts	Application of skin substitute graft to trunk, arms legs, total wound surface area up to 100 sq cm; first 25 sq cm or less wound surface area	0.02	0.00	0.00
15272	Integumentary System Skin Grafts	Application of skin substitute graft to trunk, arms legs, total wound surface area up to 100 sq cm; each additional 25 sq cm wound surface area	0.00	0.00	0.00
15273	Integumentary System Skin Grafts	Application of skin substitute graft to trunk, arms legs, total wound surface area greater than or equal to 100 sq cm; first 100 sq cm or less wound surface area	0.00	0.00	0.00
15275	Integumentary System Skin Grafts	Application of skin substitute graft to trunk, arms legs, total wound surface area greater than or equal to 100 sq cm; each additional 100 sq cm wound surface area, or part thereof, or each additional 1% of body area of infants and children	0.02	0.00	0.00
15570	Integumentary System Flaps	Formation of direct or tubed pedicle, with or without	0.00	0.00	0.96

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		transfer; trunk			
15572	Integumentary System Flaps	Formation of direct or tubed pedicle, with or without transfer; scalp, arms, or legs	0.00	0.00	5.99
15574	Integumentary System Flaps	Formation of direct or tubed pedicle, with or without transfer; forehead, cheeks, chin, neck, axillae, genitalia, hands or feet	0.01	0.00	0.66
15600	Integumentary System Flaps	Delay of flap or sectioning of flap; at trunk	0.00	0.00	4.28
15610	Integumentary System Flaps	Delay of flap or sectioning of flap; at scalp, arms, or legs	0.00	0.00	0.98
15620	Integumentary System Flaps	Delay of flap or sectioning of flap; at forehead, cheeks, chin, neck, axillae, genitalia, hands or feet	0.01	0.01	0.59
15650	Integumentary System Flaps	Transfer, intermediate, of an pedicle flap, any location	0.00	0.00	Inf
15732	Integumentary System Flaps	Muscle, myocutaneous, or fasciocutaneous flap; head and neck	0.00	0.00	0.37
15734	Integumentary System Flaps	Muscle, myocutaneous, or fasciocutaneous flap; trunk	0.00	0.00	1.84
15736	Integumentary System Flaps	Muscle, myocutaneous, or fasciocutaneous flap; head and neck	0.01	0.01	0.91
15738	Integumentary System Flaps	Muscle, myocutaneous, or fasciocutaneous flap; head and neck	0.02	0.04	1.99
15740	Integumentary System Flaps	Flap; island pedicle requiring identification and dissection fo an anatomically names axial vessel	0.01	0.01	1.54
15750	Integumentary System Flaps	Flap; neurovascular pedicle	0.01	0.01	1.38
15756	Integumentary System Flaps	Free muscle or myocutaneous flap with microvascual anastomosis	0.00	0.01	3.80
15757	Integumentary System Flaps	Free skin flap with microvascular anastomosis	0.00	0.00	1.14
15758	Integumentary System Flaps	Free fascial flap with microvascular anastomosis	0.00	0.00	Inf
15760	Integumentary System Flaps	Graft; composite, including primary closure, donor area	0.00	0.00	0.80
15770	Integumentary System Flaps	Graft; derma-fat-fascia	0.00	0.00	Inf
15777	Integumentary System Flaps	Implantation of biologic implant for soft tissue reinforcement	0.00	0.00	0.00
20103	Other Musculoskeletal -	Exploration of penetrating	0.16	0.03	0.21

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
	Other	wound extremity			
20150	Other Musculoskeletal Excision	Excision of epiphyseal bar, with or without autogenous soft tissue graft obtained thorugh same fascial incision	0.00	0.00	Inf
20200	Other Musculoskeletal Excision	Biopsy, muscle, superficial	0.00	0.00	1.66
20205	Other Musculoskeletal Excision	Biopsy, muscle, deep	0.01	0.02	2.79
20206	Other Musculoskeletal Excision	Biopsy, muscle, percutaneous needle	0.00	0.00	7.97
20220	Other Musculoskeletal Excision	Biopsy, bone, trocar, or needle; superficial	0.00	0.01	1.64
20225	Other Musculoskeletal Excision	Biopsy, bone, trocar, or needle; deep	0.02	0.03	1.85
20240	Other Musculoskeletal Excision	Biopsy, bone, open; superficial	0.03	0.02	0.80
20245	Other Musculoskeletal Excision	Biopsy, bone, open; deep	0.12	0.14	1.14
20250	Other Musculoskeletal Excision	Biopsy, vertebral body, open; thoracic	0.00	0.00	0.24
20251	Other Musculoskeletal Excision	Biopsy, vertebral body, open; cervical or lumbar	0.00	0.00	0.40
20501	Other Musculoskeletal Introduction or Removal	Injection of sinus tract; therapeutic	0.00	0.00	Inf
20520	Other Musculoskeletal Introduction or Removal	Biopsy, bone, open; diagnostic	0.06	0.02	0.37
20525	Other Musculoskeletal Introduction or Removal	Removal of foreign body in muscle or tendon sheath; simple	0.08	0.02	0.30
20526	Other Musculoskeletal Introduction or Removal	Removal of foreign body in muscle or tendon sheath; deep or complicated	0.03	0.04	1.20
20527	Other Musculoskeletal Introduction or Removal	Injection, enzyme (eg collagenase), palmar fascial cord	0.00	0.00	0.08
20550	Other Musculoskeletal Introduction or Removal	Injection(s); single tendon sheath, or ligament, aponeurosis	0.07	0.05	0.71
20551	Other Musculoskeletal Introduction or Removal	Injection(s); single tendon origin/insertion	0.02	0.01	0.47
20552	Other Musculoskeletal Introduction or Removal	Injection(s); single or multiple trigger point(s), 1 or 2 muscle(s)	0.00	0.01	5.59
20600	Other Musculoskeletal Introduction or Removal	Arthrocentesis, aspiration and/or injection; small joint or bursa	0.07	0.04	0.63
20605	Other Musculoskeletal Introduction or Removal	Arthrocentesis, aspiration and/or injection; intermediate joint or bursa	0.07	0.14	2.06
20610	Other Musculoskeletal	Arthrocentesis, aspiration	0.36	0.82	2.26

CPT Code <sup>a</sup>	CPT Code Category	<b>CPT Code Description</b>	Practitioner %	Resident %	Relative Rate
	Introduction or Removal	and/or injection; major joint or bursa			
20612	Other Musculoskeletal Introduction or Removal	Aspiration and/or injection of ganglion cyst(s) any location	0.00	0.01	1.23
20615	Other Musculoskeletal Introduction or Removal	Aspiration and injection for treatment of bone cyst	0.00	0.00	Inf
20650	Other Musculoskeletal Introduction or Removal	Insertion of wire or pin with application of skeletal traction, including removal	0.09	0.18	1.98
20660	Other Musculoskeletal Introduction or Removal	Application of cranial tongs, caliper, or stereotactic frame, including removal	0.02	0.05	2.39
20661	Other Musculoskeletal Introduction or Removal	Application of halo, including removal, cranial	0.01	0.03	5.35
20670	Other Musculoskeletal Introduction or Removal	Removal of implant; superficial (eg buried wire, pin or rod)	0.19	0.18	0.94
20680	Other Musculoskeletal Introduction or Removal	Removal of implant; deep (eg buried wire, pin, screw, metal band, nail, rod or plate)	2.34	2.41	1.03
20690	Other Musculoskeletal Introduction or Removal	Application of uniplane (pins or wires in 1 plane), unilateral, external fixation system	0.76	0.66	0.88
20692	Other Musculoskeletal Introduction or Removal	Application of multiplane (pins or wires in more than 1 plane), unilateral, external fixation system (eg Ilizarov, Monticelli type)	0.25	0.29	1.14
20693	Other Musculoskeletal Introduction or Removal	Adjustment or revision of external fixation system	0.13	0.11	0.83
20696	Other Musculoskeletal Introduction or Removal	Application of multiplane (pins or wires in more than 1 plane), unilateral, external fixation system with stereotactic computer-assisted adjustment (eg spatial frame), including imaging; intiial and subsequent alignment(s), assessments and computations of adjusment schedule	0.02	0.03	1.17
20697	Other Musculoskeletal Introduction or Removal	Application of multiplane (pins or wires in more than 1 plane), unilateral, external fixation system with stereotactic computer-assisted adjustment (eg spatial frame), including imaging; intiial and subsequent alignment(s), assessments and computations of adjusment	0.01	0.02	3.81

OPERATIVE EXPERIENCE DURING ORTHOPAEDIC RESIDENCY COMPARED WITH EARLY PRACTICE IN THE U.S.

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		schedule; exchange			
20802	Other Musculoskeletal Repair, Revision, or Reconstruction	Replantation, arm (includes surgical neck of humerus through elbow joint, complete amputation	0.00	0.00	Inf
20805	Other Musculoskeletal Repair, Revision, or Reconstruction	Replantation, forearm (includes radius and ulna to radial carpal joint), complete amputation	0.00	0.00	Inf
20808	Other Musculoskeletal Repair, Revision, or Reconstruction	Replantation, hand (includes hand through metacarpophalangeal joints), complete	0.00	0.00	2.03
20816	Other Musculoskeletal Repair, Revision, or Reconstruction	Replantation, digit, excluding thumb (includes metacarophalangel joint to insertion of flexor sublimis tendon), complete amputation	0.00	0.01	3.62
20822	Other Musculoskeletal Repair, Revision, or Reconstruction	Replantation, digit, excluding thumb (includes distal tip to sublimis tendon insertion), complete amputation	0.00	0.01	4.57
20824	Other Musculoskeletal Repair, Revision, or Reconstruction	Replantation, thumb, complete amputation	0.00	0.00	1.82
20827	Other Musculoskeletal Repair, Revision, or Reconstruction	Replantation thumb (includes distal tip to MP joint)	0.00	0.00	2.27
20900	Other Musculoskeletal Repair, Revision, or Reconstruction	Bone graft, any area; minor or small	0.12	0.09	0.72
20902	Other Musculoskeletal Repair, Revision, or Reconstruction	Bone graft, any area; major or large	0.14	0.19	1.38
20910	Other Musculoskeletal Repair, Revision, or Reconstruction	Cartilage graft; costochondral	0.00	0.00	Inf
20922	Other Musculoskeletal Repair, Revision, or Reconstruction	Fascia lata graft; by incision	0.00	0.00	Inf
20924	Other Musculoskeletal Repair, Revision, or Reconstruction	Tendon graft, from a distance	0.02	0.02	1.00
20926	Other Musculoskeletal Repair, Revision, or Reconstruction	Tissue grafts, other	0.00	0.01	2.26
20930	Other Musculoskeletal Other Procedures	Allograft, morselized, or placement of osteopromotive material, for spine surgery only	0.43	0.15	0.35
20931	Other Musculoskeletal	Allograft, structural, for spine	0.34	0.10	0.29

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
	Other Procedures	surgery only			
20936	Other Musculoskeletal Other Procedures	Autograft for spine surgery only; local; obtained from same incision	0.44	0.20	0.45
20937	Other Musculoskeletal Other Procedures	Autograft for spine surgery only; local; obtained through separate incision	0.16	0.13	0.80
20938	Other Musculoskeletal Other Procedures	Autograft for spine surgery only; local; structural, bicortical or tricortical	0.03	0.03	1.24
20950	Other Musculoskeletal Other Procedures	Monitoring of interstitial fluid pressure in detection of muscle compartment syndrome	0.01	0.02	2.87
20955	Other Musculoskeletal Other Procedures	Bone graft with microvascular anastomosis; fibula	0.00	0.01	7.53
20956	Other Musculoskeletal Other Procedures	Bone graft with microvascular anastomosis; iliac crest	0.00	0.01	3.36
20969	Other Musculoskeletal Other Procedures	Free osteocutaneous flap with microvascular anastomsis; other than iliac creast, metatarsal, or great toe	0.00	0.00	1.46
20970	Other Musculoskeletal Other Procedures	Free osteocutaneous flap with microvascular anastomsis; iliac crest	0.00	0.00	0.39
20974	Other Musculoskeletal Other Procedures	Electrical stimulation to aid bone healing; noninvasive	0.00	0.00	2.14
20975	Other Musculoskeletal Other Procedures	Electrical stimulation to aid bone healing; invasive	0.00	0.01	Inf
20982	Other Musculoskeletal Other Procedures	Ablation, bone tumor, radiofrequency, percutaneous, including CT-guidance	0.00	0.00	3.15
20985	Other Musculoskeletal Other Procedures	Computer-assisted surgical navigational procedure for musculoskeletal procedures, image-less	0.14	0.03	0.22
20986	Other Musculoskeletal Other Procedures		0.00	0.00	Inf
20987	Other Musculoskeletal Other Procedures		0.00	0.00	Inf
20999	Other Musculoskeletal Other Procedures	Unlisted procedure, musculoskeletal system, general	0.01	0.01	2.38
22206	Spine Osteotomy	Osteotomy of spine, posterior or posterolateral approach, three columns, one vertebral segment (eg, pedicle/vertebral body subtraction); thoracic	0.00	0.00	0.73
22207	Spine Osteotomy	Osteotomy of spine, posterior or posterolateral approach, three columns, one vertebral	0.01	0.00	0.35

CPT Code <sup>a</sup>	CPT Code Category	<b>CPT Code Description</b>	Practitioner %	Resident %	Relative Rate
		segment (eg, pedicle/vertebral body subtraction); lumbar			
22208	Spine Osteotomy	Osteotomy of spine, posterior or posterolateral approach, three columns, one vertebral segment (eg, pedicle/vertebral body subtraction); each additional vertebral segment	0.00	0.00	1.93
22210	Spine Osteotomy	Osteotomy of spine, posterior or posterolateral approach, 1 vertebral segment; cervical	0.00	0.00	13.58
22212	Spine Osteotomy	Osteotomy of spine, posterior or posterolateral approach, one vertebral segment; thoracic	0.01	0.01	1.13
22214	Spine Osteotomy	Osteotomy of spine, posterior or posterolateral approach, one vertebral segment; lumbar	0.02	0.03	1.45
22216	Spine Osteotomy	Osteotomy of spine, posterior or posterolateral approach, one vertebral segment; each additional vertebral segment	0.02	0.04	2.51
22220	Spine Osteotomy	Osteotomy of spine, including discectomy, anterior approach, single vertebral segment; cervical	0.00	0.00	5.45
22222	Spine Osteotomy	Osteotomy of spine, including discectomy, anterior approach, single vertebral segment; thoracic	0.00	0.00	6.63
22224	Spine Osteotomy	Osteotomy of spine, including discectomy, anterior approach, single vertebral segment; lumbar	0.00	0.01	24.28
22226	Spine Osteotomy	Osteotomy of spine, including discectomy, anterior approach, single vertebral segment; each additional vertebral segment (List separately in addition to code for primary procedure)	0.00	0.00	14.33
22305	Spine Fracture and/or Dislocation	Closed treatment of vertebral process fracture(s)	0.00	0.06	199.99
22310	Spine Fracture and/or Dislocation	Closed treatment of vertebral body fracture(s), without manipulation, requiring and including casting or bracing	0.00	0.14	97.96
22315	Spine Fracture and/or Dislocation	Closed treatment of vertebral fracture(s) and/or	0.00	0.04	13.15

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		dislocation(s) requiring casting or bracing, with and including casting and/or bracing by manipulation or traction			
22318	Spine Fracture and/or Dislocation	Open treatment and/or reduction of odontoid fracture and or dislocation, anterior approach, including placement of internal fixation; without grafting	0.00	0.00	4.28
22325	Spine Fracture and/or Dislocation	Open treatment and/or reduction of vertebral fracture(s) and/or dislocation(s), posterior approach, 1 fractured vertebra or dislocated segment; lumbar	0.03	0.03	1.22
22326	Spine Fracture and/or Dislocation	Open treatment and/or reduction of vertebral fracture(s) and/or dislocation(s), posterior approach, 1 fractured vertebra or dislocated segment; cervical	0.02	0.03	1.41
22327	Spine Fracture and/or Dislocation	Open treatment and/or reduction of vertebral fracture(s) and/or dislocation(s), posterior approach, 1 fractured vertebra or dislocated segment; thoracic	0.03	0.03	1.27
22328	Spine Fracture and/or Dislocation	Open treatment and/or reduction of vertebral fracture(s) and/or dislocation(s), posterior approach, 1 fractured vertebra or dislocated segment; each additional fractured vertebra or dislocated segment (List separately in addition to code for primary procedure)	0.01	0.02	1.94
22548	Spine Arthrodesis/ Anterior	Arthrodesis, anterior transoral or extraoral technique, clivus-C1-C2 (atlas-axis), with or without excision of odontoid process	0.00	0.00	4.71
22551	Spine Arthrodesis/ Anterior	Arthrodesis, anterior interbody, including disc	0.67	0.00	0.01

Copyright © by The Journal of Bone and Joint Surgery, Incorporated Kohring et al. Operative Experience During Orthopaedic Residency Compared with Early Practice in the U.S. http://dx.doi.org/10.2106/JBJS.17.01115 Page 29

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		space preparation, discectomy, osteophytectomy and decompression of spinal cord and /or nerve roots; cervical below C2			
22552	Spine Arthrodesis/ Anterior	Arthrodesis, anterior interbody, including disc space preparation, discectomy, osteophytectomy and decompression of spinal cord and/or nerve roots; cervical below C2, each additional interspace (List separately in addition to code for separate procedure)	0.30	0.00	0.01
22554	Spine Arthrodesis/ Anterior	Arthrodesis, anterior interbody technique, including minimal discectomy to prepare interspace (other than for decompression) cervical below C2	0.09	0.42	4.55
22556	Spine Arthrodesis/ Anterior	Arthrodesis, anterior interbody technique, including minimal discectomy to prepare interspace (other than for decompression); thoracic	0.01	0.02	2.10
22558	Spine Arthrodesis/ Anterior	Arthrodesis, anterior interbody technique, including minimal discectomy to prepare interspace (other than for decompression) lumbar	0.23	0.18	0.82
22585	Spine Arthrodesis/ Anterior	Arthrodesis, anterior interbody technique, including minimal discectomy to prepare interspace (other than for decompression); each additional interspace (List separately in addition to code for primary procedure)	0.11	0.26	2.40
22590	Spine Arthrodesis/ Posterior	Arthrodesis, posterior technique, craniocervical (occiput-C2)	0.01	0.01	1.67
22595	Spine Arthrodesis/ Posterior	Arthrodesis, posterior technique, Atlas-axis (C1-C2)	0.01	0.02	1.91
22600	Spine Arthrodesis/ Posterior	Arthrodesis, posterior or posterolateral technique, single level, cervical below C-2	0.16	0.16	0.99

COPYRIGHT © BY THE JOURNAL OF BONE AND JOINT SURGERY, INCORPORATED KOHRING ET AL. OPERATIVE EXPERIENCE DURING ORTHOPAEDIC RESIDENCY COMPARED WITH EARLY PRACTICE IN THE U.S. http://dx.doi.org/10.2106/JBJS.17.01115 Page 30

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
22610	Spine Arthrodesis/ Posterior	Arthodesis, posterior or posterolateral technique, single level: thoracic (with or without lateral transverse technique)	0.09	0.11	1.23
22612	Spine Arthrodesis/ Posterior	Arthrodesis, Posterior or posterolateral technique, single level, lumbar (with or without lateral trasverse technique)	0.59	0.69	1.17
22614	Spine Arthrodesis/ Posterior	Arthrodesis, posterior or posterolateral technique, single level; each additional vertebral segment (List separately in addition to code for primary procedure)	0.37	0.80	2.14
22630	Spine Arthrodesis/ Posterior	Arthrodesis, posterior interbody technique, including laminectomy and /or discectomy to prepare interspace (other than for decompression), single interspace: lumbar	0.12	0.29	2.35
22632	Spine Arthrodesis/ Posterior	Arthrodesis, posterior interbody technique, including laminectomy and/or discectomy to prepare interspace (other than for decompression), single interspace; each additional interspace (List separately in addition to code for primary procedure)	0.02	0.16	8.64
22633	Spine Arthrodesis/ Posterior	Arthodesis, combined posterior or posterolateral technique with posterior interbody technique including laminectomy and /or discectomy sufficient to prepare interspace (other than for decompression), single interspace and segment, lumbar	0.23	0.00	0.00
22634	Spine Arthrodesis/ Posterior	Arthodesis, combined posterior or posterolateral technique with posterior interbody technique including laminectomy and /or discectomy sufficient to prepare interspace (other than for decompression), each	0.03	0.00	0.00

Copyright @ by The Journal of Bone and Joint Surgery, Incorporated Kohring et al.

OPERATIVE EXPERIENCE DURING ORTHOPAEDIC RESIDENCY COMPARED WITH EARLY PRACTICE IN THE U.S.

http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		interspace and segment, lumbar			
22800	Spine Arthrodesis/ Deformity	Arthrodesis, posterior, for spinal deformity, with or without cast; up to 6 vertebral segments (levels)	0.01	0.04	5.04
22802	Spine Arthrodesis/ Deformity	Arthrodesis, posterior, for spinal deformity, with or without cast; 7 to 12 vertebral segments (levels)	0.02	0.05	2.49
22804	Spine Arthrodesis/ Deformity	Arthrodesis, posterior, for spinal deformity, with or without cast; 13 or more vertebral segments (levels)	0.01	0.02	2.00
22808	Spine Arthrodesis/ Deformity	Arthrodesis, anterior, for spinal deformity, with or without cast; 4 to 7 vertebral segments (levels)	0.00	0.02	4.87
22810	Spine Arthrodesis/ Deformity	Arthrodesis, anterior, for spinal deformity, with or without cast; 4 to 7 vertebral segments	0.00	0.01	31.01
22812	Spine Arthrodesis/ Deformity	Arthrodesis, anterior, for spinal deformity, with or without cast; 8 or more vertebral segments (levels)	0.00	0.00	3.24
22818	Spine Arthrodesis/ Deformity	Kyphectomy, circumferential exposure of spine and resection of vertebral segments; single or 2 segments	0.00	0.00	0.30
22819	Spine Arthrodesis/ Deformity	Kyphectomy, circumferential exposure of spine and resection of vertebral segments; 3 or more segments	0.00	0.00	Inf
22840	Spine Instrumentation	Posterior non-segmental instrumentation (eg, Harrington rod technique, pedicle fixation across one interspace, atlantoaxial transarticular screw fixation, sublaminar wiring at C1, facet screw fixation)	0.47	0.20	0.43
22841	Spine Instrumentation	Internal spinal fixation by wiring of spinous processes	0.00	0.01	1.87
22842	Spine Instrumentation	Posterior segmental instrumentation (eg, pedicle fixation, dual rods with multiple hooks and sublaminar wires); 3 to 6 vertebral	0.47	0.54	1.14

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		segments			
22843	Spine Instrumentation	Posterior segmental instrumentation (eg, pedicle fixation, dual rods with multiple hooks and sublaminar wires); 7 to 12 vertebral segments	0.08	0.10	1.28
22844	Spine Instrumentation	Posterior segmental instrumentation (eg, pedicle fixation, dual rods with multiple hooks and sublaminar wires); 13 or more vertebral segments	0.01	0.03	2.07
22845	Spine Instrumentation	Anterior instrumentation; 2 to 3 vertebral segments	0.67	0.30	0.45
22846	Spine Instrumentation	Anterior instrumentation; 4 to 7 vertebral segments	0.09	0.04	0.38
22847	Spine Instrumentation	Anterior instrumentation; 8 or more vertebral segments	0.00	0.00	2.41
22848	Spine Instrumentation	Pelvic fixation (attachment of caudal end of instrumentation to pelvic bony structures) other than sacrum	0.03	0.04	1.19
22849	Spine Instrumentation	Reinsertion of spinal fixation device	0.03	0.02	0.90
22850	Spine Instrumentation	Removal of posterior non- segmental instrumentation	0.02	0.02	1.07
22851	Spine Instrumentation	Application of intervertebral biomechanical device(s) (eg, synthetic cage[s], methylmethacrylate) to vertebral defect or interspace.	0.74	0.32	0.43
22852	Spine Instrumentation	Removal of posterior segmental instrumentation	0.04	0.11	2.75
22855	Spine Instrumentation	Removal of anterior instrumentation	0.02	0.02	0.98
22856	Spine Instrumentation	Total disc arthroplasty (artificial disc), anterior approach, including discectomy with end plate preparation (includes osteophytectomy for nerve root or spinal cord decompression and microdissection); single interspace, cervical	0.02	0.01	0.42
22857	Spine Instrumentation	Total disc arthroplasty (artificial disc), anterior approach, including discectomy with end plate preparation	0.00	0.01	1.97

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		(includes osteophytectomy for nerve root or spinal cord decompression and microdissection); single interspace, lumbar			
22861	Spine Instrumentation	Revision including replacement of total disc arthroplasty (artificial disc), anterior approach, single interspace; cervical	0.00	0.00	Inf
22864	Spine Instrumentation	Removal of total disc arthroplasty (artificial disc), anterior approach, single interspace; cervical	0.00	0.00	0.86
23000	Shoulder Incision	Removal of subdeltoid calcareous deposits, open	0.00	0.00	0.98
23020	Shoulder Incision	Capsular contracture release	0.02	0.01	0.97
23030	Shoulder Incision	Incision and drainage, shoulder area; deep abscess or hematoma	0.04	0.06	1.23
23031	Shoulder Incision	Incision and drainage, shoulder area; infected bursa	0.00	0.01	2.04
23035	Shoulder Incision	Incision, bone cortex, shoulder area	0.01	0.01	1.38
23040	Shoulder Incision	Arthrotomy, glemohumeral joint, including exploration, drainage, or removal of foreign body	0.04	0.03	0.77
23044	Shoulder Incision	Arthorotomy, acromioclavicular, sternoclavicular joint, including exploration, drainage, or removal of foreign body	0.01	0.01	0.67
23065	Shoulder Excision	Biopsy, soft tissue of shoulder area; superficial	0.00	0.00	4.46
23066	Shoulder Excision	Biopsy, soft tissue of shoulder area; deep	0.00	0.02	5.63
23071	Shoulder Excision	Excision, tumor, soft tissue of shoulder area, subcutaneous; 3 cm or greater	0.01	0.00	0.03
23073	Shoulder Excision	Excision, tumor, soft tissue of shoulder area, subfascial; 5cm or greater	0.01	0.00	0.09
23075	Shoulder Excision	Excision, tumor, soft tissue of shoulder area, subcutaneous; less than 3 cm	0.01	0.02	3.73
23076	Shoulder Excision	Excision, tumor, soft tissue of shoulder area, subfascial; less	0.01	0.04	5.26

Operative Experience During Orthopaedic Residency Compared with Early Practice in the U.S. http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		than 5 cm			
23077	Shoulder Excision	Radical resection of tumor, soft tissue of shoulder area; less than 5 cm	0.00	0.01	7.77
23078	Shoulder Excision	Radical resection of tumor, soft tissue of shoulder area; 5 cm or greater	0.00	0.00	0.07
23100	Shoulder Excision	Arthrotomy, glemohumeral joint, including biopsy	0.00	0.00	1.50
23101	Shoulder Excision	Arthrotomy, acromioclavicular joint or sternoclavicular joint, including biopsu and/or excision of torn cartilage	0.00	0.01	1.77
23105	Shoulder Excision	Arthrotomy; glenojumeral joint, with synovectomy, with or without biopsy	0.00	0.00	2.41
23106	Shoulder Excision	Arthrotomy; sternoclavicular joint, with synovectomy, with or without biopsy	0.00	0.00	1.98
23107	Shoulder Excision	Arthrotomy, glenohumeral joint, with joint exploration, with or without removal of loose or foreign body	0.00	0.01	1.40
23120	Shoulder Excision	Claviculectomy; partial	0.22	0.13	0.60
23125	Shoulder Excision	Claviculectomy; total	0.00	0.00	1.02
23130	Shoulder Excision	Acromioplasty or acromionectomy, partial, with or without coracoacromial ligament release	0.03	0.14	4.93
23140	Shoulder Excision	Excision or curettage of bone cyst or benign tumor of clavicle or scapula	0.00	0.01	3.67
23145	Shoulder Excision	Excision or curettage of bone cyst or benign tumor of clavicle or scapula; with autograft (includes obtaining graft)	0.00	0.00	0.64
23146	Shoulder Excision	Excision or curettage of bone cyst or benign tumor of clavicle or scapula; with allograft	0.00	0.00	5.45
23150	Shoulder Excision	Excision or curettage of bone cyst or benign tumor of proximal humerus;	0.01	0.01	1.98
23155	Shoulder Excision	Excision or curettage of bone cyst or benign tumor of proximal humerus; with autograft (includes obtaining graft)	0.00	0.00	4.28
23156	Shoulder Excision	Excision or curettage of bone cyst or benign tumor of	0.00	0.01	3.66

CPT Code <sup>a</sup>	CPT Code Category	<b>CPT Code Description</b>	Practitioner %	Resident %	Relative Rate
		proximal humerus; with allograft			
23170	Shoulder Excision	Sequestrectomy (eg, for osteomyelitis or bone abscess), clavicle	0.00	0.00	0.82
23172	Shoulder Excision	Sequestrectomy (eg, for osteomyelitis or bone abscess), scapula	0.00	0.00	0.64
23174	Shoulder Excision	Sequestrectomy (eg, for osteomyelitis or bone abscess), humeral head to surgical neck	0.00	0.00	0.60
23180	Shoulder Excision	Partial excision (craterization, saucerization, or diaphysectomy) bone (eg, osteomyelitis), clavicle	0.01	0.04	3.66
23182	Shoulder Excision	Partial excision (craterization, saucerization, or diaphysectomy) bone (eg, osteomyelitis), scapula	0.00	0.00	2.17
23184	Shoulder Excision	Partial excision (craterization, saucerization, or diaphysectomy) bone (eg, osteomyelitis), proximal humerus	0.00	0.00	1.29
23190	Shoulder Excision	Ostectomy of scapula, partial (eg, superior medial angle)	0.00	0.00	3.40
23195	Shoulder Excision	Resection, humeral head	0.00	0.00	1.39
23200	Shoulder Excision	Radical resection of tumor; clavicle	0.00	0.00	1.75
23210	Shoulder Excision	Radical resection of tumor; scapula	0.00	0.01	5.12
23220	Shoulder Excision	Radical resection of tumor; proximal humerus	0.01	0.01	1.11
23395	Shoulder Repair Revision and/or Reconstruction	Muscle transfer, any type, shoulder or upper arn; single	0.01	0.02	3.19
23397	Shoulder Repair Revision and/or Reconstruction	multiple	0.00	0.01	2.33
23400	Shoulder Repair Revision and/or Reconstruction	Scapulopexy	0.00	0.00	3.42
23405	Shoulder Repair Revision and/or Reconstruction	Tenotomy, shoulder area, single tendon	0.15	0.10	0.65
23406	Shoulder Repair Revision and/or Reconstruction	multiple tendons through same incision	0.00	0.01	6.49
23410	Shoulder Repair Revision and/or Reconstruction	Repair of ruptured musculoteninous cuff, open; acute	0.11	0.19	1.68
23412	Shoulder Repair Revision and/or Reconstruction	chronic	0.15	0.32	2.07
23415	Shoulder Repair Revision and/or Reconstruction	Coracoacromial ligament release, with or without	0.00	0.01	1.89

CPT Code <sup>a</sup>	CPT Code Category	<b>CPT Code Description</b>	Practitioner %	Resident %	Relative Rate
		acromioplasty			
23420	Shoulder Repair Revision and/or Reconstruction	Reconstruction of complete shoulder (rotator) cuff avulsion, chronic (includes acromioplasty)	0.04	0.05	1.35
23430	Shoulder Repair Revision and/or Reconstruction	Tenodesis of long tendon of biceps	0.91	0.32	0.35
23440	Shoulder Repair Revision and/or Reconstruction	Resection or transplantation of long tendon of biceps	0.06	0.06	1.01
23450	Shoulder Repair Revision and/or Reconstruction	Capsulorrhaphy, anterior; Putti-Platt procedure or Magnuson type operation	0.00	0.01	1.63
23455	Shoulder Repair Revision and/or Reconstruction	with labral repair	0.04	0.22	5.06
23460	Shoulder Repair Revision and/or Reconstruction	Capsulorrhaphy, anterior, any type; with bone block	0.01	0.01	1.04
23462	Shoulder Repair Revision and/or Reconstruction	with coracoid process transfer]	0.02	0.03	1.08
23465	Shoulder Repair Revision and/or Reconstruction	Capsulorrhaphy, glenohumeral joint, posterior, with or without bone block	0.01	0.02	2.94
23466	Shoulder Repair Revision and/or Reconstruction	Capsulorrhaphy, glenohumeral joint, any type multi-directional instability	0.01	0.02	2.51
23470	Shoulder Repair Revision and/or Reconstruction	Arthroplasty, glenohumeral joint; hemiarthroplasty	0.10	0.24	2.47
23472	Shoulder Repair Revision and/or Reconstruction	Arthroplasty, glenohumeral joint; total shoulder (glenoid and proximal humeral replacement)	0.61	0.66	1.08
23473	Shoulder Repair Revision and/or Reconstruction	Revison of total shoulder arthoplasty, including allograft when performed, humeral or glenoid component	0.01	0.00	0.00
23474	Shoulder Repair Revision and/or Reconstruction	Revision of total shoulder arthroplasty, including allograft when performed; humeral and glenoid component	0.01	0.00	0.00
23480	Shoulder Repair Revision and/or Reconstruction	Osteotomy, clavicle, with or without internal fixation	0.00	0.03	6.23
23485	Shoulder Repair Revision and/or Reconstruction	with bone graft for nonunion or malunion (includes obtaining graft and/or necessary fixation)	0.02	0.03	1.44
23490	Shoulder Repair Revision and/or Reconstruction	Prophylactic treatment (nailing, pinning,plating, or wiring_ with or without methylmethacrylate; clavicle	0.00	0.01	9.41
23491	Shoulder Repair Revision and/or Reconstruction	Proximal humerus	0.00	0.01	1.94

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
23515	Shoulder Fracture and/or Dislocation	Open treatment of clavicular fracture, includes internal fixation, when performe	0.60	0.33	0.56
23530	Shoulder Fracture and/or Dislocation	Open treatment of sternoclavicular dislocation, acute or chronic;	0.00	0.01	2.41
23532	Shoulder Fracture and/or Dislocation	Open treatment of sternoclavicular dislocation, acute or chronic; with fascial graft (includes obtaining graft)	0.00	0.00	1.22
23550	Shoulder Fracture and/or Dislocation	Open treatment of acromioclavicular dislocation, acute or chronic;	0.06	0.06	0.89
23552	Shoulder Fracture and/or Dislocation	Open treatment of acromioclavicular dislocation, acute or chronic; with fascial graft (includes obtaining graft)	0.04	0.04	0.99
23585	Shoulder Fracture and/or Dislocation	Open treatment of scapular fracture (body, glenoid or acromion) includes internal fixation, when performed	0.04	0.05	1.31
23615	Shoulder Fracture and/or Dislocation	Open treatment of proximal humeral (surgical or anatomical neck) fracture, includes internal fixation, when performed, includes repair of tuberosity(s), when performed	0.46	0.34	0.73
23616	Shoulder Fracture and/or Dislocation	Open treatment of proximal humeral (surgical or anatomical neck) fracture, includes internal fixation, when performed, includes repair of tuberosity(s), when performed; with proximal humeral prosthetic replacement	0.08	0.08	1.00
23630	Shoulder Fracture and/or Dislocation	Open treatment of greater humeral tuberosity fracture, includes internal fixation, when performed	0.06	0.05	0.74
23660	Shoulder Fracture and/or Dislocation	Open treatment of acute shoulder dislocation	0.01	0.01	1.54
23665	Shoulder Fracture and/or Dislocation	Closed treatment of shoulder dislocation, with fracture of greater humeral tuberosity, includes internal fixation, when performed	0.01	0.03	3.64
23670	Shoulder Fracture and/or Dislocation	Open treatment of shoulder dislocation, with fracture of greater humeral tuberosity,	0.02	0.01	0.69

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		includes internal fixation, when performed			
23680	Shoulder Fracture and/or Dislocation	Open treatment of shoulder dislocation, with surgical or anatomical neck fracture, includes internal fixation, when performed	0.01	0.01	1.13
23700	Shoulder Manipulation	Manipulation under anesthesia, shoulder joint, including application of fixation apparatus (dislocation excluded)	0.10	0.10	0.98
23929	Shoulder Arthroscopy	unlisted procedure, shoulder	0.01	0.06	7.32
23930	Humerus/Elbow Incision	Incision and drainage, upper arm or elbow area; deep abscess or hematoma	0.06	0.07	1.11
23931	Humerus/Elbow Incision	Incision and drainage, upper arm or elbow area; bursa	0.04	0.04	0.83
23935	Humerus/Elbow Incision	Incision, deep, with opening of bone cortex, humerus or elbow	0.01	0.02	1.63
24000	Humerus/Elbow Incision	Arthrotomy, elbow, including exploration, drainage, or removal of foreign body	0.05	0.05	0.92
24006	Humerus/Elbow Incision	Arthrotomy of the elbow, with capsular excision for capsular release	0.02	0.03	1.58
24065	Humerus/Elbow Excision	Biopsy, soft tissue of upper arm or elbow area; superficial	0.00	0.00	2.05
24066	Humerus/Elbow Excision	Biopsy, soft tissue of upper arm or elbow area; deep (subfascial or intramuscular)	0.01	0.02	2.74
24071	Humerus/Elbow Excision	Excision, tumor, soft tissue of upper arm or elbow area, subcutaneous; 3 cm or greater	0.01	0.00	0.02
24073	Humerus/Elbow Excision	Excision, tumor, soft tissue of upper arm or elbow area, subfascial (eg, intramuscular); 5 cm or greater	0.01	0.00	0.05
24075	Humerus/Elbow Excision	Excision, tumor, soft tissue of upper arm or elbow area, subcutaneous; less than 3 cm	0.03	0.02	0.85
24076	Humerus/Elbow Excision	Excision, tumor, soft tissue of upper arm or elbow area, subfascial (eg, intramuscular); less than 5 cm	0.02	0.04	2.73
24077	Humerus/Elbow Excision	Radical resection of tumor (eg, sarcoma), soft tissue of upper arm or elbow area; less than 5 cm	0.00	0.01	8.06

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
24079	Humerus/Elbow Excision	Radical resection of tumor (eg, sarcoma), soft tissue of upper arm or elbow area; 5 cm or greater	0.00	0.00	0.09
24100	Humerus/Elbow Excision	Arthrotomy, elbow; with synovial biopsy only	0.00	0.00	0.64
24101	Humerus/Elbow Excision	Arthrotomy, elbow; with joint exploration, with or without biopsy, with or without removal of loose or foreign body	0.03	0.03	0.98
24102	Humerus/Elbow Excision	Arthrotomy, elbow; with synovectomy	0.01	0.01	1.98
24105	Humerus/Elbow Excision	Excision, olecranon bursa	0.16	0.06	0.39
24110	Humerus/Elbow Excision	Excision or curettage of bone cyst or benign tumor, humerus;	0.00	0.02	4.02
24115	Humerus/Elbow Excision	Excision or curettage of bone cyst or benign tumor, humerus; with autograft (includes obtaining graft)	0.00	0.00	Inf
24116	Humerus/Elbow Excision	Excision or curettage of bone cyst or benign tumor, humerus; with allog	0.00	0.01	5.61
24120	Humerus/Elbow Excision	Excision or curettage of bone cyst or benign tumor of head or neck of radius or olecranon process;	0.02	0.01	0.45
24125	Humerus/Elbow Excision	Excision or curettage of bone cyst or benign tumor of head or neck of radius or olecranon process; with autograft (includes obtaining graft)	0.00	0.00	Inf
24126	Humerus/Elbow Excision	Excision or curettage of bone cyst or benign tumor of head or neck of radius or olecranon process; with allograft	0.00	0.00	2.73
24130	Humerus/Elbow Excision	Excision, radial head	0.01	0.02	2.32
24134	Humerus/Elbow Excision	Sequestrectomy (eg, for osteomyelitis or bone abscess), shaft or distal humerus	0.00	0.00	0.67
24138	Humerus/Elbow Excision	Sequestrectomy (eg, for osteomyelitis or bone abscess), radial head or neck	0.00	0.00	0.41
24140	Humerus/Elbow Excision	Sequestrectomy (eg, for osteomyelitis or bone abscess), olecranon process	0.01	0.01	2.31
24145	Humerus/Elbow Excision	Partial excision (craterization, saucerization, or diaphysectomy) bone (eg,	0.00	0.00	5.40

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		osteomyelitis), humerus			
24147	Humerus/Elbow Excision	Partial excision (craterization, saucerization, or diaphysectomy) bone (eg, osteomyelitis), radial head or neck	0.02	0.01	0.69
24149	Humerus/Elbow Excision	Partial excision (craterization, saucerization, or diaphysectomy) bone (eg, osteomyelitis), olecranon process	0.02	0.05	2.03
24150	Humerus/Elbow Excision	Radical resection of capsule, soft tissue, and heterotopic bone, elbow, with contracture release (separate procedure)	0.00	0.01	2.21
24151	Humerus/Elbow Excision	Radical resection of tumor, shaft or distal humerus	0.00	0.00	Inf
24152	Humerus/Elbow Excision	Radical resection of tumor, radial head or neck	0.00	0.00	1.18
24155	Humerus/Elbow Excision	Resection of elbow joint (arthrectomy)	0.00	0.00	5.45
24300	Humerus/ Elbow Repair, Revision and/or Reconstruction	Manipulation; elbow; under anesthesia	0.04	0.04	0.98
24301	Humerus/ Elbow Repair, Revision and/or Reconstruction	Muscle or tendon transfer, any type, upper arm or elbow, single	0.01	0.01	1.26
24305	Humerus/ Elbow Repair, Revision and/or Reconstruction	Tendon lengthening, upper arm or elbow, single, each	0.01	0.02	1.10
24310	Humerus/ Elbow Repair, Revision and/or Reconstruction	Tenotomy, open elbow to shoulder, single, each	0.00	0.00	1.00
24320	Humerus/ Elbow Repair, Revision and/or Reconstruction	Tenoplasty, with muscle transfer, with or without free graft, elbow to shoulder, single (Seddon- Brookes type procedure)	0.00	0.00	2.03
24330	Humerus/ Elbow Repair, Revision and/or Reconstruction	Flexor-plasty, elbow, (eg, Steindler type advancement)	0.00	0.00	2.22
24331	Humerus/ Elbow Repair, Revision and/or Reconstruction	with extensor advancement	0.00	0.00	Inf
24332	Humerus/ Elbow Repair, Revision and/or Reconstruction	Tenolysis, triceps	0.00	0.00	2.22
24340	Humerus/ Elbow Repair, Revision and/or Reconstruction	Tenodesis of biceps tendon at elbow, separate procedure	0.02	0.02	0.97
24341	Humerus/ Elbow Repair,	Repair, tendon or muscle,	0.11	0.07	0.60

Copyright @ by The Journal of Bone and Joint Surgery, Incorporated Kohring et al.

OPERATIVE EXPERIENCE DURING ORTHOPAEDIC RESIDENCY COMPARED WITH EARLY PRACTICE IN THE U.S.

http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
	Revision and/or Reconstruction	upper arm or elbow, each tendon or muscle, primary or secondary (excludes rotator cuff)			
24342	Humerus/ Elbow Repair, Revision and/or Reconstruction	Reinsertion of ruptured biceps tendon, distal, with or without tendon graft (includes obtaining graft)	0.37	0.14	0.38
24343	Humerus/ Elbow Repair, Revision and/or Reconstruction	Repair lateral collateral ligament, elbow, with local tissue	0.13	0.08	0.63
24344	Humerus/ Elbow Repair, Revision and/or Reconstruction	Repair lateral collateral ligament, elbow, with tendon graft, including graft harvest	0.01	0.02	1.62
24345	Humerus/ Elbow Repair, Revision and/or Reconstruction	Repair medial collateral ligament, elbow, with local tissue	0.02	0.02	1.11
24346	Humerus/ Elbow Repair, Revision and/or Reconstruction	Repair medial collateral ligament, elbow, with tendon graft, including graft harvest	0.01	0.03	2.34
24350	Humerus/ Elbow Repair, Revision and/or Reconstruction	Percutaneous medial or lateral epicondyle tenotomy	0.00	0.01	Inf
24351	Humerus/ Elbow Repair, Revision and/or Reconstruction	debridement,soft tissue and/or bone, open	0.00	0.01	Inf
24354	Humerus/ Elbow Repair, Revision and/or Reconstruction	Arthroplasty, elbow, with membrane or fascia	0.00	0.00	Inf
24356	Humerus/ Elbow Repair, Revision and/or Reconstruction	Arthroplasty, elbow, with distal humeral prosthetic replacement	0.00	0.01	Inf
24357	Humerus/ Elbow Repair, Revision and/or Reconstruction	Arthroplasty, elbow, with implant and fascia lata ligament reconstruction	0.01	0.01	1.14
24358	Humerus/ Elbow Repair, Revision and/or Reconstruction	Arthroplasty, elbow, with distal humeral and proximal ulnar prosthetic replacement; total elbow	0.08	0.05	0.61
24359	Humerus/ Elbow Repair, Revision and/or Reconstruction	Arthroplasty, radial head	0.08	0.04	0.51
24360	Humerus/ Elbow Repair, Revision and/or Reconstruction	with implant	0.00	0.00	2.37
24361	Humerus/ Elbow Repair, Revision and/or Reconstruction	Revision of total elbow arthroplasty, including allograft when performed; humeral OR ulnar component	0.00	0.00	2.76
24362	Humerus/ Elbow Repair, Revision and/or	humeral AND ulnar component	0.00	0.00	Inf

CPT Code <sup>a</sup>	CPT Code Category	<b>CPT Code Description</b>	Practitioner %	Resident %	Relative Rate
	Reconstruction				
24363	Humerus/ Elbow Repair, Revision and/or Reconstruction	Osteotomy, humerus, with or without internal fixation	0.02	0.06	2.49
24365	Humerus/ Elbow Repair, Revision and/or Reconstruction	Multiple osteotomies with realignment on intramedullary rod, humeral shaft (Sofield type procedure)	0.01	0.01	1.61
24366	Humerus/ Elbow Repair, Revision and/or Reconstruction	Osteoplasty, humerus	0.03	0.05	1.46
24400	Humerus/ Elbow Repair, Revision and/or Reconstruction	Repair of nonunion or malunion, humerus; without graft	0.01	0.01	1.47
24410	Humerus/ Elbow Repair, Revision and/or Reconstruction	with iliac or other autograft (includes obtaining graft)	0.00	0.00	0.64
24420	Humerus/ Elbow Repair, Revision and/or Reconstruction	Hemiepiphyseal arrest	0.00	0.00	1.93
24430	Humerus/ Elbow Repair, Revision and/or Reconstruction	Decompression fasciotomy, forearm, with brachial artery exploration	0.03	0.03	1.05
24435	Humerus/ Elbow Repair, Revision and/or Reconstruction	Prophylactic treatment (nailing, plating, pinnig, or wiring), with or without methylmethacrylate, humeral shaft	0.02	0.03	1.39
24470	Humerus/ Elbow Repair, Revision and/or Reconstruction	Hemiepiphyseal arrest (eg, for cubitus varus or valgus, distal humerus).	0.00	0.00	Inf
24495	Humerus/ Elbow Repair, Revision and/or Reconstruction	Decompression fasciotomy, forearm, with brachial artery exploration.	0.00	0.00	0.86
24498	Humerus/ Elbow Repair, Revision and/or Reconstruction	Prophylactic treatment (nailing, pinning, plating or wiring), with or without methylmethacrylate, humerus.	0.00	0.01	2.86
24515	Humerus/ Elbow Fracture and/or Dislocation	Open treatment of humeral shaft fracture with plate/screws, with or without cerclage.	0.24	0.33	1.38
24516	Humerus/ Elbow Fracture and/or Dislocation	Open treatment of humeral shaft fracture, with insertion of intramedullary implant, with or without cerclage and/or locking screws.	0.06	0.09	1.54
24538	Humerus/ Elbow Fracture and/or Dislocation	Percutaneous skeletal fixation of supracondylar or transcondylar humeral fracture, with or without	0.00	0.04	41.14

CPT Code <sup>a</sup>	CPT Code Category	<b>CPT Code Description</b>	Practitioner %	Resident %	Relative Rate
		intercondylar extension.			
24545	Humerus/ Elbow Fracture and/or Dislocation	Open treatment of humeral supracondylar or transcondylar fracture, with or without internal or external fixation; without intercondylar extension.	0.09	0.07	0.78
24546	Humerus/ Elbow Fracture and/or Dislocation	Open treatment of humeral supracondylar or transcondylar fracture, with or without internal or external fixation; with intercondylar extension.	0.09	0.15	1.61
24566	Humerus/ Elbow Fracture and/or Dislocation	Percutaneous skeletal fixation of humeral epicondylar fracture, medial or lateral, with manipulation.	0.00	0.00	6.74
24575	Humerus/ Elbow Fracture and/or Dislocation	Open treatment of humeral epicondylar fracture, medial or lateral, with or without internal or external fixation.	0.02	0.02	1.31
24579	Humerus/ Elbow Fracture and/or Dislocation	Open treatment of humeral condylar fracture, medial or lateral, with or without internal or external fixation.	0.05	0.05	1.17
24582	Humerus/ Elbow Fracture and/or Dislocation	Percutaneous skeletal fixation of humeral condylar fracture, medial or lateral, with manipulation.	0.00	0.00	3.80
24586	Humerus/ Elbow Fracture and/or Dislocation	Open treatment of periarticular fracture and/or dislocation of the elbow (fracture distal humerus and proximal ulna and/ or proximal radius);.	0.04	0.07	2.03
24587	Humerus/ Elbow Fracture and/or Dislocation	Open treatment of periarticular fracture and/or dislocation of the elbow (fracture distal humerus and proximal ulna and/ or proximal radius); with implant arthroplasty.	0.00	0.01	3.59
24605	Humerus/ Elbow Fracture and/or Dislocation	Treatment of closed elbow dislocation; requiring anesthesia.	0.03	0.07	2.13
24615	Humerus/ Elbow Fracture and/or Dislocation	Open treatment of acute or chronic elbow dislocation.	0.03	0.04	1.20
24635	Humerus/ Elbow Fracture and/or Dislocation	Open treatment of Monteggia type of fracture dislocation at elbow (fracture proximal end of ulna with dislocation of	0.05	0.07	1.20

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		radial head), with or without internal or external fixation.			
24665	Humerus/ Elbow Fracture and/or Dislocation	Open treatment of radial head or neck fracture, with or without internal fixation or radial head excision;.	0.10	0.07	0.73
24666	Humerus/ Elbow Fracture and/or Dislocation	Open treatment of radial head or neck fracture, with or without internal fixation or radial head excision; with radial head prosthetic replacement.	0.13	0.07	0.54
24685	Humerus/ Elbow Fracture and/or Dislocation	Open treatment of ulnar fracture proximal end (olecranon process), with or without internal or external fixation.	0.45	0.38	0.85
25000	Forearm/Wrist Incision	Tendon sheath incision; at radial styloid (eg, for deQuervain's disease).	0.31	0.17	0.54
25001	Forearm/Wrist Incision	Incision, flexor tendon sheath, wrist (eg, flexor carpi radialis	0.00	0.01	1.52
25020	Forearm/Wrist Incision	Decompression fasciotomy, forearm and/or wrist; flexor or extensor compartment; without debridement of nonviable muscle and/or nerve	0.03	0.03	1.09
25023	Forearm/Wrist Incision	Decompression fasciotomy, forearm and/or wrist; with debridement of nonviable muscle and/or nerve.	0.01	0.02	1.45
25024	Forearm/Wrist Incision	Decompression fasciotomy, forearm and/or wrist, flexor AND extensor compartment; without debridement of nonviable muscle and/or nerve	0.01	0.02	1.61
25025	Forearm/Wrist Incision	Decompression fasciotomy, forearm and/or wrist, flexor AND extensor compartment; with debridement of nonviable muscle and/or nerve	0.01	0.02	1.66
25028	Forearm/Wrist Incision	Incision and drainage, forearm and/or wrist; deep abscess or hematoma.	0.11	0.10	0.90
25031	Forearm/Wrist Incision	Incision and drainage, forearm and/or wrist; infected bursa.	0.01	0.02	2.86
25035	Forearm/Wrist Incision	Incision, deep, with opening of bone cortex (eg, for osteomyelitis or bone	0.01	0.01	1.23

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		abscess), forearm and/or wrist.			
25040	Forearm/Wrist Incision	Arthrotomy, radiocarpal or midcarpal joint, with exploration, drainage, or removal of foreign body.	0.04	0.01	0.39
25065	Forearm/Wrist Excision	Biopsy, soft tissue of forearm and/or wrist; superficial	0.00	0.01	1.61
25066	Forearm/Wrist Excision	Biopsy, soft tissue of forearm and/or wrist; deep (subfascial or intramuscular)	0.01	0.02	2.99
25071	Forearm/Wrist Excision	Excision, tumor, soft tissue of forearm and/or wrist area, subcutaneous; 3 cm or greater	0.01	0.00	0.02
25073	Forearm/Wrist Excision	Excision, tumor, soft tissue of forearm and/or wrist area, subfascial (eg, intramuscular); 3 cm or greater	0.01	0.00	0.04
25075	Forearm/Wrist Excision	Excision, tumor, soft tissue of forearm and/or wrist area, subcutaneous; less than 3 cm	0.03	0.03	0.97
25076	Forearm/Wrist Excision	Excision, tumor, soft tissue of forearm and/or wrist area, subfascial (eg, intramuscular); less than 3 cm	0.03	0.05	1.72
25077	Forearm/Wrist Excision	Radical resection of tumor (eg, sarcoma), soft tissue of forearm and/or wrist area; less than 3 cm	0.00	0.01	6.27
25085	Forearm/Wrist Excision	Capsulotomy, wrist (eg, contracture)	0.00	0.00	1.13
25100	Forearm/Wrist Excision	Arthrotomy, wrist joint; with biopsy	0.00	0.00	1.16
25101	Forearm/Wrist Excision	Arthrotomy, wrist joint; with joint exploration, with or without biopsy, with or without removal of loose or foreign body	0.02	0.01	0.64
25105	Forearm/Wrist Excision	Arthrotomy, wrist joint; with synovectomy	0.01	0.01	0.97
25107	Forearm/Wrist Excision	Arthrotomy, distal radioulnar joint including repair of triangular cartilage, complex	0.02	0.01	0.51
25109	Forearm/Wrist Excision	Excision of tendon, forearm and/or wrist, floexor or extensor, each	0.00	0.00	0.26
25110	Forearm/Wrist Excision	Excision, lesion of tendon sheath, forearm and/or wrist	0.01	0.01	0.69
25111	Forearm/Wrist Excision	Excision of ganglion, wrist (dorsal or volar); primary	0.53	0.29	0.54

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
25112	Forearm/Wrist Excision	Excision of ganglion, wrist (dorsal or volar); recurrent	0.03	0.03	0.83
25115	Forearm/Wrist Excision	Radical excision of bursa, synovia of wrist, or forearm tendon sheaths (eg, tenosynovitis, fungus, Tbc, or other granulomas, rheumatoid arthritis); flexor	0.03	0.02	0.49
25116	Forearm/Wrist Excision	Radical excision of bursa, synovia of wrist, or forearm tendon sheaths (eg, tenosynovitis, fungus, Tbc, or other granulomas, rheumatoid arthritis); extensors, with or without transposition of dorsal retinaculum	0.02	0.01	0.49
25118	Forearm/Wrist Excision	Synovectomy, extensor tendon sheath, wrist, single compartment;	0.05	0.03	0.62
25119	Forearm/Wrist Excision	Synovectomy, extensor tendon sheath, wrist, single compartment; with resection of distal ulna	0.00	0.00	8.02
25120	Forearm/Wrist Excision	Excision or curettage of bone cyst or benign tumor of radius or ulna (excluding head or neck of radius and olecranon process);	0.01	0.01	1.97
25125	Forearm/Wrist Excision	Excision or curettage of bone cyst or benign tumor of radius or ulna (excluding head or neck of radius and olecranon process); with autograft (includes obtaining graft)	0.00	0.00	5.56
25126	Forearm/Wrist Excision	Excision or curettage of bone cyst or benign tumor of radius or ulna (excluding head or neck of radius and olecranon process); with allograft	0.00	0.01	2.63
25130	Forearm/Wrist Excision	Excision or curettage of bone cyst or benign tumor of carpal bones;	0.02	0.01	0.63
25135	Forearm/Wrist Excision	Excision or curettage of bone cyst or benign tumor of carpal bones; with autograft (includes obtaining graft)	0.00	0.00	1.48
25136	Forearm/Wrist Excision	Excision or curettage of bone cyst or benign tumor of carpal bones; with allograft	0.00	0.00	4.17
25145	Forearm/Wrist Excision	Sequestrectomy (eg, for osteomyelitis or bone	0.00	0.00	1.18

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		abscess), forearm and/or wrist			
25150	Forearm/Wrist Excision	Partial excision (craterization, saucerization, or diaphysectomy) of bone (eg, for osteomyelitis); ulna	0.00	0.01	1.75
25151	Forearm/Wrist Excision	Partial excision (craterization, saucerization, or diaphysectomy) of bone (eg, for osteomyelitis); radius	0.01	0.00	0.62
25170	Forearm/Wrist Excision	Radical resection of tumor, radius or ulna	0.00	0.01	2.63
25210	Forearm/Wrist Excision	Carpectomy; 1 bone	0.07	0.05	0.71
25215	Forearm/Wrist Excision	Carpectomy; all bones of proximal row	0.04	0.05	1.52
25230	Forearm/Wrist Excision	Radial styloidectomy (separate procedure)	0.02	0.01	0.90
25240	Forearm/Wrist Excision	Excision distal ulna partial or complete (eg, Darrach type or matched resection)	0.02	0.03	1.50
25260	Forearm/ Wrist Repair, Revision and/or Reconstruction	Repair, tendon or muscle, flexor, forearm and/or wrist; primary, single, each tendon or muscle	0.09	0.19	2.16
25263	Forearm/ Wrist Repair, Revision and/or Reconstruction	secondary, single, each tendon or muscle	0.00	0.01	2.96
25265	Forearm/ Wrist Repair, Revision and/or Reconstruction	secondary, with free graft (includes obtaining	0.00	0.00	1.91
25270	Forearm/ Wrist Repair, Revision and/or Reconstruction	Repair, tendon or muscle, extensor, forearm and/or wrist; primary, single, each tendon or muscle	0.06	0.10	1.62
25272	Forearm/ Wrist Repair, Revision and/or Reconstruction	secondary, single, each tendon or muscle	0.01	0.01	1.06
25274	Forearm/ Wrist Repair, Revision and/or Reconstruction	secondary, with free graft (includes obtaining	0.00	0.00	1.24
25275	Forearm/ Wrist Repair, Revision and/or Reconstruction	Repair, tendon sheath, extensor, forearm and or wrist, with free graft includes graft harvest	0.01	0.01	0.75
25280	Forearm/ Wrist Repair, Revision and/or Reconstruction	Lengthening or shortening of flexor or extensor tendon, forearm and/or wrist, single, each tendon	0.02	0.02	1.08
25290	Forearm/ Wrist Repair, Revision and/or Reconstruction	Tenotomy, open flexor or extensor tendon, forearm and/or wrist, single, each tendon	0.05	0.02	0.44

Operative Experience During Orthopaedic Residency Compared with Early Practice in the U.S. http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	<b>CPT Code Description</b>	Practitioner %	Resident %	Relative Rate
25295	Forearm/ Wrist Repair, Revision and/or Reconstruction	Tenolysis, flexor or extensor tendon, forearm and/or wrist, single, each tendon	0.02	0.05	2.08
25300	Forearm/ Wrist Repair, Revision and/or Reconstruction	Tenodesis at wrist; flexors of fingers	0.00	0.00	1.90
25301	Forearm/ Wrist Repair, Revision and/or Reconstruction	extensors of fingers	0.00	0.00	1.82
25310	Forearm/ Wrist Repair, Revision and/or Reconstruction	Tendon transplantation or transfer, flexor or extensor, forearm and/or wrist, single; each tendon	0.09	0.09	1.02
25312	Forearm/ Wrist Repair, Revision and/or Reconstruction	with tendon graft(s) (includes obtaining graft), each tendon	0.00	0.01	2.45
25315	Forearm/ Wrist Repair, Revision and/or Reconstruction	Flexor origin slide (eg, for cerebral palsy, Volkmann contracture), forearm and/or wrist	0.00	0.00	5.61
25316	Forearm/ Wrist Repair, Revision and/or Reconstruction	with tendon transfer	0.00	0.00	4.06
25320	Forearm/ Wrist Repair, Revision and/or Reconstruction	Capsulorrhaphy or reconstruction, wrist, any method open	0.09	0.06	0.59
25332	Forearm/ Wrist Repair, Revision and/or Reconstruction	Arthroplasty, wrist, with or without interposition, with or wtihout external or internal fixation	0.00	0.01	2.34
25335	Forearm/ Wrist Repair, Revision and/or Reconstruction	Centralization of wrist on ulna eg, radial club hand)	0.00	0.00	Inf
25337	Forearm/ Wrist Repair, Revision and/or Reconstruction	Reconstruction for stabilization of unstable distal radioulnar joint, secondary by soft tissue stabilization with or without open reduction of distal radioulnar joint	0.01	0.02	1.90
25350	Forearm/ Wrist Repair, Revision and/or Reconstruction	Osteotomy, radius; distal third	0.02	0.03	1.76
25355	Forearm/ Wrist Repair, Revision and/or Reconstruction	middle or proximal third	0.00	0.00	1.76
25360	Forearm/ Wrist Repair, Revision and/or Reconstruction	Osteotomy; ulna	0.02	0.04	1.90
25365	Forearm/ Wrist Repair, Revision and/or Reconstruction	radius and ulna	0.00	0.00	2.67

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
25370	Forearm/ Wrist Repair, Revision and/or Reconstruction	Multiple osteotomies, with realignment on intramedullary rod (Sofield type procedure); radius OR ulna	0.00	0.00	Inf
25375	Forearm/ Wrist Repair, Revision and/or Reconstruction	radius AND ulna	0.00	0.00	0.43
25390	Forearm/ Wrist Repair, Revision and/or Reconstruction	Osteoplasty, radius OR ulna; shortening	0.03	0.03	0.99
25391	Forearm/ Wrist Repair, Revision and/or Reconstruction	lengthening with autograft	0.00	0.00	1.75
25392	Forearm/ Wrist Repair, Revision and/or Reconstruction	Osteoplasty, radius AND ulna; shortening (excluding 64876)	0.00	0.00	1.39
25393	Forearm/ Wrist Repair, Revision and/or Reconstruction	lengthening with autograft	0.00	0.00	2.14
25394	Forearm/ Wrist Repair, Revision and/or Reconstruction	Osteoplasty, carpal bone, shortening	0.00	0.00	2.67
25400	Forearm/ Wrist Repair, Revision and/or Reconstruction	Repair of nonunion or malunion, radius OR ulna; without graft	0.03	0.03	0.79
25405	Forearm/ Wrist Repair, Revision and/or Reconstruction	with autograft (includes obtaining graft)	0.03	0.04	1.46
25415	Forearm/ Wrist Repair, Revision and/or Reconstruction	Repair of nonunion or malunion, radius AND ulna; without graft	0.00	0.00	1.10
25420	Forearm/ Wrist Repair, Revision and/or Reconstruction	with autograft (includes obtaining graft)	0.00	0.01	2.19
25425	Forearm/ Wrist Repair, Revision and/or Reconstruction	Repair of defect with autograft; radius OR ulna	0.00	0.00	1.62
25426	Forearm/ Wrist Repair, Revision and/or Reconstruction	radius AND ulna	0.00	0.00	0.50
25430	Forearm/ Wrist Repair, Revision and/or Reconstruction	Insertion vascular pedicle into carpal bone	0.01	0.00	0.47
25431	Forearm/ Wrist Repair, Revision and/or Reconstruction	Repair of carpal bone nonunion other than scaphoid, each, including graft and fixation, each bone	0.00	0.01	4.08
25440	Forearm/ Wrist Repair, Revision and/or Reconstruction	Repair of nonunion, scaphoid navicular bone, with or without radial styloidectomy (includes obtaining graft and necessary	0.06	0.06	1.00

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		fixation			
25441	Forearm/ Wrist Repair, Revision and/or Reconstruction	Arthroplasty with prosthetic replacement, distal radius	0.00	0.00	Inf
25442	Forearm/ Wrist Repair, Revision and/or Reconstruction	distal ulna	0.00	0.01	11.23
25443	Forearm/ Wrist Repair, Revision and/or Reconstruction	scaphoid carpal (navicular)	0.00	0.00	Inf
25445	Forearm/ Wrist Repair, Revision and/or Reconstruction	trapezium	0.00	0.01	14.44
25446	Forearm/ Wrist Repair, Revision and/or Reconstruction	distal radius and partial or entire carpus (total wrist)	0.00	0.00	3.14
25447	Forearm/ Wrist Repair, Revision and/or Reconstruction	Interposition arthroplasty, intercarpal or carpometacarpal joints	0.27	0.24	0.90
25449	Forearm/ Wrist Repair, Revision and/or Reconstruction	Revision of arthroplasty, including removal of implant, wrist joint	0.00	0.00	1.58
25450	Forearm/ Wrist Repair, Revision and/or Reconstruction	Epiphyseal arrest by epiphysiodesis or stapling; distal radius OR ulna	0.00	0.00	1.71
25455	Forearm/ Wrist Repair, Revision and/or Reconstruction	distal radius AND ulna	0.00	0.00	Inf
25490	Forearm/ Wrist Repair, Revision and/or Reconstruction	Prophylactic treatment (nailing, pinning, plating or wiring) with or without methyl methacrylate; radius	0.00	0.00	2.17
25491	Forearm/ Wrist Repair, Revision and/or Reconstruction	ulna	0.00	0.00	3.64
25492	Forearm/ Wrist Repair, Revision and/or Reconstruction	radius AND ulna	0.00	0.00	Inf
25515	Forearm/ Wrist Fracture and/or Dislocation	Open treatment of radial shaft fracture, includes internal fixation	0.11	0.12	1.10
25525	Forearm/ Wrist Fracture and/or Dislocation	Open treatment of radial shaft fracture, includes internal fixation and closed treatment of dislocation of DRUJ	0.05	0.06	1.30
25526	Forearm/ Wrist Fracture and/or Dislocation	Open treatment of radial shaft fracture, includes internal fixaiton and open treatment of dislocation of DRUJ	0.01	0.01	1.71
25545	Forearm/ Wrist Fracture and/or Dislocation	Open treatment of ulnar shaft fracture, includes internal	0.16	0.18	1.12

Operative Experience During Orthopaedic Residency Compared with Early Practice in the U.S. http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		fixation			
25574	Forearm/ Wrist Fracture and/or Dislocation	Open treatment of radial and ulnar shaft fractures with internal fixation of radius or ulna	0.05	0.07	1.54
25575	Forearm/ Wrist Fracture and/or Dislocation	Open treatment of radial and ulnar shaft fractures with internal fixation of radius and ulna	0.21	0.31	1.47
25606	Forearm/ Wrist Fracture and/or Dislocation	Percutaneous skeletal fixation of distal radial fracture or epiphyseal separation	0.10	0.13	1.29
25607	Forearm/ Wrist Fracture and/or Dislocation	Open treatment of distal radial extra-articular fracture or epiphyseal separation with internal fixation	0.62	0.31	0.50
25608	Forearm/ Wrist Fracture and/or Dislocation	Open treatment of distal radial intra-articular fracture or epiphyseal separation with internal fixation of 2 fragments	0.55	0.39	0.71
25609	Forearm/ Wrist Fracture and/or Dislocation	Open treatment of distal radial intra-articular fracture or epiphyseal separation with internal fixation of 3 fragments	0.91	0.60	0.66
25611	Forearm/ Wrist Fracture and/or Dislocation		0.00	0.01	Inf
25620	Forearm/ Wrist Fracture and/or Dislocation		0.01	0.05	4.19
25628	Forearm/ Wrist Fracture and/or Dislocation	Open treatment of carpal scaphoid fracture, internal fixation	0.14	0.15	1.04
25645	Forearm/ Wrist Fracture and/or Dislocation	Open treatment of carpal bone fracture (excludes scaphoid)	0.03	0.02	0.72
25651	Forearm/ Wrist Fracture and/or Dislocation	Percutaneous skeletal fixation of ulnar stylod fracture	0.01	0.01	0.58
25652	Forearm/ Wrist Fracture and/or Dislocation	Open treatment of ulnar styloid fracture	0.05	0.03	0.58
25670	Forearm/ Wrist Fracture and/or Dislocation	Open treatment of radiocarpal or intercarpal dislocation, 1 or more bones	0.03	0.02	0.77
25671	Forearm/ Wrist Fracture and/or Dislocation	Percutaneous skeletal fixation of DRUJ	0.03	0.02	0.54
25676	Forearm/ Wrist Fracture and/or Dislocation	Open treatment of DRUJ dislocation	0.02	0.02	0.92
25685	Forearm/ Wrist Fracture and/or Dislocation	Open treatment of trans- scaphoiperilunate type of fracture dislocation	0.02	0.02	1.10
25695	Forearm/ Wrist Fracture and/or Dislocation	Open treatment of lunate dislocation	0.01	0.02	1.70
25800	Forearm/ Wrist Arthrodesis	Arthrodesis, wrist; complete,	0.01	0.03	3.24

http://dx.doi.org/10.2106/JBJS.17.01115

Pa	ge	5	2
га	ᅩᆫ	J	4

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		without bone graft (includes radiocarpal and/or intercarpal and/or carpometacarpal joints)			
25805	Forearm/ Wrist Arthrodesis	Arthrodesis, wrist; with sliding graft	0.00	0.00	0.89
25810	Forearm/ Wrist Arthrodesis	Arthrodesis, wrist; with iliac or other autograft (includes obtaining graft)	0.02	0.02	1.08
25820	Forearm/ Wrist Arthrodesis	Arthrodesis, wrist; limited, without bone graft (eg, intercarpal or radiocarpa	0.01	0.03	3.46
25825	Forearm/ Wrist Arthrodesis	Arthrodesis, wrist; with autograft (includes obtaining graft)	0.03	0.04	1.45
25830	Forearm/ Wrist Arthrodesis	Arthrodesis, distal radioulnar joint with segmental resection of ulna, with or without bone graft (eg, Sauve-Kapandji procedure	0.00	0.01	3.51
26010	Hand/Fingers Incision	Drainage of finger abscess; simple.	0.06	0.07	1.26
26011	Hand/Fingers Incision	Drainage of finger abscess; complicated (eg, felon).	0.13	0.12	0.91
26020	Hand/Fingers Incision	Drainage of tendon sheath, one digit and/or palm.	0.16	0.10	0.62
26025	Hand/Fingers Incision	Drainage of palmar bursa; single, ulnar or radial.	0.03	0.02	0.73
26030	Hand/Fingers Incision	Drainage of palmar bursa; multiple or complicated.	0.01	0.02	1.47
26034	Hand/Fingers Incision	Incision, deep, with opening of bone cortex (eg, for osteomyelitis or bone abscess), hand or finger.	0.04	0.03	0.76
26035	Hand/Fingers Incision	Decompression fingers and/or hand, injection injury (eg, grease gun).	0.01	0.01	0.99
26037	Hand/Fingers Incision	Decompressive fasciotomy, hand (excludes 26035).	0.02	0.02	1.57
26040	Hand/Fingers Incision	Fasciotomy, palmar, for Dupuytren's contracture; percutaneous.	0.02	0.02	0.86
26045	Hand/Fingers Incision	Fasciotomy, palmar, for Dupuytren's contracture; open, partial.	0.02	0.09	6.20
26055	Hand/Fingers Incision	Tendon sheath incision (eg, for trigger finger).	1.30	1.05	0.81
26060	Hand/Fingers Incision	Tenotomy, percutaneous, single, each digit.	0.00	0.00	4.97
26070	Hand/Fingers Incision	Arthrotomy, with exploration, drainage, or removal of foreign body; carpometacarpal	0.01	0.01	1.13

CPT Code <sup>a</sup>	CPT Code Category	<b>CPT Code Description</b>	Practitioner %	Resident %	Relative Rate
		joint.			
26075	Hand/Fingers Incision	Arthrotomy, with exploration, drainage, or removal of foreign body; metacarpophalangeal joint.	0.08	0.04	0.50
26080	Hand/Fingers Incision	Arthrotomy, with exploration, drainage, or removal of foreign body; interphalangeal joint, each.	0.10	0.04	0.35
26100	Hand/Fingers Excision	Arthrotomy with biopsy; carpometacarpal joint, each	0.00	0.00	8.13
26105	Hand/Fingers Excision	Arthrotomy with synovial biopsy; metacarpophalangeal joint.	0.00	0.00	0.76
26110	Hand/Fingers Excision	Arthrotomy with synovial biopsy; interphalangeal joint, each.	0.02	0.01	0.34
26111	Hand/Fingers Excision	Excision, tumor or vascular malformation, soft tissue of hand or finger, subcutaneous; 1.5 cm or greater	0.05	0.00	0.02
26113	Hand/Fingers Excision	Excision, tumor, soft tissue, or vascular malformation, of hand or finger, subfascial (eg, intramuscular); 1.5 cm or greater	0.03	0.00	0.02
26115	Hand/Fingers Excision	Excision, tumor or vascular malformation, soft tissue of hand or finger, subcutaneous; less than 1.5 cm	0.23	0.13	0.59
26116	Hand/Fingers Excision	Excision, tumor, soft tissue, or vascular malformation, of hand or finger, subfascial (eg, intramuscular); less than 1.5 cm	0.09	0.11	1.17
26117	Hand/Fingers Excision	Radical resection of tumor (eg, sarcoma), soft tissue of hand or finger; less than 3 cm	0.00	0.01	1.32
26121	Hand/Fingers Excision	Radical resection of tumor (eg, sarcoma), soft tissue of hand or finger; 3 cm or greater	0.02	0.03	1.46
26123	Hand/Fingers Excision	Fasciectomy, palm only, with or without Z-plasty, other local tissue rearrangement, or skin grafting (includes obtaining graft).	0.10	0.08	0.78
26125	Hand/Fingers Excision	Fasciectomy, partial palmar with release of single digit including proximal interphalangeal joint, with or without Z-plasty, other local	0.03	0.04	1.61

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		tissue rearrangement, or skin grafting (includes obtaining graft);.			
26130	Hand/Fingers Excision	Fasciectomy, partial palmar with release of single digit including proximal interphalangeal joint, with or without Z-plasty, other local tissue rearrangement, or skin grafting (includes obtaining graft); each additional digit (List separately in addition.	0.00	0.00	2.03
26135	Hand/Fingers Excision	Synovectomy, carpometacarpal joint.	0.01	0.01	1.11
26140	Hand/Fingers Excision	Synovectomy, metacarpophalangeal joint including intrinsic release and extensor hood reconstruction, each digit.	0.01	0.01	0.96
26145	Hand/Fingers Excision	Synovectomy, proximal interphalangeal joint, including extensor reconstruction, each interphalangeal joint.	0.05	0.05	1.09
26160	Hand/Fingers Excision	Synovectomy tendon sheath, radical (tenosynovectomy), flexor, palm or finger, single, each digit.	0.44	0.28	0.63
26170	Hand/Fingers Excision	Excision of lesion of tendon sheath or capsule (eg, cyst, mucous cyst, or ganglion), hand or finger.	0.01	0.00	0.75
26180	Hand/Fingers Excision	Excision of tendon, palm, flexor, single (separate procedure), each.	0.02	0.01	0.42
26185	Hand/Fingers Excision	Excision of tendon, finger, flexor (separate procedure).	0.00	0.00	2.17
26200	Hand/Fingers Excision	Sesamoidectomy, thumb or finger (separate procedure).	0.01	0.02	2.78
26205	Hand/Fingers Excision	Excision or curettage of bone cyst or benign tumor of metacarpal;.	0.00	0.00	2.18
26210	Hand/Fingers Excision	Excision or curettage of bone cyst or benign tumor of metacarpal; with autograft (includes obtaining graft).	0.04	0.06	1.52
26215	Hand/Fingers Excision	Excision or curettage of bone cyst or benign tumor of proximal, middle, or distal phalanx of finger;.	0.00	0.01	1.83
26230	Hand/Fingers Excision	Excision or curettage of bone cyst or benign tumor of	0.01	0.01	1.28

CPT Code <sup>a</sup>	CPT Code Category	<b>CPT Code Description</b>	Practitioner %	Resident %	Relative Rate
		proximal, middle, or distal phalanx of finger; with autograft (includes obtaining graft).			
26235	Hand/Fingers Excision	Partial excision (craterization, saucerization, or diaphysectomy) of bone (eg, for osteomyelitis); metacarpal.	0.01	0.01	0.72
26236	Hand/Fingers Excision	Partial excision (craterization, saucerization, or diaphysectomy) of bone (eg, for osteomyelitis); proximal or middle phalanx of finger.	0.02	0.01	0.53
26250	Hand/Fingers Excision	Partial excision (craterization, saucerization, or diaphysectomy) of bone (eg, for osteomyelitis); distal phalanx of finger.	0.00	0.00	4.92
26255	Hand/Fingers Excision	Radical resection (ostectomy) for tumor, metacarpal;.	0.00	0.00	Inf
26260	Hand/Fingers Excision	Radical resection (ostectomy) for tumor, proximal or middle phalanx of finger;.	0.00	0.00	1.64
26261	Hand/Fingers Excision	Radical resectin of tumor, distal phalanx of finger	0.00	0.00	Inf
26262	Hand/Fingers Excision	Manipulation finger joint under anesthesia, each joint	0.00	0.00	3.10
26340	Hand/Fingers Reapir, Revision and/or Reconstruction	Manipulation, palmar fascial cord, post enzyme injection, single cord	0.04	0.03	0.78
26341	Hand/Fingers Reapir, Revision and/or Reconstruction	Repair or advancement, flexor tendon, not in zone 2 digital flexor tendon sheath; primary or secondary without free graft, each tendon	0.01	0.00	0.07
26350	Hand/Fingers Reapir, Revision and/or Reconstruction	secondary with free graft, each tendon	0.09	0.12	1.35
26352	Hand/Fingers Reapir, Revision and/or Reconstruction	Repair or advancement, flexor tendon, in zone 2 digital flexor tendon sheath; primary without free graft, each tendon	0.01	0.01	1.24
26356	Hand/Fingers Reapir, Revision and/or Reconstruction	secondary without free graft, each tendon	0.16	0.17	1.12
26357	Hand/Fingers Reapir, Revision and/or Reconstruction	secondary with free graft, each tendon	0.01	0.02	3.06
26358	Hand/Fingers Reapir, Revision and/or Reconstruction	Repair or advancement of profundus tendon, with intact superficialis tendon; primary,	0.00	0.01	1.99

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		each tendon			
26370	Hand/Fingers Reapir, Revision and/or Reconstruction	secondary with free graft, each tendon	0.05	0.03	0.61
26372	Hand/Fingers Reapir, Revision and/or Reconstruction	secondary without free graft, each tendon	0.00	0.01	2.98
26373	Hand/Fingers Reapir, Revision and/or Reconstruction	Flexor tendon excision, implantation of plastic tube or rod for delayed tendon graft, hand or finger, each rod	0.00	0.00	0.40
26390	Hand/Fingers Reapir, Revision and/or Reconstruction	Removal of tube or rod and insertion of flexor tendon graft (includes obtaining graft), hand or finger	0.01	0.01	1.36
26392	Hand/Fingers Reapir, Revision and/or Reconstruction	Extensor tendon repair, dorsum of hand, single, primary or secondary; without free graft, each tendon	0.00	0.00	0.98
26410	Hand/Fingers Reapir, Revision and/or Reconstruction	with free graft, (includes obtaining graft), each tendon	0.16	0.11	0.68
26412	Hand/Fingers Reapir, Revision and/or Reconstruction	Extensor tendon excision, implantation of plastic tube or rod for delayed tendon graft, hand or finger, each rod	0.00	0.01	1.44
26415	Hand/Fingers Reapir, Revision and/or Reconstruction	Removal of tube or rod and insertion of extensor tendon graft (includes obtaining graft), hand or finger	0.00	0.00	2.46
26416	Hand/Fingers Reapir, Revision and/or Reconstruction	Extensor tendon repair, finger, primary or secondary; without free graft, each tendon	0.00	0.00	3.48
26418	Hand/Fingers Reapir, Revision and/or Reconstruction	with free graft, (includes obtaining graft), each tendon	0.21	0.14	0.66
26420	Hand/Fingers Reapir, Revision and/or Reconstruction	Extensor tendon repair, central slip repair, secondary (boutonniere deformity); using local tissues, including lateral band(s), each finger	0.00	0.01	2.65
26426	Hand/Fingers Reapir, Revision and/or Reconstruction	with free graft, (includes obtaining graft), each finger	0.02	0.04	2.66
26428	Hand/Fingers Reapir, Revision and/or Reconstruction	Closed treatment of distal extensor tendon insertion, with or without percutaneous pinning	0.00	0.00	5.53
26432	Hand/Fingers Reapir, Revision and/or Reconstruction	Repair of extensor tendon, distal insetionk promary or secondary; without graft	0.02	0.01	0.66

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
26433	Hand/Fingers Reapir, Revision and/or Reconstruction	with free graft, (includes obtaining graft)	0.02	0.04	1.55
26434	Hand/Fingers Reapir, Revision and/or Reconstruction	Realignment of extensor tendon, hand, each tendon	0.00	0.00	1.66
26437	Hand/Fingers Reapir, Revision and/or Reconstruction	Tenolysis, flexor tendon; palm OR finger, each tendon	0.02	0.02	1.02
26440	Hand/Fingers Reapir, Revision and/or Reconstruction	palm AND finger, each tendon	0.05	0.05	1.16
26442	Hand/Fingers Reapir, Revision and/or Reconstruction	Tenolysis, extensor tendon, hand or finger, each tendon	0.01	0.03	2.22
26445	Hand/Fingers Reapir, Revision and/or Reconstruction	Tenolysis, complex, extensor tendon, finger, including forearm, each tendon	0.05	0.06	1.20
26449	Hand/Fingers Reapir, Revision and/or Reconstruction	Tenotomy, flexor, palm, open, each	0.01	0.01	2.15
26450	Hand/Fingers Reapir, Revision and/or Reconstruction	Tenotomy, flexor finger, , open, each	0.00	0.00	1.08
26455	Hand/Fingers Reapir, Revision and/or Reconstruction	Tenotomy, extensor hand or finger, single, open, each	0.00	0.01	2.41
26460	Hand/Fingers Reapir, Revision and/or Reconstruction	Tenodesis; for proximal interphalangeal joint stabilization	0.01	0.01	1.50
26471	Hand/Fingers Reapir, Revision and/or Reconstruction	of distal joint, each joint	0.00	0.01	4.58
26474	Hand/Fingers Reapir, Revision and/or Reconstruction	Tendon lengthening, extensor, hand or finger, single, each	0.00	0.00	4.03
26476	Hand/Fingers Reapir, Revision and/or Reconstruction	Tendon shortening, extensor, hand or finger, single, each	0.00	0.00	6.10
26477	Hand/Fingers Reapir, Revision and/or Reconstruction	Tendon lengthening, flexor, hand or finger, single, each	0.00	0.00	1.58
26478	Hand/Fingers Reapir, Revision and/or Reconstruction	Tendon shortening, flexor, hand or finger, single, each	0.00	0.01	2.28
26479	Hand/Fingers Reapir, Revision and/or Reconstruction	Tendon transfer or transplant, carpometacarpal area or dorsum of hand, single; without free graft, each	0.00	0.00	0.93
26480	Hand/Fingers Reapir, Revision and/or	with free tendon graft (includes obtaining graft),	0.15	0.05	0.36

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
	Reconstruction	each tendon			
26483	Hand/Fingers Reapir, Revision and/or Reconstruction	Tendon transfer or transplant, palmar, single, each tendon; without free tendon graft	0.01	0.01	2.30
26485	Hand/Fingers Reapir, Revision and/or Reconstruction	with free tendon graft (includes obtaining graft), each tendon	0.01	0.01	1.31
26489	Hand/Fingers Reapir, Revision and/or Reconstruction	Opopnensplasty, superficialis tendon transfer type, each tendon	0.00	0.00	4.04
26490	Hand/Fingers Reapir, Revision and/or Reconstruction	tendon transfer with graft (includes obtaining graft), each tendon	0.00	0.00	2.17
26492	Hand/Fingers Reapir, Revision and/or Reconstruction	hypothenar muscle transfer	0.00	0.00	13.48
26494	Hand/Fingers Reapir, Revision and/or Reconstruction	other methods	0.00	0.00	Inf
26496	Hand/Fingers Reapir, Revision and/or Reconstruction	Transfer of tendon to restore intrinsic function; ring and small finger	0.00	0.00	1.93
26497	Hand/Fingers Reapir, Revision and/or Reconstruction	all 4 fingers	0.00	0.00	12.41
26498	Hand/Fingers Reapir, Revision and/or Reconstruction	Correction claw finger, other methods	0.00	0.00	11.44
26499	Hand/Fingers Reapir, Revision and/or Reconstruction	Tendon pulley reconstruction, with local tissues separate procedure	0.00	0.00	2.78
26500	Hand/Fingers Reapir, Revision and/or Reconstruction	with tendon or fascial graft (includes obtaining graft) separate procedure	0.01	0.01	1.72
26502	Hand/Fingers Reapir, Revision and/or Reconstruction	Tendon pulley reconstruction; with tendon prosthesis (separate procedure).	0.01	0.01	1.13
26508	Hand/Fingers Reapir, Revision and/or Reconstruction	Thenar muscle release for thumb contracture	0.00	0.00	1.21
26510	Hand/Fingers Reapir, Revision and/or Reconstruction	Cross intrinsic transfer, each tendon	0.00	0.00	3.32
26516	Hand/Fingers Reapir, Revision and/or Reconstruction	Capsulodesis M-P joint; single digit	0.01	0.01	1.07
26517	Hand/Fingers Reapir, Revision and/or Reconstruction	2 digits	0.00	0.00	1.07
26518	Hand/Fingers Reapir, Revision and/or	3 or 4 digits	0.00	0.00	Inf

CPT Code <sup>a</sup>	CPT Code Category	<b>CPT Code Description</b>	Practitioner %	Resident %	Relative Rate
	Reconstruction				
26520	Hand/Fingers Reapir, Revision and/or Reconstruction	Capsulectomy or capsulotomy; metacarpophalangeal joint, single, each	0.02	0.03	1.55
26525	Hand/Fingers Reapir, Revision and/or Reconstruction	interphalangeal joint, single each	0.04	0.04	0.97
26530	Hand/Fingers Reapir, Revision and/or Reconstruction	Arthroplasty, metacarpophalangeal joint; single, each	0.00	0.04	18.09
26531	Hand/Fingers Reapir, Revision and/or Reconstruction	with prosthetic implant, single, each	0.01	0.05	4.61
26535	Hand/Fingers Reapir, Revision and/or Reconstruction	Arthroplasty, interphalangeal joint; single, each	0.01	0.02	2.24
26536	Hand/Fingers Reapir, Revision and/or Reconstruction	with prosthetic implant, single, each	0.01	0.02	1.88
26540	Hand/Fingers Reapir, Revision and/or Reconstruction	Repair of collateral ligament, metacarpophalangeal or interphalangeal joint	0.15	0.06	0.44
26541	Hand/Fingers Reapir, Revision and/or Reconstruction	Reconstruction, collateral ligament, metacarpophalangeal joint, singel; with tendon or fascial graft (includes obtaining graft)	0.02	0.02	1.09
26542	Hand/Fingers Reapir, Revision and/or Reconstruction	with local tissue	0.01	0.03	3.84
26545	Hand/Fingers Reapir, Revision and/or Reconstruction	Reconstruction, collateral ligament, interphalangeal joint, single, including graft, each joint	0.01	0.01	1.72
26546	Hand/Fingers Reapir, Revision and/or Reconstruction	Repair nonunion, metacarpal or phalanx, including bone graft with or without internal or external fixation	0.02	0.01	0.56
26548	Hand/Fingers Reapir, Revision and/or Reconstruction	Repair and reconstruction, finger volar plate, interphalangeal joint	0.02	0.02	1.37
26550	Hand/Fingers Reapir, Revision and/or Reconstruction	Pollicization of a digit	0.00	0.00	Inf
26551	Hand/Fingers Reapir, Revision and/or Reconstruction	Transfer, toe-to-hand with microvascular anastomosis; great toe wrap-around with bone graft	0.00	0.00	Inf
26553	Hand/Fingers Reapir, Revision and/or	other than great toe, single	0.00	0.00	Inf

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
	Reconstruction				
26554	Hand/Fingers Reapir, Revision and/or Reconstruction	other than great toe, double	0.00	0.00	Inf
26555	Hand/Fingers Reapir, Revision and/or Reconstruction	Transfer, finger to another position without microvascualr anastomosis	0.00	0.00	Inf
26556	Hand/Fingers Reapir, Revision and/or Reconstruction	Transfer, free toe joint with microvascular anastomosis	0.00	0.00	Inf
26560	Hand/Fingers Reapir, Revision and/or Reconstruction	Repair of syndactyly web finger each web space; with skin flaps	0.00	0.00	Inf
26561	Hand/Fingers Reapir, Revision and/or Reconstruction	with skin flaps and grafts	0.00	0.00	Inf
26562	Hand/Fingers Reapir, Revision and/or Reconstruction	complex, involving bone, nails, etc	0.00	0.00	7.70
26565	Hand/Fingers Reapir, Revision and/or Reconstruction	Osteotomy; metacarpal, each	0.01	0.02	1.47
26567	Hand/Fingers Reapir, Revision and/or Reconstruction	phalanx of finger, each	0.01	0.01	1.06
26568	Hand/Fingers Reapir, Revision and/or Reconstruction	Osteotomy; metacarpal, each	0.00	0.00	2.89
26580	Hand/Fingers Reapir, Revision and/or Reconstruction	Repair cleft hand	0.00	0.00	Inf
26587	Hand/Fingers Reapir, Revision and/or Reconstruction	Reconstruction of polydactylous digit, soft tissue and bone	0.00	0.00	4.65
26590	Hand/Fingers Reapir, Revision and/or Reconstruction	Repair macrodacylia, each digit	0.00	0.00	Inf
26591	Hand/Fingers Reapir, Revision and/or Reconstruction	Repair, intrinsic muscles of hand, each muscle	0.01	0.01	0.39
26593	Hand/Fingers Reapir, Revision and/or Reconstruction	Release, intrinsic muscles of hand	0.01	0.02	3.28
26596	Hand/Fingers Reapir, Revision and/or Reconstruction	Excision of constricting ring of finger, with multiple Z-plasties	0.00	0.00	Inf
26607	Hand/Fingers Fracture and/or Dislocation	Closed treatment of metacarpal fracture, with manipulation, with internal or external fixation, each bone.	0.01	0.03	3.69
26608	Hand/Fingers Fracture	Percutaneous skeletal fixation	0.27	0.19	0.73

Operative Experience During Orthopaedic Residency Compared with Early Practice in the U.S. http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
	and/or Dislocation	of metacarpal fracture, each bone.			
26615	Hand/Fingers Fracture and/or Dislocation	Open treatment of metacarpal fracture, single, with or without internal or external fixation, each bone.	0.35	0.29	0.82
26650	Hand/Fingers Fracture and/or Dislocation	Percutaneous skeletal fixation of carpometacarpal fracture dislocation, thumb (Bennett fracture), with manipulation, with or without external fixation.	0.04	0.04	0.92
26665	Hand/Fingers Fracture and/or Dislocation	Open treatment of carpometacarpal fracture dislocation, thumb (Bennett fracture), with or without internal or external fixation.	0.03	0.03	1.09
26675	Hand/Fingers Fracture and/or Dislocation	Closed treatment of carpometacarpal dislocation, other than thumb (Bennett fracture), single, with manipulation; requiring anesthesia.	0.00	0.01	3.83
26676	Hand/Fingers Fracture and/or Dislocation	Percutaneous skeletal fixation of carpometacarpal dislocation, other than thumb (Bennett fracture), single, with manipulation.	0.06	0.05	0.74
26685	Hand/Fingers Fracture and/or Dislocation	Open treatment of carpometacarpal dislocation, other than thumb (Bennett fracture); single, with or without internal or external fixation.	0.03	0.03	1.11
26686	Hand/Fingers Fracture and/or Dislocation	Open treatment of carpometacarpal dislocation, other than thumb (Bennett fracture); complex, multiple or delayed reduction.	0.02	0.02	0.98
26706	Hand/Fingers Fracture and/or Dislocation	Percutaneous skeletal fixation of metacarpophalangeal dislocation, single, with manipulation.	0.01	0.01	2.41
26715	Hand/Fingers Fracture and/or Dislocation	Open treatment of metacarpophalangeal dislocation, single, with or without internal or external fixation.	0.02	0.02	1.04
26727	Hand/Fingers Fracture and/or Dislocation	Percutaneous skeletal fixation of unstable phalangeal shaft fracture, proximal or middle	0.26	0.17	0.67

http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		phalanx, finger or thumb, with manipulation, each.			
26735	Hand/Fingers Fracture and/or Dislocation	Open treatment of phalangeal shaft fracture, proximal or middle phalanx, finger or thumb, with or without internal or external fixation, each.	0.23	0.19	0.83
26746	Hand/Fingers Fracture and/or Dislocation	Open treatment of articular fracture, involving metacarpophalangeal or interphalangeal joint, with or without internal or external fixation, each.	0.16	0.07	0.42
26756	Hand/Fingers Fracture and/or Dislocation	Percutaneous skeletal fixation of distal phalangeal fracture, finger or thumb, each.	0.07	0.05	0.68
26765	Hand/Fingers Fracture and/or Dislocation	Open treatment of distal phalangeal fracture, finger or thumb, with or without internal or external fixation, each.	0.14	0.06	0.39
26770	Hand/Fingers Fracture and/or Dislocation	Closed treatment of interphalangeal joint dislocation, single, with manipulation; without anesthesia	0.00	0.02	17.59
26775	Hand/Fingers Fracture and/or Dislocation	Closed treatment of interphalangeal joint dislocation, single, with manipulation; requiring anesthesia	0.01	0.01	2.21
26776	Hand/Fingers Fracture and/or Dislocation	Percutaneous skeletal fixation of interphalangeal joint dislocation, single, with manipulation.	0.02	0.02	1.05
26785	Hand/Fingers Fracture and/or Dislocation	Open treatment of interphalangeal joint dislocation, with or without internal or external fixation, single.	0.04	0.04	0.79
26820	Hand/ Fingers Arthrodesis	Fusion in opposition, thumb, with autogenous graft (includes obtaining graft).	0.00	0.00	2.49
26841	Hand/ Fingers Arthrodesis	Arthrodesis, carpometacarpal joint, thumb, with or without internal fixation;.	0.01	0.02	3.24
26842	Hand/ Fingers Arthrodesis	Arthrodesis, carpometacarpal joint, thumb, with or without internal fixation; with autograft (includes obtaining graft).	0.00	0.01	5.82
26843	Hand/ Fingers Arthrodesis	Arthrodesis, carpometacarpal joint, digits, other than thumb;.	0.00	0.01	4.83

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
26844	Hand/ Fingers Arthrodesis	Arthrodesis, carpometacarpal joint, digits, other than thumb; with autograft (includes obtaining graft).	0.00	0.01	4.06
26850	Hand/ Fingers Arthrodesis	Arthrodesis, metacarpophalangeal joint, with or without internal fixation;.	0.02	0.03	1.20
26852	Hand/ Fingers Arthrodesis	Arthrodesis, metacarpophalangeal joint, with or without internal fixation; with autograft (includes obtaining graft).	0.01	0.01	1.38
26860	Hand/ Fingers Arthrodesis	Arthrodesis, interphalangeal joint, with or without internal fixation;.	0.10	0.11	1.04
26861	Hand/ Fingers Arthrodesis	Arthrodesis, interphalangeal joint, with or without internal fixation; each additional interphalangeal joint.	0.01	0.02	1.72
26862	Hand/ Fingers Arthrodesis	Arthrodesis, interphalangeal joint, with or without internal fixation; with autograft (includes obtaining graft).	0.01	0.02	1.97
26863	Hand/ Fingers Arthrodesis	Arthrodesis, interphalangeal joint, with or without internal fixation; with autograft (includes obtaining graft), each additional joint.	0.00	0.00	5.13
26910	Hand/Fingers Amputation	Amputation, metacarpal, with finger or thumb (ray amputation), single, with or without interosseous transfer.	0.03	0.04	1.28
26951	Hand/Fingers Amputation	Amputation, finger or thumb, primary or secondary, any joint or phalanx, single, including neurectomies; with direct closure.	0.31	0.29	0.93
26952	Hand/Fingers Amputation	Amputation, finger or thumb, primary or secondary, any joint or phalanx, single, including neurectomies; with local advancement flaps (V-Y, hood).	0.07	0.05	0.66
26990	Pelvis/ Hip Incision	Incision and drainage, pelvis or hip joint area; deep abscess or hematoma.	0.11	0.16	1.43
26991	Pelvis/ Hip Incision	Incision and drainage, pelvis or hip joint area; infected bursa.	0.00	0.01	3.82
26992	Pelvis/ Hip Incision	Incision, deep, with opening of	0.02	0.03	1.99

Operative Experience During Orthopaedic Residency Compared with Early Practice in the U.S. http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		bone cortex (eg, for osteomyelitis or bone abscess), pelvis and/or hip joint.			
27000	Pelvis/ Hip Incision	Tenotomy, adductor of hip, subcutaneous, closed (separate procedure).	0.00	0.01	12.35
27001	Pelvis/ Hip Incision	Tenotomy, adductor of hip, subcutaneous, open.	0.01	0.01	1.42
27003	Pelvis/ Hip Incision	Tenotomy, adductor, subcutaneous, open, with obturator neurectomy.	0.00	0.00	7.81
27005	Pelvis/ Hip Incision	Tenotomy, iliopsoas, open (separate procedure).	0.01	0.01	0.78
27006	Pelvis/ Hip Incision	Tenotomy, abductors of hip, open (separate procedure).	0.01	0.01	1.26
27025	Pelvis/ Hip Incision	Fasciotomy, hip or thigh, any type.	0.01	0.00	0.52
27027	Pelvis/ Hip Incision	Decompression fasciotomy(ies), pelvic (buttock) compartment(s)	0.00	0.00	0.55
27030	Pelvis/ Hip Incision	Arthrotomy, hip, for infection, with drainage.	0.08	0.08	0.91
27033	Pelvis/ Hip Incision	Arthrotomy, hip, with exploration or removal of loose or foreign body.	0.02	0.03	1.87
27035	Pelvis/ Hip Incision	Hip joint denervation, intrapelvic or extrapelvic intra- articular branches of sciatic, femoral, or obturator nerves.	0.00	0.00	3.74
27036	Pelvis/ Hip Incision	Capsulectomy or capsulotomy of hip, with or without excision of heterotopic bone, with release of hip flexor muscles (ie, gluteus medius, gluteus minimus, tensor fascia latae, rectus femoris, sartorius, iliopsoas).	0.02	0.03	1.69
27040	Pelvis/ Hip Excision	Biopsy, soft tissue of pelvis and hip area; superficial.	0.00	0.00	3.56
27041	Pelvis/ Hip Excision	Biopsy, soft tissue of pelvis and hip area; deep.	0.01	0.03	3.66
27045	Pelvis/ Hip Excision	Excision, tumor, pelvis and hip area; subcutaneous, 3 cm or greater.	0.01	0.00	0.04
27047	Pelvis/ Hip Excision	Excision, tumor, pelvis and hip area; deep, subfascial, intramuscular, 5 cm or greater	0.00	0.01	2.64
27048	Pelvis/ Hip Excision	Excision, tumor, pelvis and hip area; subcutaneous, less than 3 cm	0.00	0.04	13.33

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
27049	Pelvis/ Hip Excision	Excision, tumor, pelvis and hip area; deep, subfascial, intramuscular, less than 5 cm	0.00	0.02	12.57
27050	Pelvis/ Hip Excision	Radical resection of tumor (eg, malignant neoplasm), soft tissue of pelvis and hip area, less than 5 cm.	0.00	0.00	0.75
27052	Pelvis/ Hip Excision	Arthrotomy, with biopsy; sacroiliac joint.	0.00	0.01	1.90
27054	Pelvis/ Hip Excision	Arthrotomy, with biopsy; hip joint.	0.00	0.02	5.47
27057	Pelvis/ Hip Excision	Arthrotomy with synovectomy, hip joint.	0.00	0.00	1.55
27059	Pelvis/ Hip Excision	Decompression fasciotomy(ies), pelvic (buttock) compartment(s) with debridement of nonviable muscle, unilateral	0.01	0.00	0.09
27060	Pelvis/ Hip Excision	Radical resection of tumor (eg, malignant neoplasm), soft tissue of pelvis and hip area 5 cm or greater.	0.00	0.00	0.47
27062	Pelvis/ Hip Excision	Excision; ischial bursa.	0.03	0.02	0.73
27065	Pelvis/ Hip Excision	Excision; trochanteric bursa or calcification.	0.00	0.01	3.46
27066	Pelvis/ Hip Excision	Excision of bone cyst or benign tumor; superficial (wing of ilium, symphysis pubis, or greater trochanter of femur) with or without autograft.	0.01	0.03	3.38
27067	Pelvis/ Hip Excision	Excision of bone cyst or benign tumor; deep, with or without autograft.	0.00	0.00	10.91
27070	Pelvis/ Hip Excision	Excision of bone cyst or benign tumor; with autograft requiring separate incision.	0.00	0.01	2.29
27071	Pelvis/ Hip Excision	Partial excision (craterization, saucerization) (eg, for osteomyelitis); superficial (eg, wing of ilium, symphysis pubis or greater trochanter of femur).	0.02	0.03	1.27
27075	Pelvis/ Hip Excision	Partial excision (craterization, saucerization) (eg, for osteomyelitis); deep.	0.00	0.01	3.12
27076	Pelvis/ Hip Excision	Radical resection of tumor or infection; wing of ilium, one pubic or ischial ramus or symphysis pubis.	0.00	0.01	4.90
27077	Pelvis/ Hip Excision	Radical resection of tumor or	0.00	0.00	3.18

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		infection; ilium, including acetabulum, both pubic rami, or ischium and acetabulum.			
27078	Pelvis/ Hip Excision	Radical resection of tumor or infection; innominate bone, total.	0.00	0.00	2.42
27079	Pelvis/ Hip Excision	Radical resection of tumor or infection; ischial tuberosity and greater trochanter of femur.	0.00	0.00	Inf
27080	Pelvis/ Hip Excision	Radical resection of tumor or infection; ischial tuberosity and greater trochanter of femur, with skin flaps.	0.00	0.01	2.67
27086	Pelvis/ Hip Introduction or Removal	Coccygectomy, primary.	0.00	0.00	6.58
27087	Pelvis/ Hip Introduction or Removal	Removal of foreign body, pelvis or hip; subcutaneous tissue.	0.01	0.02	3.56
27090	Pelvis/ Hip Introduction or Removal	Removal of foreign body, pelvis or hip; deep.	0.01	0.04	3.08
27091	Pelvis/ Hip Introduction or Removal	Removal of hip prosthesis; (separate procedure).	0.08	0.10	1.24
27093	Pelvis/ Hip Introduction or Removal	Removal of hip prosthesis; complicated, including "total hip" and methylmethacrylate, when applicable.	0.01	0.01	1.09
27095	Pelvis/ Hip Introduction or Removal	Injection procedure for hip arthrography; without anesthesia.	0.03	0.02	0.69
27096	Pelvis/ Hip Introduction or Removal	Injection procedure for hip arthrography; with anesthesia.	0.02	0.00	0.21
27097	Pelvis/ Hip Repair, Revision and/or Reconstruction	Injection procedure for sacroiliac joint, anesthetic/steroid, with image guidance including arthrography when performed	0.00	0.00	1.85
27098	Pelvis/ Hip Repair, Revision and/or Reconstruction	Release or recession, hamstring, proximal	0.00	0.00	Inf
27100	Pelvis/ Hip Repair, Revision and/or Reconstruction	Transfer, adductor to ischium	0.00	0.00	0.32
27110	Pelvis/ Hip Repair, Revision and/or Reconstruction	Transfer external oblique muscle to greater trochanter including fascial or tendon extension (graft)	0.00	0.00	Inf
27111	Pelvis/ Hip Repair, Revision and/or Reconstruction	Transfer iliopsoas; to greater trochanter of femur	0.00	0.00	Inf
27120	Pelvis/ Hip Repair, Revision and/or Reconstruction	to femoral neck	0.00	0.02	7.53
27122	Pelvis/ Hip Repair, Revision and/or Reconstruction	Acetabuloplasty; (eg, Whitman, Colonna,	0.03	0.05	1.76

http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		Haygroves, or cup type)			
27125	Pelvis/ Hip Repair, Revision and/or Reconstruction	resection, femoral head (eg, Girdlestone procedure)	0.41	0.61	1.48
27130	Pelvis/ Hip Repair, Revision and/or Reconstruction	Hemiarthroplasty, hip, partial (eg, femoral stem prosthesis, bipolar arthroplasty)	2.72	4.13	1.52
27132	Pelvis/ Hip Repair, Revision and/or Reconstruction	Arthroplasty, acetabular and proximal femoral prosthetic replacement (total hip arthroplasty), with or without autograft or allograft	0.18	0.08	0.46
27134	Pelvis/ Hip Repair, Revision and/or Reconstruction	Conversion of previous hip surgery to total hip arthroplasty, with or without autograft or allograft	0.26	0.41	1.58
27137	Pelvis/ Hip Repair, Revision and/or Reconstruction	Revision of total hip arthroplasty; both components, with or without autograft or allograft	0.14	0.23	1.64
27138	Pelvis/ Hip Repair, Revision and/or Reconstruction	acetabular component only, with or without autograft or allograft	0.10	0.10	1.04
27140	Pelvis/ Hip Repair, Revision and/or Reconstruction	femoral component only, with or without allograft	0.01	0.01	2.48
27146	Pelvis/ Hip Repair, Revision and/or Reconstruction	Osteotomy and transfer of greater trochanter of femur (separate procedure)	0.00	0.02	12.28
27147	Pelvis/ Hip Repair, Revision and/or Reconstruction	Osteotomy, iliac, acetabular or innominate bone;	0.00	0.00	2.09
27151	Pelvis/ Hip Repair, Revision and/or Reconstruction	with open reduction of hip	0.00	0.00	3.85
27156	Pelvis/ Hip Repair, Revision and/or Reconstruction	with femoral osteotomy	0.00	0.00	8.34
27158	Pelvis/ Hip Repair, Revision and/or Reconstruction	with femoral osteotomy and with open reduction of hip	0.00	0.00	1.39
27161	Pelvis/ Hip Repair, Revision and/or Reconstruction	Osteotomy, pelvis, bilateral (eg, congenital malformation)	0.00	0.02	10.52
27165	Pelvis/ Hip Repair, Revision and/or Reconstruction	Osteotomy, femoral neck (separate procedure)	0.01	0.02	1.98
27170	Pelvis/ Hip Repair, Revision and/or Reconstruction	Osteotomy, intertrochanteric or subtrochanteric including internal or external fixation and/or cast	0.01	0.03	2.58
27175	Pelvis/ Hip Repair, Revision and/or Reconstruction	Bone graft, femoral head, neck, intertrochanteric or subtrochanteric area (includes obtaining bone graft)	0.00	0.00	Inf
27176	Pelvis/ Hip Repair, Revision and/or Reconstruction	Treatment of slipped femoral epiphysis; by traction, without reduction	0.00	0.00	Inf
27177	Pelvis/ Hip Repair, Revision	by single or multiple	0.00	0.00	Inf

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
	and/or Reconstruction	pinning, in situ			
27178	Pelvis/ Hip Repair, Revision and/or Reconstruction	Open treatment of slipped femoral epiphysis; single or multiple pinning or bone graft (includes obtaining graft)	0.00	0.00	5.35
27179	Pelvis/ Hip Repair, Revision and/or Reconstruction	closed manipulation with single or multiple pinning	0.00	0.01	Inf
27181	Pelvis/ Hip Repair, Revision and/or Reconstruction	osteoplasty of femoral neck (Heyman type procedure)	0.00	0.00	1.07
27185	Pelvis/ Hip Repair, Revision and/or Reconstruction	osteotomy and internal fixation	0.00	0.00	1.18
27187	Pelvis/ Hip Repair, Revision and/or Reconstruction	Epiphyseal arrest by epiphysiodesis or stapling, greater trochanter of femur	0.03	0.03	1.34
27194	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Prophylactic treatment (nailing, pinning, plating or wiring) with or without methylmethacrylate, femoral neck and proximal femur	0.04	0.03	0.96
27202	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Closed treatment of pelvic ring fracture, dislocation, diastasis or subluxation; with manipulation, requiring more than local anesthesia.	0.00	0.00	2.03
27215	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Open treatment of coccygeal fracture.	0.01	0.02	1.69
27216	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Open treatment of iliac spine(s), tuberosity avulsion, or iliac wing fracture(s) (eg, pelvic fracture(s) which do not disrupt the pelvic ring), with internal fixation.	0.19	0.21	1.09
27217	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Percutaneous skeletal fixation of posterior pelvic ring fracture and/or dislocation (includes ilium, sacroiliac joint and/or sacrum).	0.12	0.16	1.36
27218	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Open treatment of anterior ring fracture and/or dislocation with internal fixation (includes pubic symphysis and/or rami).	0.04	0.09	2.08
27226	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Open treatment of posterior ring fracture and/or dislocation with internal fixation (includes ilium, sacroiliac joint and/ or sacrum).	0.07	0.12	1.68
27227	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Open treatment of posterior or anterior acetabular wall fracture, with internal fixation.	0.07	0.18	2.53
27228	Pelvis/ Hip Trauma -	Open treatment of acetabular	0.12	0.16	1.29

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
	Fracture and/or Dislocation	fracture(s) involving anterior or posterior (one) column, or a fracture running transversely across the acetabulum, with internal fixation.			
27235	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Open treatment of acetabular fracture(s) involving anterior and posterior (two) columns, includes T-fracture and both column fracture with complete articular detachment, or single column or transverse fracture with associated acetabular wall fracture, wit.	0.60	0.30	0.49
27236	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Percutaneous skeletal fixation of femoral fracture, proximal end, neck, undisplaced, mildly displaced, or impacted fracture.	1.61	0.87	0.54
27244	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Open treatment of femoral fracture, proximal end, neck, internal fixation or prosthetic replacement (direct fracture exposure).	0.30	0.43	1.45
27245	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Open treatment of intertrochanteric, pertrochanteric, or subtrochanteric femoral fracture; with plate/screw type implant, with or without cerclage.	2.62	1.29	0.49
27248	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Open treatment of intertrochanteric, pertrochanteric, or subtrochanteric femoral fracture; with intramedullary implant, with or without interlocking screws and/or cerclage.	0.05	0.04	0.85
27253	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Open treatment of greater trochanteric fracture, with or without internal or external fixation.	0.01	0.02	1.74
27254	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Open treatment of hip dislocation, traumatic, without internal fixation.	0.01	0.04	2.76
27256	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Open treatment of hip dislocation, traumatic, with acetabular wall and femoral head fracture, with or without internal or external fixation.	0.00	0.00	14.54

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
27257	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Treatment of spontaneous hip dislocation (developmental, including congenital or pathological), by abduction, splint or traction; without anesthesia, without manipulation.	0.00	0.00	3.66
27258	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Treatment of spontaneous hip dislocation (developmental, including congenital or pathological), by abduction, splint or traction; with manipulation, requiring anesthesia.	0.00	0.00	2.41
27259	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Open treatment of spontaneous hip dislocation (developmental, including congenital or pathological), replacement of femoral head in acetabulum (including tenotomy, etc);.	0.00	0.00	1.87
27265	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Open treatment of spontaneous hip dislocation (developmental, including congenital or pathological), replacement of femoral head in acetabulum (including tenotomy, etc); with femoral shaft shortening.	0.01	0.03	2.17
27266	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Closed treatment of post hip arthroplasty dislocation; requiring anesthesia	0.17	0.09	0.55
27267	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Closed treatment of femoral fracture, proximal end, head; without manipulation	0.00	0.00	0.36
27268	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Closed treatment of femoral fracture, proximal end, head; with manipulation	0.00	0.00	1.82
27269	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Open treatment of femoral fracture, proximal end, head, includes internal fixation, when performed	0.03	0.01	0.30
27299	Pelvis/ Hip Other Procedures	Unlisted procedure, pelvis or hip joint	0.05	0.18	3.55
27301	Femur/ Knee Incision	Incision and drainage of deep abscess, infected bursa, or hematoma, thigh or knee region.	0.22	0.24	1.07
27303	Femur/ Knee Incision	Incision, deep, with opening of bone cortex (eg, for osteomyelitis or bone	0.03	0.06	2.06

CPT Code <sup>a</sup>	CPT Code Category	<b>CPT Code Description</b>	Practitioner %	Resident %	Relative Rate
		abscess), femur or knee.			
27305	Femur/ Knee Incision	Fasciotomy, iliotibial (tenotomy), open.	0.01	0.01	0.99
27306	Femur/ Knee Incision	Tenotomy, subcutaneous, closed, adductor or hamstring, (separate procedure); single.	0.00	0.00	0.76
27307	Femur/ Knee Incision	Tenotomy, subcutaneous, closed, adductor or hamstring, (separate procedure); multiple.	0.00	0.00	2.91
27310	Femur/ Knee Incision	Arthrotomy, knee, for infection, with exploration, drainage or removal of foreign body.	0.32	0.31	0.98
27323	Femur/ Knee Excision	Biopsy, soft tissue of thigh or knee area; superficial.	0.00	0.01	2.96
27324	Femur/ Knee Excision	Biopsy, soft tissue of thigh or knee area; deep.	0.02	0.07	3.32
27325	Femur/ Knee Excision	Neurectomy, hamstring muscle	0.00	0.00	0.43
27326	Femur/ Knee Excision	Neurectomy, popliteal (gastrocnemius)	0.00	0.00	0.86
27327	Femur/ Knee Excision	Excision, tumor, thigh or knee area; subcutaneous less than 3 cm	0.02	0.03	1.59
27328	Femur/ Knee Excision	Excision, tumor, thigh or knee area; deep, subfascial, or intramuscular less than 5 cm	0.02	0.13	7.44
27329	Femur/ Knee Excision	Radical resection of tumor (eg, malignant neoplasm), soft tissue of thigh or knee area less than 5 cm	0.01	0.06	8.62
27330	Femur/ Knee Excision	Arthrotomy, knee; with synovial biopsy only.	0.01	0.00	0.69
27331	Femur/ Knee Excision	Arthrotomy, knee; with joint exploration, with or without biopsy, with or without removal of loose or foreign bodies.	0.04	0.06	1.63
27332	Femur/ Knee Excision	Arthrotomy, knee, with excision of semilunar cartilage (meniscectomy); medial OR lateral.	0.01	0.01	1.29
27333	Femur/ Knee Excision	Arthrotomy, knee, with excision of semilunar cartilage (meniscectomy); medial AND lateral.	0.00	0.00	7.38
27334	Femur/ Knee Excision	Arthrotomy, knee, with synovectomy; anterior OR posterior.	0.03	0.05	1.54
27335	Femur/ Knee Excision	Arthrotomy, knee, with	0.01	0.02	1.52

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		synovectomy; anterior AND posterior including popliteal area.			
27337	Femur/ Knee Excision	Excision, tumor, thigh or knee area; subcutaneous 3 cm or greater	0.01	0.00	0.03
27339	Femur/ Knee Excision	Excision, tumor, thigh or knee area; deep, subfascial, or intramuscular5 cm or greater	0.02	0.00	0.07
27340	Femur/ Knee Excision	Excision, prepatellar bursa.	0.06	0.03	0.47
27345	Femur/ Knee Excision	Excision of synovial cyst of popliteal space (Baker's cyst).	0.01	0.02	2.31
27347	Femur/ Knee Excision	Excision of lesion of meniscus or capsule, knee	0.02	0.01	0.47
27350	Femur/ Knee Excision	Patellectomy or hemipatellectomy.	0.02	0.02	1.06
27355	Femur/ Knee Excision	Excision or curettage of bone cyst or benign tumor of femur;.	0.02	0.05	2.06
27356	Femur/ Knee Excision	Excision or curettage of bone cyst or benign tumor of femur; with allograft.	0.01	0.03	4.36
27357	Femur/ Knee Excision	Excision or curettage of bone cyst or benign tumor of femur; with autograft (includes obtaining graft).	0.00	0.00	4.88
27358	Femur/ Knee Excision	Excision or curettage of bone cyst or benign tumor of femur; with internal fixation (list in addition to 27355, 27356, or 27357).	0.01	0.01	2.61
27360	Femur/ Knee Excision	Partial excision (craterization, saucerization, or diaphysectomy) of bone (eg, for osteomyelitis), femur, proximal tibia and/ or fibula.	0.04	0.04	0.90
27364	Femur/ Knee Excision	Radical resection of tumor (eg, malignant neoplasm), soft tissue of thigh or knee area 5 cm or greater	0.02	0.00	0.06
27365	Femur/ Knee Excision	Radical resection of tumor, bone, femur or knee.	0.02	0.06	3.40
27380	Femur/ Knee repair, Revision and/or Reconstruction	Removal of foreign body, deep, thigh region or knee area.	0.18	0.16	0.87
27381	Femur/ Knee repair, Revision and/or Reconstruction	Suture of infrapatellar tendon; primary	0.02	0.03	1.76
27385	Femur/ Knee repair, Revision and/or Reconstruction	secondary reconstruction, including fascial or tendon graft	0.21	0.18	0.83

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
27386	Femur/ Knee repair, Revision and/or Reconstruction	Suture of quadriceps or hamstring muscle rupture; primary	0.01	0.02	1.64
27390	Femur/ Knee repair, Revision and/or Reconstruction	secondary reconstruction, including fascial or tendon graft	0.00	0.00	Inf
27391	Femur/ Knee repair, Revision and/or Reconstruction	Tenotomy, open, hamstring, knee to hip; single tendon	0.00	0.01	5.00
27392	Femur/ Knee repair, Revision and/or Reconstruction	multiple tendons, one leg	0.00	0.00	4.92
27393	Femur/ Knee repair, Revision and/or Reconstruction	multiple tendons, bilateral	0.00	0.00	2.25
27394	Femur/ Knee repair, Revision and/or Reconstruction	Lengthening of hamstring tendon; single tendon	0.00	0.00	3.03
27395	Femur/ Knee repair, Revision and/or Reconstruction	multiple tendons, one leg	0.00	0.00	1.84
27396	Femur/ Knee repair, Revision and/or Reconstruction	multiple tendons, bilateral	0.00	0.00	2.03
27397	Femur/ Knee repair, Revision and/or Reconstruction	Transplant or transfer (with muscle redirection or rerouting), thigh; single tendon	0.00	0.00	2.50
27400	Femur/ Knee repair, Revision and/or Reconstruction	multiple tendons	0.00	0.00	2.62
27403	Femur/ Knee repair, Revision and/or Reconstruction	Transfer, tendon or muscle, hamstrings to femur	0.08	0.05	0.61
27405	Femur/ Knee repair, Revision and/or Reconstruction	Arthrotomy with meniscus repair, knee	0.05	0.07	1.41
27407	Femur/ Knee repair, Revision and/or Reconstruction	Repair, primary, torn ligament and/or capsule, knee; collateral	0.00	0.02	5.43
27409	Femur/ Knee repair, Revision and/or Reconstruction	cruciate	0.00	0.02	4.84
27412	Femur/ Knee repair, Revision and/or Reconstruction	collateral and cruciate ligaments	0.01	0.02	4.08
27415	Femur/ Knee repair, Revision and/or Reconstruction	Autologous chondrocyte implantation, knee	0.01	0.03	2.34
27416	Femur/ Knee repair, Revision and/or Reconstruction	Osteohondral allograft, knee, open	0.00	0.01	1.05

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
27418	Femur/ Knee repair, Revision and/or Reconstruction	Osteochondral, knee, open (includes harvesting of autografts)	0.03	0.04	1.55
27420	Femur/ Knee repair, Revision and/or Reconstruction	Anterior tibial tubercleplasty	0.03	0.03	1.23
27422	Femur/ Knee repair, Revision and/or Reconstruction	Reconstruction of dislocating patella	0.04	0.05	1.55
27424	Femur/ Knee repair, Revision and/or Reconstruction	with extensor realignment and/or muscle advancement or release	0.00	0.00	2.17
27425	Femur/ Knee repair, Revision and/or Reconstruction	with patellectomy	0.02	0.04	2.50
27427	Femur/ Knee repair, Revision and/or Reconstruction	Lateral retinacular release, open	0.09	0.09	1.01
27428	Femur/ Knee repair, Revision and/or Reconstruction	Ligamentous reconstruction (augmentation), knee; extra-articular	0.01	0.02	2.34
27429	Femur/ Knee repair, Revision and/or Reconstruction	intra-articular (open)	0.01	0.02	4.11
27430	Femur/ Knee repair, Revision and/or Reconstruction	intra-articular (open) and extra-articular	0.01	0.03	1.78
27435	Femur/ Knee repair, Revision and/or Reconstruction	Quadricepsplasty (eg, Bennett or Thompson type)	0.00	0.01	3.37
27437	Femur/ Knee repair, Revision and/or Reconstruction	Capsulotomy, posterior capsular release, knee	0.01	0.00	0.42
27438	Femur/ Knee repair, Revision and/or Reconstruction	Arthroplasty, patella; without prosthesis	0.02	0.04	2.28
27440	Femur/ Knee repair, Revision and/or Reconstruction	with prosthesis	0.00	0.00	14.97
27441	Femur/ Knee repair, Revision and/or Reconstruction	Arthoroplasty, knee, tibial plateau	0.00	0.01	33.05
27442	Femur/ Knee repair, Revision and/or Reconstruction	with debridement and partial synovectomy	0.00	0.03	7.17
27443	Femur/ Knee repair, Revision and/or Reconstruction	Arthroplasty, femoral condyles or tibial plateay(s), knee	0.00	0.01	7.24
27445	Femur/ Knee repair, Revision and/or Reconstruction	with debridement and partial synovectomy	0.01	0.04	3.38

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
27446	Femur/ Knee repair, Revision and/or Reconstruction	Arthroplasty, knee, hinge prosthesis	0.16	0.26	1.65
27447	Femur/ Knee repair, Revision and/or Reconstruction	Arthroplasty, knee, condyle and plateau; medial OR lateral compartment	3.25	6.01	1.85
27448	Femur/ Knee repair, Revision and/or Reconstruction	medial AND lateral compartments with or without parella resurfacing (total knee arthroplasty)	0.00	0.00	0.98
27450	Femur/ Knee repair, Revision and/or Reconstruction	Osteotomy, femur, shaft or supracondylar; without fixation	0.01	0.03	4.24
27454	Femur/ Knee repair, Revision and/or Reconstruction	with fixation	0.00	0.00	2.52
27455	Femur/ Knee repair, Revision and/or Reconstruction	Osteotomy, multiple, with realignment on intramedullary rod, femoral shaft	0.00	0.00	1.86
27457	Femur/ Knee repair, Revision and/or Reconstruction	Osteotomy, proximal tibia, including fibular excision or osteotomy (includes correction of genu varus [bowleg] or genu valgus [knock knee]); before epiphyseal closure	0.02	0.04	2.47
27465	Femur/ Knee repair, Revision and/or Reconstruction	after epiphyseal closure	0.00	0.00	4.24
27466	Femur/ Knee repair, Revision and/or Reconstruction	Osteoplasty, femyr;shortening	0.00	0.00	1.60
27468	Femur/ Knee repair, Revision and/or Reconstruction	lengthening	0.00	0.00	3.64
27470	Femur/ Knee repair, Revision and/or Reconstruction	combined, lengthing and shortening with femoral segment transfer	0.02	0.04	1.68
27472	Femur/ Knee repair, Revision and/or Reconstruction	Repair, nonunion or malunion, femyr, distal to head and neck: without graft	0.03	0.06	1.91
27475	Femur/ Knee repair, Revision and/or Reconstruction	with iliac or other autogenous bone graft (includes obtaining graft)	0.00	0.00	2.51
27477	Femur/ Knee repair, Revision and/or Reconstruction	Arrest, epiphyseal, any method; distal femur	0.00	0.00	0.98
27479	Femur/ Knee repair, Revision and/or Reconstruction	tibial and fibula, proximal	0.00	0.00	Inf
27485	Femur/ Knee repair,	combined distal femur,	0.00	0.00	1.98

 $Operative\ Experience\ During\ Orthopaedic\ Residency\ Compared\ with\ Early\ Practice\ in\ the\ U.S.$ 

http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
	Revision and/or Reconstruction	proximal tibial or fibula			
27486	Femur/ Knee repair, Revision and/or Reconstruction	Arrest, hemiepiphyseal, distal femur or proximal tibia or fibula	0.16	0.21	1.28
27487	Femur/ Knee repair, Revision and/or Reconstruction	Revison of total knee arthroplasty, with or without allograft; 1 component	0.30	0.49	1.61
27488	Femur/ Knee repair, Revision and/or Reconstruction	femoral and entire tibial component	0.14	0.20	1.38
27495	Femur/ Knee repair, Revision and/or Reconstruction	Removal of prosthesis, including total knee prosthesis, methylmethacrylate with or without insertion of spacer, knee	0.03	0.05	1.57
27496	Femur/ Knee repair, Revision and/or Reconstruction	Prophylactic treatment (nailing, pinning, plating,or wiring) with or without methylmethacrylate, femur	0.00	0.00	1.08
27497	Femur/ Knee repair, Revision and/or Reconstruction	Decompression fasciotomy, thigh and/or knee, one compartment (flexor or extensor or adductor);	0.00	0.00	1.45
27498	Femur/ Knee repair, Revision and/or Reconstruction	with debridement of nonviable muscle and/or nerve	0.01	0.01	1.75
27499	Femur/ Knee repair, Revision and/or Reconstruction	Decompression fasciotomy, thigh and/or knee, multiple compartments;	0.00	0.01	9.14
27506	Femur/Knee Trauma - Fracture and/ or Dislocation	with debridement of nonviable muscle and/or nerve	0.66	1.24	1.89
27507	Femur/Knee Trauma - Fracture and/ or Dislocation	Open treatment of femoral shaft fracture, with or without external fixation, with insertion of intramedullary implant, with or without cerclage and/or locking screws.	0.13	0.16	1.18
27509	Femur/Knee Trauma - Fracture and/ or Dislocation	Open treatment of femoral shaft fracture with plate/screws, with or without cerclage.	0.01	0.05	5.52
27511	Femur/Knee Trauma - Fracture and/ or Dislocation	Percutaneous skeletal fixation of femoral fracture, distal end, medial or lateral condyle, or supracondylar or transcondylar, with or without intercondylar extension, or distal femoral epiphyseal	0.16	0.16	1.01

OPERATIVE EXPERIENCE DURING ORTHOPAEDIC RESIDENCY COMPARED WITH EARLY PRACTICE IN THE U.S. http://dx.doi.org/10.2106/JBJS.17.01115 Page 77

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		separation.			
27513	Femur/Knee Trauma - Fracture and/ or Dislocation	Open treatment of femoral supracondylar or transcondylar fracture without intercondylar extension, with or without internal or external fixation.	0.14	0.21	1.57
27514	Femur/Knee Trauma - Fracture and/ or Dislocation	Open treatment of femoral supracondylar or transcondylar fracture with intercondylar extension, with or without internal or external fixation.	0.10	0.10	1.05
27519	Femur/Knee Trauma - Fracture and/ or Dislocation	Open treatment of femoral fracture, distal end, medial or lateral condyle, with or without internal or external fixation.	0.00	0.00	8.07
27524	Femur/Knee Trauma - Fracture and/ or Dislocation	Open treatment of distal femoral epiphyseal separation, with or without internal or external fixation.	0.30	0.35	1.14
27535	Femur/Knee Trauma - Fracture and/ or Dislocation	Open treatment of patellar fracture, with internal fixation and/or partial or complete patellectomy and soft tissue repair.	0.35	0.41	1.15
27536	Femur/Knee Trauma - Fracture and/ or Dislocation	Open treatment of tibial fracture, proximal (plateau); unicondylar, with or without internal or external fixation.	0.27	0.40	1.45
27540	Femur/Knee Trauma - Fracture and/ or Dislocation	Open treatment of tibial fracture, proximal (plateau); bicondylar, with or without internal fixation.	0.04	0.02	0.41
27552	Femur/Knee Trauma - Fracture and/ or Dislocation	Open treatment of intercondylar spine(s) and/or tuberosity fracture(s) of the knee, with or without internal or external fixation.	0.02	0.03	1.40
27556	Femur/Knee Trauma - Fracture and/ or Dislocation	Closed treatment of knee dislocation; requiring anesthesia.	0.01	0.01	1.90
27557	Femur/Knee Trauma - Fracture and/ or Dislocation	Open treatment of knee dislocation, with or without internal or external fixation; without primary ligamentous repair or augmentation/reconstruction.	0.00	0.01	1.87
27558	Femur/Knee Trauma - Fracture and/ or Dislocation	Open treatment of knee dislocation, with or without internal or external fixation;	0.00	0.01	2.93

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		with primary ligamentous repair.			
27562	Femur/Knee Trauma - Fracture and/ or Dislocation	Open treatment of knee dislocation, with or without internal or external fixation; with primary ligamentous repair, with augmentation/reconstruction.	0.00	0.00	1.95
27566	Femur/Knee Trauma - Fracture and/ or Dislocation	Closed treatment of patellar dislocation; requiring anesthesia.	0.00	0.01	4.20
27570	Femur/ Knee Trauma - Manipulation	Open treatment of patellar dislocation, with or without partial or total patellectomy.	0.24	0.26	1.11
27590	Femur/ Knee Amputation	Manipulation of knee joint under general anesthesia (includes application of traction or other fixation devices).	0.06	0.11	1.80
27591	Femur/ Knee Amputation	Amputation, thigh, through femur, any level;.	0.00	0.01	17.97
27592	Femur/ Knee Amputation	Amputation, thigh, through femur, any level; immediate fitting technique including first cast.	0.01	0.01	1.77
27594	Femur/ Knee Amputation	Amputation, thigh, through femur, any level; open, circular (guillotine).	0.01	0.02	1.81
27596	Femur/ Knee Amputation	Amputation, thigh, through femur, any level; secondary closure or scar revision.	0.02	0.03	1.65
27598	Femur/ Knee Amputation	Amputation, thigh, through femur, any level; reamputation.	0.01	0.02	1.60
27599	Femur/ Knee Other Procedures	Disarticulation at knee.	0.03	0.11	3.44
27600	Leg/Ankle Incision	Decompression fasciotomy, leg; anterior and/or lateral compartments only.	0.03	0.05	1.49
27601	Leg/Ankle Incision	Decompression fasciotomy, leg; posterior compartment(s) only.	0.02	0.01	0.44
27602	Leg/Ankle Incision	Decompression fasciotomy, leg; anterior and/or lateral, and posterior compartment(s).	0.10	0.12	1.25
27603	Leg/Ankle Incision	Incision and drainage, leg or ankle; deep abscess or hematoma.	0.16	0.26	1.60
27604	Leg/Ankle Incision	Incision and drainage, leg or ankle; infected bursa.	0.01	0.02	2.50
27605	Leg/Ankle Incision	Tenotomy, Achilles tendon,	0.01	0.01	0.87

CPT Code <sup>a</sup>	CPT Code Category	<b>CPT Code Description</b>	Practitioner %	Resident %	Relative Rate
		subcutaneous (separate procedure); local anesthesia.			
27606	Leg/Ankle Incision	Tenotomy, Achilles tendon, subcutaneous (separate procedure); general anesthesia.	0.05	0.11	1.95
27607	Leg/Ankle Incision	Incision, deep, with opening of bone cortex (eg, for osteomyelitis or bone abscess), leg or ankle.	0.03	0.08	2.42
27610	Leg/Ankle Incision	Arthrotomy, ankle, for infection, with exploration, drainage, or removal of foreign body.	0.07	0.06	0.88
27612	Leg/Ankle Incision	Arthrotomy, ankle, posterior capsular release, with or without Achilles tendon lengthening.	0.00	0.01	2.81
27613	Leg/Ankle Excision	Biopsy, soft tissue of leg or ankle area; superficial.	0.00	0.01	3.41
27614	Leg/Ankle Excision	Biopsy, soft tissue of leg or ankle area; deep.	0.01	0.03	3.34
27615	Leg/Ankle Excision	Radical resection of tumor (eg, malignant neoplasm), soft tissue of leg or ankle area less than 5 cm	0.00	0.02	5.06
27616	Leg/Ankle Excision	Radical resection of tumor (eg, malignant neoplasm), soft tissue of leg or ankle area 5 cm or greater	0.01	0.00	0.09
27618	Leg/Ankle Excision	Excision, tumor, leg or ankle area; subcutaneous; less than 3 cm	0.01	0.02	1.64
27619	Leg/Ankle Excision	Excision, tumor, leg or ankle area; deep, subfascial or intramuscular; less than 5 cm	0.01	0.05	4.57
27620	Leg/Ankle Excision	Arthrotomy, ankle, with joint exploration, with or without biopsy, with or without removal of loose or foreign body.	0.03	0.05	1.41
27625	Leg/Ankle Excision	Arthrotomy, ankle, with synovectomy;.	0.01	0.01	1.27
27626	Leg/Ankle Excision	Arthrotomy, ankle, with synovectomy; including tenosynovectomy.	0.01	0.01	0.51
27630	Leg/Ankle Excision	Excision of lesion of tendon sheath or capsule (eg, cyst or ganglion), leg and/or ankle.	0.03	0.03	0.82
27632	Leg/Ankle Excision	Excision, tumor, leg or ankle area; subcutaneous; 3 cm or	0.01	0.00	0.02

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		greater			
27634	Leg/Ankle Excision	Excision, tumor, leg or ankle area; deep, subfascial or intramuscular; 5 cm or greater	0.01	0.00	0.06
27635	Leg/Ankle Excision	Excision or curettage of bone cyst or benign tumor, tibia or fibula;.	0.05	0.05	0.88
27637	Leg/Ankle Excision	Excision or curettage of bone cyst or benign tumor, tibia or fibula; with autograft (includes obtaining graft).	0.00	0.01	3.46
27638	Leg/Ankle Excision	Excision or curettage of bone cyst or benign tumor, tibia or fibula; with allograft.	0.01	0.03	2.77
27640	Leg/Ankle Excision	Partial excision (craterization, saucerization, or diaphysectomy) of bone (eg, for osteomyelitis or exostosis); tibia.	0.07	0.08	1.13
27641	Leg/Ankle Excision	Partial excision (craterization, saucerization, or diaphysectomy) of bone (eg, for osteomyelitis or exostosis); fibula.	0.02	0.02	0.83
27645	Leg/Ankle Excision	Radical resection of tumor, bone; tibia.	0.00	0.01	2.90
27646	Leg/Ankle Excision	Radical resection of tumor, bone; fibula.	0.00	0.00	2.14
27647	Leg/Ankle Excision	Radical resection of tumor, bone; talus or calcaneus.	0.00	0.00	1.44
27650	Leg/ Ankle Repair, Revision, and/or Reconstruction	Repair, primary, open or percutaneous, ruptured Achilles tendon;	0.38	0.26	0.69
27652	Leg/ Ankle Repair, Revision, and/or Reconstruction	with graft (includes obtaining graft)	0.02	0.03	1.54
27654	Leg/ Ankle Repair, Revision, and/or Reconstruction	Repair, secondary, Achilles tendon, with or without graft	0.08	0.06	0.75
27656	Leg/ Ankle Repair, Revision, and/or Reconstruction	Repair, fascial defect of leg	0.00	0.00	1.21
27658	Leg/ Ankle Repair, Revision, and/or Reconstruction	Repair, flexor tendon, leg; primary, without graft, each tendon	0.06	0.03	0.58
27659	Leg/ Ankle Repair, Revision, and/or Reconstruction	secondary, with or without graft, each tendon	0.03	0.01	0.35
27664	Leg/ Ankle Repair, Revision, and/or Reconstruction	Repair, extensor tendon, leg; primary, without graft, each tendon	0.03	0.03	0.91

CPT Code <sup>a</sup>	CPT Code Category	<b>CPT Code Description</b>	Practitioner %	Resident %	Relative Rate
27665	Leg/ Ankle Repair, Revision, and/or Reconstruction	secondary, with or without graft, each tendon	0.02	0.01	0.26
27675	Leg/ Ankle Repair, Revision, and/or Reconstruction	Repair, dislocating peroneal tendons; without fibular osteotomy	0.04	0.05	1.18
27676	Leg/ Ankle Repair, Revision, and/or Reconstruction	with fibular osteotomy	0.02	0.02	0.88
27680	Leg/ Ankle Repair, Revision, and/or Reconstruction	Tenolysis, flexor or extensor tendon, leg and/or ankle; single, each tendon	0.11	0.05	0.45
27681	Leg/ Ankle Repair, Revision, and/or Reconstruction	multiple tendons (through separate incision[s])	0.00	0.01	1.08
27685	Leg/ Ankle Repair, Revision, and/or Reconstruction	Lengthening or shortening of tendon, leg or ankle; single tendon	0.06	0.07	1.14
27686	Leg/ Ankle Repair, Revision, and/or Reconstruction	multiple tendons (through same incision[s])	0.00	0.02	5.58
27687	Leg/ Ankle Repair, Revision, and/or Reconstruction	Gastrocnemius recession	0.15	0.14	0.91
27690	Leg/ Ankle Repair, Revision, and/or Reconstruction	Transfer or transplant of single tendon (with muscle redirection or rerouting); superficial	0.03	0.04	1.29
27691	Leg/ Ankle Repair, Revision, and/or Reconstruction	deep	0.17	0.14	0.83
27692	Leg/ Ankle Repair, Revision, and/or Reconstruction	each additional tendon	0.01	0.02	1.36
27695	Leg/ Ankle Repair, Revision, and/or Reconstruction	Repair, primary, disrupted ligament, ankle; collateral	0.09	0.09	1.07
27696	Leg/ Ankle Repair, Revision, and/or Reconstruction	both collateral ligaments	0.04	0.02	0.65
27698	Leg/ Ankle Repair, Revision, and/or Reconstruction	Repair, secondary, disrupted ligament, ankle, collateral (eg, Watson-Jones procedure)	0.12	0.08	0.69
27700	Leg/ Ankle Repair, Revision, and/or Reconstruction	Arthroplasty, ankle	0.00	0.01	3.56
27702	Leg/ Ankle Repair, Revision, and/or Reconstruction	with implant (total ankle)	0.03	0.05	1.72
27703	Leg/ Ankle Repair, Revision, and/or	revision, total ankle	0.00	0.01	3.28

27742 Leg/ Ankle Repair,

http://dx.doi.org/10.2106/JBJS.17.01115 Page 82

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
	Reconstruction				
	Leg/ Ankle Repair,				
27704	Revision, and/or	Removla of ankle implant	0.01	0.13	11.98
	Reconstruction				
	Leg/ Ankle Repair,				
27705	Revision, and/or	Osteotomy; tibial	0.02	0.06	2.92
	Reconstruction				
	Leg/ Ankle Repair,				
27707	Revision, and/or	fibula	0.02	0.03	1.78
	Reconstruction				
	Leg/ Ankle Repair,				
27709	Revision, and/or	tibia and fibula	0.01	0.03	2.76
	Reconstruction				
	Leg/ Ankle Repair,	manulain la moithe na ali ann ann an t			
27712	Revision, and/or	multiple, with realignment	0.00	0.00	5.24
	Reconstruction	on intramedullary rod			
	Leg/ Ankle Repair,	Octoonlast, tilda and filoda			
27715	Revision, and/or	Osteoplasty, tibia and fibula,	0.01	0.01	1.86
	Reconstruction	lengthening or shortening			
	Leg/ Ankle Repair,	Denois of securios on			
27720	Revision, and/or	Repair of nonunion or	0.03	0.06	1.81
	Reconstruction	malunion, tibia: without graft			
	Leg/ Ankle Repair,	with sliding graft			
27722	Revision, and/or		0.00	0.01	5.81
	Reconstruction				
	Leg/ Ankle Repair,				
27724	Revision, and/or	with iliac or other autograft	0.04	0.10	2.25
	Reconstruction	(includes obtaining graft)			
	Leg/ Ankle Repair,	1			
27725	Revision, and/or	by synostosis, with fibula,	0.00	0.01	26.84
	Reconstruction	any method			
	Leg/ Ankle Repair,	Repair of fibula nonunion			
27726	Revision, and/or	and/or malunion with internal	0.02	0.01	0.61
	Reconstruction	fixation			
	Leg/ Ankle Repair,	Depair of composite!			
27727	Revision, and/or	Repair of congenital	0.00	0.00	Inf
	Reconstruction	pseudarthrosis, tibia			
	Leg/ Ankle Repair,	Arrest, epiphyseal			
27730	Revision, and/or	(epiphysiodesis), open; distal	0.00	0.00	Inf
	Reconstruction	tibia			
	Leg/ Ankle Repair,				
27732	Revision, and/or	distal fibula	0.00	0.00	0.64
	Reconstruction				
	Leg/ Ankle Repair,				
27734	Revision, and/or	distal tibia and fibula	0.00	0.00	0.96
	Reconstruction				
	Log/Ankla Banair	Arrest, epiphyseal			
27740	Leg/ Ankle Repair,	(epiphysiodesis), any method,	0.00	0.00	Inf
27740	Revision, and/or	combined, proximal and distal	0.00	0.00	Inf
	Reconstruction	tibia and fibula			
27742	Log/Ankla Banair	and distal famur	0.00	0.00	Inf

and distal femur

0.00

0.00

Inf

OPERATIVE EXPERIENCE DURING ORTHOPAEDIC RESIDENCY COMPARED WITH EARLY PRACTICE IN THE U.S. http://dx.doi.org/10.2106/JBJS.17.01115 Page 83

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
	Revision, and/or Reconstruction				
27745	Leg/ Ankle Repair, Revision, and/or Reconstruction	Prophylactic treatment (nailing, pinning, plating or wiring) with or without methylmethacrylate, tibia	0.01	0.01	2.36
27756	Leg/ Ankle Trauma - Fracture and/or Dislocation	Percutaneous skeletal fixation of tibial shaft fracture (with or without fibular fracture) (eg, pins or screws).	0.01	0.11	8.05
27758	Leg/ Ankle Trauma - Fracture and/or Dislocation	Open treatment of tibial shaft fracture, (with or without fibular fracture) with plate/screws, with or without cerclage.	0.15	0.24	1.59
27759	Leg/ Ankle Trauma - Fracture and/or Dislocation	Open treatment of tibial shaft fracture (with or without fibular fracture) by intramedullary implant, with or without interlocking screws and/or cerclage.	0.77	1.15	1.49
27766	Leg/ Ankle Trauma - Fracture and/or Dislocation	Open treatment of medial malleolus fracture, with or without internal or external fixation.	0.24	0.25	1.05
27769	Leg/ Ankle Trauma - Fracture and/or Dislocation	Open treatment of posterior malleous fracture,includes internal fixation, when performed	0.03	0.01	0.23
27784	Leg/ Ankle Trauma - Fracture and/or Dislocation	Open treatment of proximal fibula or shaft fracture, with or without internal or external fixation.	0.06	0.05	0.79
27792	Leg/ Ankle Trauma - Fracture and/or Dislocation	Open treatment of distal fibular fracture (lateral malleolus), with or without internal or external fixation.	0.98	0.75	0.76
27814	Leg/ Ankle Trauma - Fracture and/or Dislocation	Open treatment of bimalleolar ankle fracture, with or without internal or external fixation.	0.90	1.11	1.23
27822	Leg/ Ankle Trauma - Fracture and/or Dislocation	Open treatment of trimalleolar ankle fracture, with or without internal or external fixation, medial and/or lateral malleolus; without fixation of posterior lip.	0.45	0.25	0.56
27823	Leg/ Ankle Trauma - Fracture and/or Dislocation	Open treatment of trimalleolar ankle fracture, with or without internal or external fixation, medial and/or lateral malleolus; with fixation of	0.16	0.15	0.96

Operative Experience During Orthopaedic Residency Compared with Early Practice in the U.S. http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		posterior lip.			
27826	Leg/ Ankle Trauma - Fracture and/or Dislocation	Open treatment of fracture of weight bearing articular surface/ portion of distal tibia (eg, pilon or tibial plafond), with internal or external fixation; of fibula only.	0.04	0.04	1.06
27827	Leg/ Ankle Trauma - Fracture and/or Dislocation	Open treatment of fracture of weight bearing articular surface/ portion of distal tibia (eg, pilon or tibial plafond), with internal or external fixation; of tibia only.	0.19	0.24	1.25
27828	Leg/ Ankle Trauma - Fracture and/or Dislocation	Open treatment of fracture of weight bearing articular surface/ portion of distal tibia (eg, pilon or tibial plafond), with internal or external fixation; of both tibia and fibula.	0.19	0.28	1.48
27829	Leg/ Ankle Trauma - Fracture and/or Dislocation	Open treatment of distal tibiofibular joint (syndesmosis) disruption, with or without internal or external fixation.	0.73	0.48	0.66
27831	Leg/ Ankle Trauma - Fracture and/or Dislocation	Closed treatment of proximal tibiofibular joint dislocation; requiring anesthesia.	0.00	0.00	0.82
27832	Leg/ Ankle Trauma - Fracture and/or Dislocation	Open treatment of proximal tibiofibular joint dislocation, with or without internal or external fixation, or with excision of proximal fibula.	0.00	0.01	1.19
27842	Leg/ Ankle Trauma - Fracture and/or Dislocation	Closed treatment of ankle dislocation; requiring anesthesia, with or without percutaneous skeletal fixation.	0.02	0.07	3.16
27846	Leg/ Ankle Trauma - Fracture and/or Dislocation	Open treatment of ankle dislocation, with or without percutaneous skeletal fixation; without repair or internal fixation.	0.01	0.03	2.03
27848	Leg/ Ankle Trauma - Fracture and/or Dislocation	Open treatment of ankle dislocation, with or without percutaneous skeletal fixation; with repair or internal or external fixation.	0.03	0.09	3.46
27870	Leg/ Ankle Arthrodesis	Arthrodesis, ankle, any method.	0.09	0.22	2.39
27871	Leg/ Ankle Arthrodesis	Arthrodesis, tibiofibular joint, proximal or distal.	0.01	0.02	2.23
27880	Leg/ Ankle Amputation	Amputation, leg, through tibia	0.16	0.22	1.33

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		and fibula;.			
27881	Leg/ Ankle Amputation	Amputation, leg, through tibia and fibula; with immediate fitting technique including application of first cast.	0.01	0.02	2.26
27882	Leg/ Ankle Amputation	Amputation, leg, through tibia and fibula; open, circular (guillotine).	0.03	0.03	1.13
27884	Leg/ Ankle Amputation	Amputation, leg, through tibia and fibula; secondary closure or scar revision.	0.02	0.03	1.53
27886	Leg/ Ankle Amputation	Amputation, leg, through tibia and fibula; re-amputation.	0.04	0.05	1.35
27888	Leg/ Ankle Amputation	Amputation, ankle, through malleoli of tibia and fibula (Syme, Pirogoff type procedures), with plastic closure and resection of nerves.	0.00	0.01	3.39
27889	Leg/ Ankle Amputation	Ankle disarticulation.	0.00	0.00	1.46
27892	Leg/ Ankle Other Procedures	Decompression fasciotomy, leg; anterior and/or lateral compartments only, with debridement of nonviable muscle and/or nerve	0.01	0.01	1.50
27893	Leg/ Ankle Other Procedures	Decompression fasciotomy, leg; posterior compartments only, with debridement of nonviable muscle and/or nerve	0.00	0.00	1.41
27894	Leg/ Ankle Other Procedures	Decompression fasciotomy, leg; anterior and/or lateral compartments only, with debridement of nonviable muscle and/or nerve	0.02	0.05	3.08
27899	Leg/ Ankle Other Procedures	Unlisted procedure, leg or ankle	0.02	0.12	7.22
28001	Foot/ Toes Incision	Incision and drainage, infected bursa, foot.	0.00	0.02	3.94
28002	Foot/ Toes Incision	Deep dissection below fascia, for deep infection of foot, with or without tendon sheath involvement; single bursal space, specify.	0.04	0.03	0.76
28003	Foot/ Toes Incision	Deep dissection below fascia, for deep infection of foot, with or without tendon sheath involvement; multiple areas.	0.03	0.07	2.76
28005	Foot/ Toes Incision	Incision, deep, with opening of bone cortex (eg, for osteomyelitis or bone	0.04	0.05	1.27

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		abscess), foot.			
28008	Foot/ Toes Incision	Fasciotomy, foot and/or toe.	0.01	0.02	1.80
28010	Foot/ Toes Incision	Tenotomy, subcutaneous, toe; single.	0.01	0.02	2.76
28011	Foot/ Toes Incision	Tenotomy, subcutaneous, toe; multiple.	0.01	0.02	1.93
28020	Foot/ Toes Incision	Arthrotomy, with exploration, drainage, or removal of loose or foreign body; intertarsal or tarsometatarsal joint.	0.01	0.01	0.72
28022	Foot/ Toes Incision	Arthrotomy, with exploration, drainage, or removal of loose or foreign body; metatarsophalangeal joint.	0.01	0.01	0.65
28024	Foot/ Toes Incision	Arthrotomy, with exploration, drainage, or removal of loose or foreign body; interphalangeal joint.	0.00	0.01	1.04
28035	Foot/ Toes Incision	Neurectomy of intrinsic musculature of foot.	0.02	0.03	1.28
28039	Foot/ Toes Excision	Tarsal tunnel release (posterior tibial nerve decompression).	0.01	0.00	0.02
28041	Foot/ Toes Excision	Excision, tumor, foot; subcutaneous; 1.5 cm or greater	0.01	0.00	0.02
28043	Foot/ Toes Excision	Excision, tumor, foot; deep, subfascial, intramuscular; 1.5 cm or greater	0.01	0.03	1.88
28045	Foot/ Toes Excision	Excision, tumor, foot; subcutaneous; less than1.5 cm	0.01	0.03	3.77
28046	Foot/ Toes Excision	Excision, tumor, foot; deep, subfascial, intramuscular; less than 1.5 cm	0.00	0.00	2.55
28050	Foot/ Toes Excision	Radical resection of tumor (eg, malignant neoplasm), soft tissue of foot; 3 cm or greater	0.00	0.00	1.16
28052	Foot/ Toes Excision	Arthrotomy for synovial biopsy; intertarsal or tarsometatarsal joint.	0.00	0.00	4.17
28054	Foot/ Toes Excision	Arthrotomy for synovial biopsy; metatarsophalangeal joint.	0.00	0.00	1.78
28055	Foot/ Toes Excision	Arthrotomy for synovial biopsy; interphalangeal joint.	0.00	0.00	2.89
28060	Foot/ Toes Excision	Neurectomy, intrinsic musculature of foot	0.02	0.03	1.12
28062	Foot/ Toes Excision	Fasciectomy, excision of plantar fascia; partial (separate procedure).	0.00	0.00	1.43

CPT Code <sup>a</sup>	CPT Code Category	<b>CPT Code Description</b>	Practitioner %	Resident %	Relative Rate
28070	Foot/ Toes Excision	Fasciectomy, excision of plantar fascia; radical (separate procedure).	0.00	0.00	0.69
28072	Foot/ Toes Excision	Synovectomy; intertarsal or tarsometatarsal joint, each.	0.00	0.01	1.18
28080	Foot/ Toes Excision	Synovectomy; metatarsophalangeal joint, each.	0.04	0.06	1.52
28086	Foot/ Toes Excision	Excision of interdigital (Morton) neuroma, single, each.	0.02	0.01	0.61
28088	Foot/ Toes Excision	Synovectomy, tendon sheath, foot; flexor.	0.00	0.00	1.65
28090	Foot/ Toes Excision	Synovectomy, tendon sheath, foot; extensor.	0.04	0.04	1.03
28092	Foot/ Toes Excision	Excision of lesion of tendon or fibrous sheath or capsule (including synovectomy) (cyst or ganglion); foot.	0.01	0.01	1.00
28100	Foot/ Toes Excision	Excision of lesion of tendon or fibrous sheath or capsule (including synovectomy) (cyst or ganglion); toes.	0.02	0.02	1.03
28102	Foot/ Toes Excision	Excision or curettage of bone cyst or benign tumor, talus or calcaneus;.	0.00	0.00	5.78
28103	Foot/ Toes Excision	Excision or curettage of bone cyst or benign tumor, talus or calcaneus; with iliac or other autograft (includes obtaining graft).	0.00	0.01	1.71
28104	Foot/ Toes Excision	Excision or curettage of bone cyst or benign tumor, talus or calcaneus; with allograft.	0.01	0.01	1.44
28106	Foot/ Toes Excision	Excision or curettage of bone cyst or benign tumor, tarsal or metatarsal bones, except talus or calcaneus;.	0.00	0.00	1.26
28107	Foot/ Toes Excision	Excision or curettage of bone cyst or benign tumor, tarsal or metatarsal bones, except talus or calcaneus; with iliac or other autograft (includes obtaining graft).	0.00	0.00	2.33
28108	Foot/ Toes Excision	Excision or curettage of bone cyst or benign tumor, tarsal or metatarsal bones, except talus or calcaneus; with allograft.	0.01	0.01	2.03
28110	Foot/ Toes Excision	Excision or curettage of bone cyst or benign tumor,	0.01	0.02	1.83

CPT Code <sup>a</sup>	CPT Code Category	<b>CPT Code Description</b>	Practitioner %	Resident %	Relative Rate
		phalanges of foot.			
28111	Foot/ Toes Excision	Ostectomy, partial excision, fifth metatarsal head (bunionette) (separate procedure).	0.00	0.01	7.91
28112	Foot/ Toes Excision	Ostectomy, complete excision; first metatarsal head.	0.01	0.04	2.73
28113	Foot/ Toes Excision	Ostectomy, complete excision; other metatarsal head (second, third or fourth).	0.01	0.02	2.52
28114	Foot/ Toes Excision	Ostectomy, complete excision; fifth metatarsal head.	0.01	0.01	1.46
28116	Foot/ Toes Excision	Ostectomy, complete excision; all metatarsal heads, with partial proximal phalangectomy, excluding first metatarsal (Clayton type procedure).	0.01	0.01	1.65
28118	Foot/ Toes Excision	Ostectomy, excision of tarsal coalition.	0.07	0.06	0.84
28119	Foot/ Toes Excision	Ostectomy, calcaneus;.	0.01	0.02	1.66
28120	Foot/ Toes Excision	Ostectomy, calcaneus; for spur, with or without plantar fascial release.	0.11	0.07	0.62
28122	Foot/ Toes Excision	Partial excision (craterization, saucerization, sequestrectomy, or diaphysectomy) of bone (eg, for osteomyelitis or talar bossing), talus or calcaneus.	0.06	0.05	0.84
28124	Foot/ Toes Excision	Partial excision (craterization, saucerization, or diaphysectomy) of bone (eg, for osteomyelitis or tarsal bossing), tarsal or metatarsal bone, except talus or calcaneus.	0.02	0.02	1.01
28126	Foot/ Toes Excision	Partial excision (craterization, saucerization, or diaphysectomy) of bone (eg, for osteomyelitis or dorsal bossing), phalanx of toe.	0.00	0.01	2.66
28130	Foot/ Toes Excision	Resection, partial or complete, phalangeal base, single toe, each.	0.00	0.00	5.63
28140	Foot/ Toes Excision	Talectomy (astragalectomy).	0.00	0.00	1.06
28150	Foot/ Toes Excision	Metatarsectomy.	0.00	0.00	4.92
28153	Foot/ Toes Excision	Phalangectomy of toe, single, each.	0.00	0.01	10.03
28160	Foot/ Toes Excision	Resection, head of phalanx, toe.	0.01	0.01	1.58

CPT Code <sup>a</sup>	CPT Code Category	<b>CPT Code Description</b>	Practitioner %	Resident %	Relative Rate
28171	Foot/ Toes Excision	Hemiphalangectomy or interphalangeal joint excision, toe, single, each.	0.00	0.00	1.50
28173	Foot/ Toes Excision	Radical resection of tumor, bone; tarsal (except talus or calcaneus).	0.00	0.00	Inf
28175	Foot/ Toes Excision	Radical resection of tumor, bone; metatarsal.	0.00	0.00	Inf
28200	Foot/ Toes Repair, Revision and/or Reconstruction	Radical resection of tumor, bone; phalanx of toe.	0.03	0.02	0.73
28202	Foot/ Toes Repair, Revision and/or Reconstruction	Repair, tendon, flexor, foot; primary or secondary, without free graft, each tendon	0.00	0.00	5.78
28208	Foot/ Toes Repair, Revision and/or Reconstruction	Repair, tendon, flexor, foot; secondary with free graft, each tendon (includes obtaining graft)	0.04	0.03	0.99
28210	Foot/ Toes Repair, Revision and/or Reconstruction	Repair, tendon, extensor, foot; primary or secondary, each tendon	0.00	0.00	2.06
28220	Foot/ Toes Repair, Revision and/or Reconstruction	Repair, tendon, extensor, foot; secondary with free graft, each tendon (includes obtaining graft)	0.00	0.01	3.41
28222	Foot/ Toes Repair, Revision and/or Reconstruction	Tenolysis, flexor, foot; single tendon	0.00	0.01	3.18
28225	Foot/ Toes Repair, Revision and/or Reconstruction	Tenolysis, flexor, foot; multiple tendons	0.01	0.01	1.27
28226	Foot/ Toes Repair, Revision and/or Reconstruction	Tenolysis, extensor, foot; single tendon	0.00	0.00	3.06
28230	Foot/ Toes Repair, Revision and/or Reconstruction	Tenolysis, extensor, foot; multiple tendons	0.02	0.03	2.03
28232	Foot/ Toes Repair, Revision and/or Reconstruction	Tenotomy, open, tendon flexor; foot, single or multiple tendon(s)	0.04	0.03	0.95
28234	Foot/ Toes Repair, Revision and/or Reconstruction	Tenotomy, open, tendon flexor; toe single tendon	0.03	0.05	1.67
28238	Foot/ Toes Repair, Revision and/or Reconstruction	Tenotomy, open, extensor, foot or toe, each tendon	0.02	0.03	1.45
28240	Foot/ Toes Repair, Revision and/or Reconstruction	Reconstruction (advancement), posterior tibial tendon with excision of accessory tarsal navicular bone	0.00	0.00	0.84
28250	Foot/ Toes Repair, Revision and/or Reconstruction	Tenotomy, lengthening, or release, abductor hallucis muscle	0.02	0.02	1.18
28260	Foot/ Toes Repair, Revision and/or Reconstruction	Division of plantar fascia and muscle (eg, Steindler stripping)	0.00	0.00	1.43
28261	Foot/ Toes Repair, Revision	Capsulotomy, midfoot; medial	0.00	0.00	3.46

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
	and/or Reconstruction	release only			
28262	Foot/ Toes Repair, Revision and/or Reconstruction	Capsulotomy, midfoot; with tendon lengthening	0.00	0.00	Inf
28264	Foot/ Toes Repair, Revision and/or Reconstruction	Capsulotomy, midfoot; extensive, including posterior talotibial capsulotomy and tendon(s) lengthening	0.00	0.00	2.32
28270	Foot/ Toes Repair, Revision and/or Reconstruction	Capsulotomy, midtarsal (eg, Heyman type procedure)	0.08	0.08	1.03
28272	Foot/ Toes Repair, Revision and/or Reconstruction	Capsulotomy; metatarsophalangeal joint, with or without tenorrhaphy, each joint	0.00	0.02	9.30
28280	Foot/ Toes Repair, Revision and/or Reconstruction	Capsulotomy; interphalangeal joint, each joint	0.00	0.00	16.47
28285	Foot/ Toes Repair, Revision and/or Reconstruction	Syndactylization, toes (eg, webbing or Kelikian type procedure)	0.19	0.39	2.01
28286	Foot/ Toes Repair, Revision and/or Reconstruction	Correction, hammertoe (eg, interphalangeal fusion, partial or total phalangectomy)	0.00	0.00	Inf
28288	Foot/ Toes Repair, Revision and/or Reconstruction	Correction, cock-up fifth toe, with plastic skin closure (eg, Ruiz-Mora type procedure)	0.02	0.06	2.60
28289	Foot/ Toes Repair, Revision and/or Reconstruction	Ostectomy, partial, exostectomy or condylectomy, metatarsal head, each metatarsal head	0.09	0.08	0.95
28290	Foot/ Toes Repair, Revision and/or Reconstruction	Hallux rigidus correction with cheilectomy, debridement and capsular release of the first metatarsophalangeal joint	0.02	0.03	1.49
28292	Foot/ Toes Repair, Revision and/or Reconstruction	Hallux rigidus correction with cheilectomy, debridement and capsular release of the first metatarsophalangeal joint, with implant	0.05	0.09	1.82
28293	Foot/ Toes Repair, Revision and/or Reconstruction	Correction, hallux valgus, with sesamoidectomy, when performed; with resection of proximal phalanx base, when performed, any method	0.00	0.00	0.67
28294	Foot/ Toes Repair, Revision and/or Reconstruction	Correction, hallux valgus, with sesamoidectomy, when performed; with proximal metatarsal osteotomy, any method	0.00	0.00	Inf
28296	Foot/ Toes Repair, Revision and/or Reconstruction	Correction, hallux valgus, with sesamoidectomy, when performed; with distal metatarsal osteotomy, any	0.09	0.21	2.37

OPERATIVE EXPERIENCE DURING ORTHOPAEDIC RESIDENCY COMPARED WITH EARLY PRACTICE IN THE U.S. http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		method			
28297	Foot/ Toes Repair, Revision and/or Reconstruction	Correction, hallux valgus, with sesamoidectomy, when performed; with first metatarsal and medial cuneiform joint arthrodesis, any method	0.03	0.06	2.11
28298	Foot/ Toes Repair, Revision and/or Reconstruction	Correction, hallux valgus, with sesamoidectomy, when performed; with phalanx osteotomy, any method	0.02	0.04	2.03
28299	Foot/ Toes Repair, Revision and/or Reconstruction	Correction, hallux valgus, with sesamoidectomy, when performed; with double osteotomy, any method	0.03	0.02	0.77
28300	Foot/ Toes Repair, Revision and/or Reconstruction	Osteotomy; calcaneus (eg, Dwyer or Chambers type procedure), with or without internal fixation	0.10	0.16	1.50
28302	Foot/ Toes Repair, Revision and/or Reconstruction	Osteotomy; talus	0.00	0.01	3.85
28304	Foot/ Toes Repair, Revision and/or Reconstruction	Osteotomy, tarsal bones, other than calcaneus or talus	0.01	0.02	1.58
28305	Foot/ Toes Repair, Revision and/or Reconstruction	Osteotomy, tarsal bones, other than calcaneus or talus; with autograft	0.00	0.01	2.66
28306	Foot/ Toes Repair, Revision and/or Reconstruction	Osteotomy, with or without lengthening, shortening or angular correction, metatarsal; first metatarsal	0.05	0.05	1.15
28307	Foot/ Toes Repair, Revision and/or Reconstruction	Osteotomy, with or without lengthening, shortening or angular correction, metatarsal; first metatarsal with autograft (other than first toe)	0.00	0.01	2.93
28308	Foot/ Toes Repair, Revision and/or Reconstruction	Osteotomy, with or without lengthening, shortening or angular correction, metatarsal; first metatarsal with autograft (other than first toe)	0.11	0.11	1.05
28309	Foot/ Toes Repair, Revision and/or Reconstruction	Osteotomy, with or without lengthening, shortening or angular correction, metatarsal; multiple	0.00	0.01	2.70
28310	Foot/ Toes Repair, Revision and/or Reconstruction	Osteotomy, shortening, angular or rotational correction; proximal phalanx, first toe	0.01	0.03	1.78
28312	Foot/ Toes Repair, Revision and/or Reconstruction	Osteotomy, shortening, angular or rotational correction; other phalanges,	0.00	0.03	8.94

OPERATIVE EXPERIENCE DURING ORTHOPAEDIC RESIDENCY COMPARED WITH EARLY PRACTICE IN THE U.S. http://dx.doi.org/10.2106/JBJS.17.01115 Page 92

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		any toe			
28313	Foot/ Toes Repair, Revision and/or Reconstruction	Reconstruction, angular deformity of toe, soft tissue procedures only	0.03	0.02	0.57
28315	Foot/ Toes Repair, Revision and/or Reconstruction	Sesamoidectomy, first toe (separate procedure)	0.02	0.02	0.69
28320	Foot/ Toes Repair, Revision and/or Reconstruction	Repair, nonunion or malunion; tarsal bones	0.01	0.01	1.03
28322	Foot/ Toes Repair, Revision and/or Reconstruction	Repair, nonunion or malunion; metatarsal, with or without bone graft	0.02	0.01	0.57
28340	Foot/ Toes Repair, Revision and/or Reconstruction	Reconstruction, toe, macrodactyly; soft tissue resection	0.00	0.00	Inf
28341	Foot/ Toes Repair, Revision and/or Reconstruction	Reconstruction, toe, macrodactyly; requiring bone resection	0.00	0.00	Inf
28344	Foot/ Toes Repair, Revision and/or Reconstruction	Reconstruction, toe(s); polydactyly	0.00	0.00	Inf
28345	Foot/ Toes Repair, Revision and/or Reconstruction	Reconstruction, toe(s); syndactyly, with or without skin graft(s), each web	0.00	0.00	Inf
28360	Foot/ Toes Repair, Revision and/or Reconstruction	Reconstruction, cleft foot	0.00	0.00	0.75
28406	Foot/ Toes Trauma - Fracture and/ or Dislocation	Percutaneous skeletal fixation of calcaneal fracture, with manipulation	0.03	0.04	1.44
28415	Foot/ Toes Trauma - Fracture and/ or Dislocation	Open treatment of calcaneal fracture, includes internal fixation, when performed	0.20	0.23	1.14
28420	Foot/ Toes Trauma - Fracture and/ or Dislocation	Open treatment of calcaneal fracture, includes internal fixation, when performed; with primary iliac or other autogenous bone graft	0.00	0.02	5.87
28436	Foot/ Toes Trauma - Fracture and/ or Dislocation	Percutaneous skeletal fixation of talus fracture, with manipulation	0.00	0.01	2.50
28445	Foot/ Toes Trauma - Fracture and/ or Dislocation	Open treatment of talus fracture, includes internal fixation, when performed; with primary iliac or other autogenous bone graft	0.12	0.16	1.42
28446	Foot/ Toes Trauma - Fracture and/ or Dislocation	Open osteochondral allograft, talus (includes obtaining graft)	0.00	0.01	3.58
28450	Foot/ Toes Trauma - Fracture and/ or Dislocation	Treatment of tarsal bone fracture (except talus and calcaneus); without manipulation, each	0.01	0.02	1.15
28455	Foot/ Toes Trauma - Fracture and/ or Dislocation	Treatment of tarsal bone fracture (except talus and	0.01	0.01	1.21

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		calcaneus); with manipulation, each			
28456	Foot/ Toes Trauma - Fracture and/ or Dislocation	Percutaneous skeletal fixation of tarsal bone fracture (except talus and calcaneus), with manipulation, each	0.00	0.01	3.22
28465	Foot/ Toes Trauma - Fracture and/ or Dislocation	Open treatment of tarsal bone fracture (except talus and calcaneus), includes internal fixation, when performed	0.05	0.06	1.25
28476	Foot/ Toes Trauma - Fracture and/ or Dislocation	Percutaneous skeletal fixation of metatarsal fracture, with manipulation	0.05	0.08	1.48
28485	Foot/ Toes Trauma - Fracture and/ or Dislocation	Open treatment of metatarsal fracture, includes internal fixation, when performed	0.15	0.18	1.16
28496	Foot/ Toes Trauma - Fracture and/ or Dislocation	Percutaneous skeletal fixation of fracture of great toe, phalanx or phalanges, with manipulation	0.02	0.02	0.93
28505	Foot/ Toes Trauma - Fracture and/ or Dislocation	Open treatment of fracture, great toe, phalanx or phalanges, includes internal fixation, when performed	0.03	0.02	0.76
28525	Foot/ Toes Trauma - Fracture and/ or Dislocation	Open treatment of fracture, phalanx or phalanges, other than great toe, includes internal fixation, when performed, each	0.02	0.02	1.18
28531	Foot/ Toes Trauma - Fracture and/ or Dislocation	Open treatment of sesamoid fracture, with or without internal fixation	0.00	0.00	2.39
28546	Foot/ Toes Trauma - Fracture and/ or Dislocation	Percutaneous skeletal fixation of tarsal bone dislocation, other than talotarsal, with manipulation	0.00	0.01	1.49
28555	Foot/ Toes Trauma - Fracture and/ or Dislocation	Open treatment of tarsal bone dislocation, includes internal fixation, when performed	0.03	0.04	1.09
28576	Foot/ Toes Trauma - Fracture and/ or Dislocation	Percutaneous skeletal fixation of talotarsal joint dislocation, with manipulation.	0.01	0.01	1.00
28585	Foot/ Toes Trauma - Fracture and/ or Dislocation	Open treatment of talotarsal joint dislocation, with or without internal or external fixation.	0.02	0.03	1.23
28606	Foot/ Toes Trauma - Fracture and/ or Dislocation	Percutaneous skeletal fixation of tarsometatarsal joint dislocation, with manipulation.	0.03	0.03	1.02
28615	Foot/ Toes Trauma - Fracture and/ or Dislocation	Open treatment of tarsometatarsal joint	0.14	0.15	1.09

http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		dislocation, with or without			
		internal or external fixation.			
28636	Foot/ Toes Trauma - Fracture and/ or Dislocation	Percutaneous skeletal fixation of metatarsophalangeal joint dislocation, with manipulation.	0.01	0.01	2.15
28645	Foot/ Toes Trauma - Fracture and/ or Dislocation	Open treatment of metatarsophalangeal joint dislocation, with or without internal or external fixation.	0.02	0.03	1.94
28666	Foot/ Toes Trauma - Fracture and/ or Dislocation	Percutaneous skeletal fixation of interphalangeal joint dislocation, with manipulation.	0.00	0.01	2.45
28675	Foot/ Toes Trauma - Fracture and/ or Dislocation	Open treatment of interphalangeal joint dislocation, with or without internal or external fixation.	0.01	0.01	1.40
28705	Foot/ Toes Arthrodesis	Pantalar arthrodesis.	0.01	0.03	4.50
28715	Foot/ Toes Arthrodesis	Triple arthrodesis.	0.04	0.11	2.89
28725	Foot/ Toes Arthrodesis	Subtalar arthrodesis.	0.09	0.19	2.22
28730	Foot/ Toes Arthrodesis	Arthrodesis, midtarsal or tarsometatarsal, multiple or transverse;.	0.08	0.09	1.16
28735	Foot/ Toes Arthrodesis	Arthrodesis, midtarsal or tarsometatarsal, multiple or transverse; with osteotomy as for flatfoot correction.	0.01	0.03	5.09
28737	Foot/ Toes Arthrodesis	Arthrodesis, midtarsal navicular-cuneiform, with tendon lengthening and advancement (Miller type procedure).	0.00	0.00	1.71
28740	Foot/ Toes Arthrodesis	Arthrodesis, midtarsal or tarsometatarsal, single joint.	0.05	0.07	1.40
28750	Foot/ Toes Arthrodesis	Arthrodesis, great toe; metatarsophalangeal joint.	0.12	0.16	1.30
28755	Foot/ Toes Arthrodesis	Arthrodesis, great toe; interphalangeal joint.	0.02	0.03	2.01
28760	Foot/ Toes Arthrodesis	Arthrodesis, great toe, interphalangeal joint, with extensor hallucis longus transfer to first metatarsal neck (Jones type procedure).	0.00	0.01	2.10
28800	Foot/ Toes Amputation	Amputation, foot; midtarsal (Chopart type procedure).	0.01	0.01	1.32
28805	Foot/ Toes Amputation	Amputation, foot; transmetatarsal.	0.04	0.06	1.49
28810	Foot/ Toes Amputation	Amputation, metatarsal, with toe, single.	0.07	0.07	1.08
28820	Foot/ Toes Amputation	Amputation, toe; metatarsophalangeal joint.	0.10	0.12	1.19
28825	Foot/ Toes Amputation	Amputation, toe;	0.06	0.07	1.05

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		interphalangeal joint.			
29805	Shoulder Other Procedures	Arthroscopy, shoulder, diagnostic, with or without synovial biopsy	0.13	0.49	3.71
29806	Shoulder Arthroscopy	Arthroscopy, shoulder, surgical;capsulorrhaphy	0.52	0.28	0.54
29807	Shoulder Arthroscopy	with repair of SLAP lesion	0.33	0.52	1.56
29819	Shoulder Arthroscopy	with removal of loose or foreign body	0.09	0.06	0.65
29820	Shoulder Arthroscopy	with synovectomy, partial	0.06	0.09	1.54
29821	Shoulder Arthroscopy	with synovectomy, complete	0.04	0.02	0.59
29822	Shoulder Arthroscopy	with debridement, limited	0.86	0.56	0.65
29823	Shoulder Arthroscopy	with debridement, extensive	0.96	0.45	0.47
29824	Shoulder Arthroscopy	with distal claviculectomy including distal articular surface (Mumford procedure)	1.03	0.70	0.68
29825	Shoulder Arthroscopy	with lysis and resection of adhesions, with or without manipulation	0.15	0.14	0.89
29826	Shoulder Arthroscopy	with decompression of subacromial space with partial acromioplasty, with coracoacromial ligament release, whem performed	2.61	2.31	0.89
29827	Shoulder Arthroscopy	with rotator cuff repair	2.22	1.62	0.73
29828	Shoulder Arthroscopy	with biceps tenodesis	0.46	0.14	0.30
29830	Humerus/ Elbow Arthroscopy	Arthroscopy, elbow, diagnostic, with or without synovial biopsy	0.00	0.02	4.61
29834	Humerus/ Elbow Arthroscopy	Arthroscopy, elbow, surgical; with removal of loose or foreign body	0.04	0.04	1.22
29835	Humerus/ Elbow Arthroscopy	with synovectomy, partial	0.01	0.01	1.38
29836	Humerus/ Elbow Arthroscopy	with synovectomy, complete	0.01	0.01	1.32
29837	Humerus/ Elbow Arthroscopy	with debridement, limited	0.02	0.03	1.27
29838	Humerus/ Elbow Arthroscopy	with debridement, extensive	0.04	0.05	1.34
29840	Forearm/ Wrist Arthroscopy	Arthroscopy, wrist, diagnostic, with or without synovial biopsy	0.02	0.06	3.53
29843	Forearm/ Wrist Arthroscopy	Arthroscopy, wrist, surgical; for infection, lavage and drainage	0.00	0.00	2.16
29844	Forearm/ Wrist Arthroscopy	with synovectomy, partial	0.03	0.04	1.48
29845	Forearm/ Wrist Arthroscopy	with synovectomy, complete	0.01	0.01	0.90

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
29846	Forearm/ Wrist Arthroscopy	with excision and/or repair of triangular fibrocartilage and/or joint debridement	0.14	0.17	1.19
29847	Forearm/ Wrist Arthroscopy	with internternal fixation for fracture or instability	0.01	0.01	1.38
29848	Forearm/ Wrist Arthroscopy	Endoscopy, wrist, surgical, with release of transverse carpal ligament	0.57	0.23	0.41
29850	Femur/ Knee Arthroscopy	Arthroscopically aided treatment of intercondylar spine(s) and/or tuberosity fracture(s) of the knee, with or without manipulation; without internal or external fixation	0.00	0.00	1.27
29851	Femur/ Knee Arthroscopy	with internal or external fixation	0.00	0.01	1.20
29855	Femur/ Knee Arthroscopy	Arthroscopically aided treatment of tibial fracture, proximal (plateau); unicondylar, includes internal fixation, when perforned	0.01	0.01	0.77
29856	Femur/ Knee Arthroscopy	bicondylar, in cludes internal fixation, when performed	0.00	0.00	2.97
29860	Pelvis/ Hip Arthroscopy	Arthroscopy,hip, diagnostic,with or without synovial biopsy	0.01	0.03	2.69
29861	Pelvis/ Hip Arthroscopy	Arthroscopy, hip, surgical; with removal of loose or foreign body	0.02	0.01	0.72
29862	Pelvis/ Hip Arthroscopy	with debridement/shaving of articular cartilage (chondroplasty), abrasion arthroplasty, and/or resection of labrum	0.08	0.20	2.61
29863	Pelvis/ Hip Arthroscopy	with synovectomy	0.03	0.03	1.07
29866	Femur/ Knee Arthroscopy	Arthroscopy, knee, surgical; osteochondral autograft(s) (includes harvesting of the autograft[s])	0.01	0.02	2.70
29867	Femur/ Knee Arthroscopy	osteochodral allograft	0.00	0.01	3.59
29868	Femur/ Knee Arthroscopy	meniscal translplantation, medial or lateral	0.00	0.02	4.11
29870	Femur/ Knee Arthroscopy	Arthroscopy, knee, diagnostic, with or without synovial biopsy	0.17	0.81	4.89
29871	Femur/ Knee Arthroscopy	Arthroscopy, knee, surgical; for infection, lavage and drainage	0.17	0.12	0.71
29873	Femur/ Knee Arthroscopy	with lateral release	0.09	0.15	1.71
29874	Femur/ Knee Arthroscopy	for removal of loose or foreign body	0.36	0.28	0.78

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
29875	Femur/ Knee Arthroscopy	with synovectomy, limited	0.43	0.42	0.98
29876	Femur/ Knee Arthroscopy	with synovectomy, major, 2 or more compartments	0.23	0.25	1.12
29877	Femur/ Knee Arthroscopy	debridement/shaving of articular cartilage	0.96	1.51	1.57
29879	Femur/ Knee Arthroscopy	abrasion arthoplasty (includes chondroplsty where necessary) or multiple drilling or microfracture	0.29	0.37	1.28
29880	Femur/ Knee Arthroscopy	with meniscectomy (medial AND lateral, including any meniscal shaving) including debridement/ shaving of articular cartilage, same or separate compartment(s), when performed	0.84	0.87	1.03
29881	Femur/ Knee Arthroscopy	with meniscectomy (medial OR lateral, including any meniscal shaving) including debridement/ shaving of articular cartilage, same or separate compartment(s), when performed	3.39	3.41	1.01
29882	Femur/ Knee Arthroscopy	with meniscus repair (medial OR lateral)	0.50	0.41	0.82
29883	Femur/ Knee Arthroscopy	with meniscus repair (medial AND lateral)	0.04	0.07	1.61
29884	Femur/ Knee Arthroscopy	with lysis of adhesions, with or with out manipulation	0.08	0.11	1.41
29885	Femur/ Knee Arthroscopy	driling for ostiochondritis dissecans with bone grafting, withour without internal fixation (including debridement of base of lesion)	0.01	0.02	2.54
29886	Femur/ Knee Arthroscopy	drilling for intact ostiochondritis dissecans lesion	0.01	0.03	4.59
29887	Femur/ Knee Arthroscopy	drilling for intact ostiochondritis dissecans lesion with internal fixation	0.02	0.03	1.44
29888	Femur/ Knee Arthroscopy	Arthroscopically aided anterior cruciate ligament repair/ augmentation or reconstruction	1.43	1.56	1.09
29889	Femur/ Knee Arthroscopy	Arthroscopically aided posterior cruciate ligament repair/ augmentation or reconstruction	0.02	0.06	2.57
29891	Leg/ Ankle Arthroscopy	Arthroscopy, ankle, surgical,	0.12	0.05	0.42

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		excision of osteochondral defect of talus and/or tibia, including drilling of the defect			
29892	Leg/ Ankle Arthroscopy	Arthroscopically aided repair of large osteochondritis dissecans lesion, talar dome fracture, or tibial plafond fracture, with or without internal fixation	0.01	0.01	1.10
29893	Leg/ Ankle Arthroscopy	Endoscopic plantar fasciotomy	0.01	0.00	0.18
29894	Leg/ Ankle Arthroscopy	Arthroscopy, ankle, surgical; with removal of loose or foreign body	0.04	0.05	1.41
29895	Leg/ Ankle Arthroscopy	with synovectomy, partial	0.03	0.05	1.62
29897	Leg/ Ankle Arthroscopy	with debridement, limited	0.07	0.13	1.91
29898	Leg/ Ankle Arthroscopy	with debridement, extensive	0.18	0.15	0.86
29899	Leg/ Ankle Arthroscopy	with ankle arthrodesis	0.01	0.02	2.68
29900	Foot/ Toes Arthroscopy	Arthroscopy, metatarsophalangeal joint, diagnostic, includes synovial biopsy	0.00	0.00	4.71
29901	Foot/ Toes Arthroscopy	Arthroscopy, metatarsophalangeal joint, surgical; with debridement	0.00	0.01	5.03
29902	Foot/ Toes Arthroscopy	with reduction of displaced ulnar collateral ligament	0.00	0.00	Inf
29904	Foot/ Toes Arthroscopy	Arthroscopy, subtalar joint, surgical; with removal of loose or foreign body	0.00	0.00	1.25
29905	Foot/ Toes Arthroscopy	with synovectomy	0.00	0.00	0.70
29906	Foot/ Toes Arthroscopy	with debridement	0.01	0.00	0.78
29907	Foot/ Toes Arthroscopy	with subtalar arthrodesis	0.00	0.00	0.86
29914	Pelvis/ Hip Arthroscopy	with femoroplasty	0.25	0.00	0.02
29915	Pelvis/ Hip Arthroscopy	with acetabuloplasty	0.14	0.00	0.02
29916	Pelvis/ Hip Arthroscopy	with labral repair	0.25	0.00	0.01
29999	Foot/ Toes Arthroscopy	unlisted procedure, arthroscopy	0.23	0.08	0.33
63001	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decompression of Neural Elements or Excision of Herniated Intervertebral Disc	Laminectomy with exploration and /or decompression of spinal cord and/or cauda equina, without facetectomy, foraminotomy or discectomy (e.g., spinal stenosis), 1 or 2 vertebral segments, cervical	0.01	0.03	3.30
63003	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for	Laminectomy with exploration and /or decompression of spinal cord and/or cauda equina, without facetectomy,	0.01	0.01	1.73

OPERATIVE EXPERIENCE DURING ORTHOPAEDIC RESIDENCY COMPARED WITH EARLY PRACTICE IN THE U.S. http://dx.doi.org/10.2106/JBJS.17.01115 Page 99

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
	Exploration/Decompression of Neural Elements or Excision of Herniated Intervertebral Disc	foraminotomy or discectomy (e.g., spinal stenosis), 1 or 2 vertebral segments, thoracic			
63005	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decompression of Neural Elements or Excision of Herniated Intervertebral Disc	Laminectomy with exploration and /or decompression of spinal cord and/or cauda equina, without facetectomy, foraminotomy or discectomy (e.g., spinal stenosis), 1 or 2 vertebral segments, lumbar, except for spondylolistheseis	0.03	0.20	6.96
63011	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decompression of Neural Elements or Excision of Herniated Intervertebral Disc	Laminectomy with exploration and/or decompression of spinal cord and/or cauda equina, without facetectomy, foraminotomy or discectomy (eg, spinal stenosis), 1 or 2 vertebral segments; sacral	0.01	0.01	1.60
63012	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decompression of Neural Elements or Excision of Herniated Intervertebral Disc	Laminectomy with removal of abnormal facets and/or pars inter-articularis with decompression of cauda equina and nerve roots for spondylolisthesis, lumbar (Gill type procedure)	0.04	0.03	0.94
63015	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decompression of Neural Elements or Excision of Herniated Intervertebral Disc	Laminectomy with exploration and /or decompression of spinal cord and /or cauda equina, without facetectomy, foraminotomy or discectomy (e.g., spinal stenosis), more than 2 vertebral segments, cervical	0.03	0.04	1.58
63016	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decompression of Neural Elements or Excision of Herniated Intervertebral Disc	Laminectomy with exploration and /or decompression of spinal cord and /or cauda equina, without facetectomy, foraminotomy or discectomy (e.g., spinal stenosis), more than 2 vertebral segments, thoracic	0.00	0.01	4.07
63017	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decompression of Neural Elements or Excision of Herniated	Laminectomy with exploration and /or decompression of spinal cord and /or cauda equina, without facetectomy, foraminotomy or discectomy (e.g., spinal stenosis), more than 2 vertebral segments,	0.01	0.16	12.57

Operative Experience During Orthopaedic Residency Compared with Early Practice in the U.S. http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
	Intervertebral Disc	lumbar			
63020	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decompression of Neural Elements or Excision of Herniated Intervertebral Disc	Laminotomy (hemilaminectomy). with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or excision of herniated intervertebral disc, including open and edoscopically assisted approaches, 1 interspace, cervical	0.03	0.02	0.89
63030	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decompression of Neural Elements or Excision of Herniated Intervertebral Disc	Laminotomy (hemilaminectomy). with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or excision of herniated intervertebral disc, including open and edoscopically assisted approaches, 1 interspace, lumbar	0.79	0.34	0.43
63035	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decompression of Neural Elements or Excision of Herniated Intervertebral Disc	Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or excision of herniated intervertebral disc; each additional interspace, cervical or lumbar (List separately in addition to code for primary procedure)	0.09	0.07	0.86
63040	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decompression of Neural Elements or Excision of Herniated Intervertebral Disc	Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or excision of herniated intervertebral disc, reexploration, single interspace; cervical	0.01	0.01	1.48
63042	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decompression of Neural Elements or Excision of Herniated	Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or excision of herniated intervertebral	0.12	0.13	1.07

http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
	Intervertebral Disc	disc, reexploration, single interspace; lumbar			
63043	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decompression of Neural Elements or Excision of Herniated Intervertebral Disc	Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or excision of herniated intervertebral disc, reexploration, single interspace; each additional cervical interspace (List separately in addition to code for primary procedure)	0.00	0.01	7.59
63044	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decompression of Neural Elements or Excision of Herniated Intervertebral Disc	Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or excision of herniated intervertebral disc, reexploration, single interspace; each additional lumbar interspace (List separately in addition to code for primary procedure)	0.02	0.06	2.96
63045	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decompression of Neural Elements or Excision of Herniated Intervertebral Disc	Laminectomy, facetectomy and foraminotomy (unilateral or bilateral with decompression of spinal cord, cauda equina and /or nerve root(s), (e.g., spinal or lateral recess stenosis), single vertebral segment, cervical	0.10	0.04	0.44
63046	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decompression of Neural Elements or Excision of Herniated Intervertebral Disc	Laminectomy, facetectomy and foraminotomy (unilateral or bilateral with decompression of spinal cord, cauda equina and/or nerve root[s], [eg, spinal or lateral recess stenosis]), single vertebral segment; thoracic	0.03	0.02	0.62
63047	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for	Laminectomy, facetectomy and foraminotomy (unilateral or bilateral with decompression of spinal cord,	1.05	0.52	0.49

Operative Experience During Orthopaedic Residency Compared with Early Practice in the U.S. http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
	Exploration/Decompression of Neural Elements or Excision of Herniated Intervertebral Disc	cauda equina and /or nerve root(s), (e.g., spinal or lateral recess stenosis), single vertebral segment, lumbar			
63048	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decompression of Neural Elements or Excision of Herniated Intervertebral Disc	Laminectomy, facetectomy and foraminotomy (unilateral or bilateral with decompression of spinal cord, cauda equina and/or nerve root[s], [eg, spinal or lateral recess stenosis]), single vertebral segment; each additional segment, cervical, thoracic, or lumbar (List separately in addition to code for primary procedure)	0.61	0.46	0.75
63050	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decompression of Neural Elements or Excision of Herniated Intervertebral Disc	Laminoplasty, cervical, with decompression of the spinal cord, 2 or more vertebral segments;	0.01	0.00	0.61
63051	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decompression of Neural Elements or Excision of Herniated Intervertebral Disc	Laminoplasty, cervical, with decompression of the spinal cord, 2 or more vertebral segments; with reconstruction of the posterior bony elements (including the application of bridging bone graft and non-segmental fixation devices [eg, wire, suture, mini-plates], when performed)	0.02	0.02	1.11
63075	Nervous System Spine & Spinal Cord Anterior or Anterolateral Approach for Extradural Exploration/Decompression	Discectomy, anterior, with decompression of spinal cord and/or nerve root(s), including osteophytectomy; cervical, single interspace	0.06	0.25	4.22
63076	Nervous System Spine & Spinal Cord Anterior or Anterolateral Approach for Extradural Exploration/Decompression	Discectomy, anterior, with decompression of spinal cord and/or nerve root(s), including osteophytectomy; cervical, each additional interspace (List separately in addition to code for primary procedure)	0.02	0.16	6.84
63077	Nervous System Spine & Spinal Cord Anterior or Anterolateral Approach for	Discectomy, anterior, with decompression of spinal cord and/or nerve root(s),	0.00	0.01	4.49

http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
	Extradural Exploration/Decompression	including osteophytectomy; thoracic, single interspace			
63078	Nervous System Spine & Spinal Cord Anterior or Anterolateral Approach for Extradural Exploration/Decompression	Discectomy, anterior, with decompression of spinal cord and/or nerve root(s), including osteophytectomy; thoracic, each additional interspace (List separately in addition to code for primary procedure)	0.00	0.01	13.96
63081	Nervous System Spine & Spinal Cord Anterior or Anterolateral Approach for Extradural Exploration/Decompression	Vertebral corpectomy (vertebral body resection), partial or complete, anterior approach with decompression of spinal cord and/or nerve root(s); cervical, single segment	0.06	0.05	0.82
63082	Nervous System Spine & Spinal Cord Anterior or Anterolateral Approach for Extradural Exploration/Decompression	Vertebral corpectomy (vertebral body resection), partial or complete, anterior approach with decompression of spinal cord and/or nerve root(s); cervical, each additional segment (List separately in addition to code for primary procedure)	0.02	0.03	1.57
63085	Nervous System Spine & Spinal Cord Anterior or Anterolateral Approach for Extradural Exploration/Decompression	Vertebral corpectomy (vertebral body resection), partial or complete, transthoracic approach with decompression of spinal cord and/or nerve root(s); thoracic, single segment	0.01	0.01	1.02
63086	Nervous System Spine & Spinal Cord Anterior or Anterolateral Approach for Extradural Exploration/Decompression	Vertebral corpectomy (vertebral body resection), partial or complete, transthoracic approach with decompression of spinal cord and/or nerve root(s); thoracic, each additional segment	0.00	0.00	1.54
63087	Nervous System Spine & Spinal Cord Anterior or Anterolateral Approach for Extradural Exploration/Decompression	Vertebral corpectomy (vertebral body resection), partial or complete, combined thoracolumbar approach with decompression of spinal cord, cauda equina or nerve root(s), lower thoracic or lumbar; single segment	0.00	0.01	2.55
63088	Nervous System Spine & Spinal Cord Anterior or Anterolateral Approach for	Vertebral corpectomy (vertebral body resection), partial or complete, combined	0.00	0.01	3.21

Operative Experience During Orthopaedic Residency Compared with Early Practice in the U.S. http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
	Extradural Exploration/Decompression	thoracolumbar approach with decompression of spinal cord, cauda equina or nerve root(s), lower thoracic or lumbar; each additional segment (List separately in addition to code for primary procedure)			
63090	Nervous System Spine & Spinal Cord Anterior or Anterolateral Approach for Extradural Exploration/Decompression	Vertebral corpectomy (vertebral body resection), partial or complete, transperitoneal or retroperitoneal approach with decompression of spinal cord, cauda equina or nerve root(s), lower thoracic, lumbar, or sacral; single segment	0.01	0.01	0.86
63091	Nervous System Spine & Spinal Cord Anterior or Anterolateral Approach for Extradural Exploration/Decompression	Vertebral corpectomy (vertebral body resection), partial or complete, transperitoneal or retroperitoneal approach with decompression of spinal cord, cauda equina or nerve root(s), lower thoracic, lumbar, or sacral; each additional segment (List separately in addition to code for primary procedure)	0.00	0.00	1.45
64702	Nervous System Spine & Spinal Cord Neuroplasty	Neuroplasty; digital, 1 or both, same digit	0.04	0.02	0.60
64704	Nervous System Spine & Spinal Cord Neuroplasty	Neuroplasty; nerve of hand or foot	0.02	0.02	1.55
64708	Nervous System Spine & Spinal Cord Neuroplasty	Neuroplasty, major peripheral nerve, arm or leg, open; other than specified	0.08	0.09	1.09
64712	Nervous System Spine & Spinal Cord Neuroplasty	Neuroplasty, major peripheral nerve, arm or leg, open; sciatic nerve	0.02	0.03	1.54
64713	Nervous System Spine & Spinal Cord Neuroplasty	Neuroplasty, major peripheral nerve, arm or leg, open; brachial plexus	0.01	0.02	2.64
64714	Nervous System Spine & Spinal Cord Neuroplasty	Neuroplasty, major peripheral nerve, arm or leg, open; lumbar plexus	0.00	0.00	0.67
64718	Nervous System Spine & Spinal Cord Neuroplasty	Neuroplasty and/or transposition; ulnar nerve at elbow	0.77	0.50	0.65
64719	Nervous System Spine & Spinal Cord Neuroplasty	Neuroplasty and/or transposition; ulnar nerve at wrist	0.07	0.05	0.77

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
64721	Nervous System Spine & Spinal Cord Neuroplasty	Neuroplasty and/or transposition; median nerve at carpal tunnel	3.21	1.99	0.62
64722	Nervous System Spine & Spinal Cord Neuroplasty	Decompression; unspecified nerve(s) (specify)	0.02	0.05	2.68
64726	Nervous System Spine & Spinal Cord Neuroplasty	Decompression; plantar digital nerve	0.00	0.00	2.65
64727	Nervous System Spine & Spinal Cord Neuroplasty	Internal neurolysis, requiring use of operating microscope (List separately in addition to code for neuroplasty) (Neuroplasty includes external neurolysis)	0.01	0.02	2.63
64831	Nervous System Spine & Spinal Cord Neurorrhaphy	Suture of digital nerve, hand or foot; 1 nerve	0.20	0.12	0.63
64832	Nervous System Spine & Spinal Cord Neurorrhaphy	Suture of digital nerve, hand or foot; each additional digital nerve (List separately in addition to code for primary procedure)	0.02	0.04	2.05
64834	Nervous System Spine & Spinal Cord Neurorrhaphy	Suture of 1 nerve; hand or foot, common sensory nerve	0.03	0.02	0.71
64835	Nervous System Spine & Spinal Cord Neurorrhaphy	Suture of 1 nerve; median motor thenar	0.00	0.01	1.76
64836	Nervous System Spine & Spinal Cord Neurorrhaphy	Suture of 1 nerve; ulnar motor	0.01	0.01	1.73
64837	Nervous System Spine & Spinal Cord Neurorrhaphy	Suture of each additional nerve, hand or foot (List separately in addition to code for primary procedure)	0.00	0.00	1.47
64840	Nervous System Spine & Spinal Cord Neurorrhaphy	Suture of posterior tibial nerve	0.00	0.00	0.56
64856	Nervous System Spine & Spinal Cord Neurorrhaphy	Suture of major peripheral nerve, arm or leg, except sciatic; including transposition	0.02	0.02	0.81
64857	Nervous System Spine & Spinal Cord Neurorrhaphy	Suture of major peripheral nerve, arm or leg, except sciatic; without transposition	0.05	0.04	0.95
64859	Nervous System Spine & Spinal Cord Neurorrhaphy	Suture of each additional major peripheral nerve (List separately in addition to code for primary procedure)	0.01	0.01	0.81
64861	Nervous System Spine & Spinal Cord Neurorrhaphy	Suture of nerve; requiring extensive mobilization, or transposition of nerve (List separately in addition to code for nerve suture)	0.00	0.00	7.17
64874	Nervous System Spine & Spinal Cord Neurorrhaphy	Suture of nerve; requiring extensive mobilization, or transposition of nerve (List	0.00	0.01	4.57

Copyright © by The Journal of Bone and Joint Surgery, Incorporated Kohring et al. Operative Experience During Orthopaedic Residency Compared with Early Practice in the U.S. http://dx.doi.org/10.2106/JBJS.17.01115 Page 106

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		separately in addition to code for nerve suture)			

<sup>&</sup>lt;sup>a</sup> Sorted by this column.

Copyright © by The Journal of Bone and Joint Surgery, Incorporated Kohring et al. Operative Experience During Orthopaedic Residency Compared with Early Practice in the U.S. http://dx.doi.org/10.2106/JBJS.17.01115 Page 107

Appendix Table 6. All CPT Codes Used in the Pediatric Data Analysis Listed with Corresponding CPT Code Descriptions Listed by CPT Code Numeric Order

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
10060	Integumentary System Incision & Drainage	Incision and drainage of abscess; simple or single	0.10	0.06	0.55
10061	Integumentary System Incision & Drainage	Incision and drainage of abscess; complicated or multiple	0.08	0.04	0.46
10080	Integumentary System Incision & Drainage	Incision and drainage of pilonidal cyst; simple or single	0.00	0.00	Inf
10120	Integumentary System Incision & Drainage	Incision and removal of foreign body, subcutaneous tissues; simple	0.18	0.04	0.23
10121	Integumentary System Incision & Drainage	Incision and removal of foreign body, subcutaneous tissues; complicated	0.12	0.03	0.28
10140	Integumentary System Incision & Drainage	Incision and drainage of hematoma, seroma or fluid collection	0.04	0.03	0.67
10160	Integumentary System Incision & Drainage	Puncture aspiration of abscess, hematoma, bulla, or cyst	0.00	0.01	2.08
10180	Integumentary System Incision & Drainage	Incision and drainage, complex, postoperative wound infection	0.16	0.13	0.83
11000	Integumentary System Debridement	Debridement of extensive eczematous or infected skin; up to 10% of body surface	0.00	0.00	0.67
11001	Integumentary System Debridement	Debridement of extensive eczematous or infected skin; each additional 10% of the body surface, or part thereof (List separately in addition to code for primary procedure)	0.00	0.00	Inf
11004	Integumentary System Debridement	Debridement of skin, subcutaneous tissue, muscle, and fascia for necrotizing soft tissue infection; external genitalia and perineum	0.00	0.00	Inf
11005	Integumentary System Debridement	Debridement of skin, subcutaneous tissue, muscle, and fascia for necrotizing soft tissue infection; abdominal wall, with or without fascial closure	0.00	0.00	Inf
11006	Integumentary System Debridement	Debridement of skin, subcutaneous tissue, muscle, and fascia for necrotizing soft tissue infection; external genitalia, perineum, and abdominal wall, with or without	0.00	0.00	Inf

http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
11010	Integumentary System - Incision/Excision	fascial closure  Debridement including removal of foreign material at the site of an open fracture and/or an open dislocation (eg, excisional debridement); skin and subcutaneous tissues	0.35	0.20	0.57
11011	Integumentary System - Incision/Excision	Debridement including removal of foreign material at the site of an open fracture and/or an open dislocation (eg, excisional debridement); skin, subcutaneous tissue, muscle fascia, and muscle	0.23	0.24	1.03
11012	Integumentary System - Incision/Excision	Debridement including removal of foreign material at the site of an open fracture and/or an open dislocation (eg, excisional debridement); skin, subcutaneous tissue, muscle fascia, muscle, and bone	2.26	0.91	0.40
11040	Integumentary System Debridement		0.01	0.02	2.24
11041	Integumentary System Debridement		0.00	0.04	14.61
11042	Integumentary System - Incision/Excision	Debridement, subcutaneous tissue (includes epidermis and dermis, if performed); first 20 sq cm or less	0.50	0.21	0.42
11043	Integumentary System - Incision/Excision	Debridement, muscle and/or fascia (includes epidermis, dermis, and subcutaneous tissue, if performed); first 20 sq cm or less	0.78	0.43	0.55
11044	Integumentary System - Incision/Excision	Debridement, bone (includes epidermis, dermis, subcutaneous tissue, muscle and/or fascia, if performed); first 20 sq cm or less	0.79	0.77	0.98
11045	Integumentary System Debridement	Debridement, subcutaneous tissue (includes epidermis and dermis, if performed); each additional 20 square cm, or part thereof 20 sq cm or less	0.02	0.00	0.04
11046	Integumentary System Debridement	Debridement, muscle and/or fascia (includes epidermis, dermis, and subcutaneous;	0.09	0.00	0.00

http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		each additional 20 square cm, or part thereof 20 sq cm or less tissue, if performed); first 20 sq cm or less			
11047	Integumentary System Debridement	Debridement, muscle and/or fascia (includes epidermis, dermis, and subcutaneous; each additional 20 square cm, or part thereof	0.06	0.00	0.01
11400	Integumentary System Excision-Benign	Excision, benign lesion including margins, except skin tag, trunk, arms or legs; excise diameter 0.5 cm or less	0.02	0.01	0.65
11401	Integumentary System Excision-Benign	Excision, benign lesion including margins, except skin tag, trunk, arms or legs; excised diameter 0.6 to 1.0 cm	0.01	0.00	0.30
11402	Integumentary System Excision-Benign	Excision, benign lesion including margins, except skin tag, trunk, arms or legs; excised diameter 1.1 to 2.0 cm	0.01	0.01	1.13
11403	Integumentary System Excision-Benign	Excision, benign lesion including margins, except skin tag, trunk, arms or legs; excised diameter 2.1 to 3.0 cm	0.02	0.01	0.57
11404	Integumentary System Excision-Benign	Excision, benign lesion including margins, except skin tag, trunk, arms or legs; excised diameter 3.1 to 4.0 cm	0.01	0.01	0.96
11406	Integumentary System Excision-Benign	Excision, benign lesion including margins, except skin tag, trunk, arms or legs; excised diameter over 4.0 cm	0.02	0.01	0.57
11420	Integumentary System Excision-Benign	Excision, benign lesion including margins, except skin tag, scalp, neck, hands, feet, genitalia; excised diameter 0.5 cm or less	0.02	0.01	0.58
11421	Integumentary System Excision-Benign	Excision, benign lesion including margins, except skin tag, scalp, neck, hands, feet, genitalia	0.01	0.01	0.80
11422	Integumentary System Excision-Benign	Excision, benign lesion including margins, except skin tag, scalp, neck, hands, feet, genitalia	0.01	0.01	0.87

http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
11423	Integumentary System Excision-Benign	Excision, benign lesion including margins, except skin tag, scalp, neck, hands, feet, genitalia	0.00	0.01	2.00
11424	Integumentary System Excision-Benign	Excision, benign lesion including margins, except skin tag, scalp, neck, hands, feet, genitalia	0.00	0.00	Inf
11426	Integumentary System Excision-Benign	Excision, benign lesion including margins, except skin tag, scalp, neck, hands, feet, genitalia	0.00	0.00	Inf
11440	Integumentary System Excision-Benign	Excision, other benign lesion including margins, except skin tag, face, ears, eyelids, nose, lips, mucous membrane; excised diameter	0.00	0.00	Inf
11441	Integumentary System Excision-Benign	Excision, other benign lesion including margins, except skin tag, face, ears, eyelids, nose, lips, mucous membrane; excised diameter	0.00	0.00	Inf
11442	Integumentary System Excision-Benign	Excision, other benign lesion including margins, except skin tag, face, ears, eyelids, nose, lips, mucous membrane; excised diameter	0.00	0.00	Inf
11443	Integumentary System Excision-Benign	Excision, other benign lesion including margins, except skin tag, face, ears, eyelids, nose, lips, mucous membrane; excised diameter	0.00	0.00	Inf
11444	Integumentary System Excision-Benign	Excision, other benign lesion including margins, except skin tag, face, ears, eyelids, nose, lips, mucous membrane; excised diameter	0.00	0.00	Inf
11446	Integumentary System Excision-Benign	Excision, other benign lesion including margins, except skin tag, face, ears, eyelids, nose, lips, mucous membrane; excised diameter	0.00	0.00	Inf
11760	Integumentary System - Incision/Excision	20 sq cm or less	0.66	0.29	0.44
11900	Integumentary System Introduction	tissue, if performed); first 20 sq cm or less	0.00	0.00	Inf
11971	Integumentary System Introduction	Removal of tissue expander(s) without insertion of prosthesis	0.00	0.00	0.45
11981	Integumentary System Introduction	Insertion, non-biodegradable drug delivery implant	0.07	0.02	0.22
11982	Integumentary System	Removal, non-biodegradable	0.05	0.01	0.13

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
	Introduction	drug delivery implant			
11983	Integumentary System Introduction	Removal with reinsertion, non- biodegradable drug delivery implant	0.03	0.00	0.15
12001	Integumentary System Repair-Simple	Simple repair of superficial wounds of scalp, neck, axillae, external genitalia, trunk and/ or extremeities; 2.5 cm or less	0.10	0.06	0.58
12002	Integumentary System Repair-Simple	Simple repair of superficial wounds of scalp, neck, axillae, external genitalia, trunk and/ or extremeities; 2.6 - 7.5 cm	0.09	0.05	0.53
12004	Integumentary System Repair-Simple	Simple repair of superficial wounds of scalp, neck, axillae, external genitalia, trunk and/ or extremeities; 7.6 - 12.5 cm	0.03	0.02	0.59
12005	Integumentary System Repair-Simple	Simple repair of superficial wounds of scalp, neck, axillae, external genitalia, trunk and/ or extremeities; 12.6 - 20.0 cm	0.01	0.01	0.79
12006	Integumentary System Repair-Simple	Simple repair of superficial wounds of scalp, neck, axillae, external genitalia, trunk and/ or extremeities; 20.1 - 30.0 cm	0.00	0.00	1.78
12007	Integumentary System Repair-Simple	Simple repair of superficial wounds of scalp, neck, axillae, external genitalia, trunk and/ or extremeities; over 30 cm	0.00	0.00	1.34
12011	Integumentary System Repair-Simple	Simple repair of superficial wounds of scalp, neck, axillae, external genitalia, trunk and/ or extremeities; over 30 cm	0.00	0.00	0.52
12013	Integumentary System Repair-Simple	Simple repair of superficial wounds of face, ears, eyelids, nose, lips, and/or mucous membranes; 2.6 to 5.0 cm	0.00	0.00	Inf
12015	Integumentary System Repair-Simple	Simple repair of superficial wounds of face, ears, eyelids, nose, lips, and/or mucous membranes; 5.1 to 7.5 cm	0.00	0.00	Inf
12017	Integumentary System Repair-Simple	Simple repair of superficial wounds of face, ears, eyelids, nose, lips, and/or mucous membranes; 7.6 to 12.5 cm	0.00	0.00	Inf
12018	Integumentary System Repair-Simple	Simple repair of superficial wounds of face, ears, eyelids, nose, lips, and/or mucous membranes; 12.6 to 20.0 cm	0.00	0.00	Inf
12020	Integumentary System Repair-Simple	Treatment of superficial wound dehiscence; simple	0.05	0.01	0.20

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		closure			
12021	Integumentary System Repair-Simple	Treatment of superficial wound dehiscence; with packing	0.00	0.00	0.74
12031	Integumentary System Repair-Intermediate	Repair, intermediate, wounds of scalp, axillae, trunk and/or extremities excluding hands and feel; 2.5 cm or less	0.05	0.02	0.30
12032	Integumentary System Repair-Intermediate	Repair, intermediate, wounds of scalp, axillae, trunk and/or extremities excluding hands and feel; 2.6 to 7.5 cm	0.09	0.04	0.41
12034	Integumentary System Repair-Intermediate	Repair, intermediate, wounds of scalp, axillae, trunk and/or extremities excluding hands and feel; 7.6 to 12.5 cm	0.06	0.03	0.60
12035	Integumentary System Repair-Intermediate	Repair, intermediate, wounds of scalp, axillae, trunk and/or extremities excluding hands and feel; 12.6 to 20.0 cm	0.07	0.03	0.40
12036	Integumentary System Repair-Intermediate	Repair, intermediate, wounds of scalp, axillae, trunk and/or extremities excluding hands and feel; 20.1 to 30.0 cm	0.02	0.01	0.89
12037	Integumentary System Repair-Intermediate	Repair, intermediate, wounds of scalp, axillae, trunk and/or extremities excluding hands and feel; over 30.0 cm	0.01	0.01	0.73
12041	Integumentary System Repair-Intermediate	Repair, intermediate, wounds of neck, hands, feet, and/ or external genitalia; 2.5 cm or less	0.04	0.02	0.63
12042	Integumentary System Repair-Intermediate	Repair, intermediate, wounds of neck, hands, feet, and/ or external genitalia; 2.6 to 7.5 cm	0.05	0.03	0.48
12044	Integumentary System Repair-Intermediate	Repair, intermediate, wounds of neck, hands, feet, and/ or external genitalia; 7.6 to 12.5n cm	0.01	0.01	0.80
12045	Integumentary System Repair-Intermediate	Repair, intermediate, wounds of neck, hands, feet, and/ or external genitalia; 12.6 to 20.0 cm	0.01	0.01	0.62
12046	Integumentary System Repair-Intermediate	Repair, intermediate, wounds of neck, hands, feet, and/ or external genitalia; 20.1 to 30.0 cm	0.00	0.00	0.67
12047	Integumentary System Repair-Intermediate	Repair, intermediate, wounds of neck, hands, feet, and/ or external genitalia; over 30.0	0.00	0.00	0.22

CPT Code <sup>a</sup>	CPT Code Category	<b>CPT Code Description</b>	Practitioner %	Resident %	Relative Rate
		cm			
12051	Integumentary System Repair-Intermediate	Repair, intermediate, wounds of face, ears, eyelids, nose, lips and/or mucous membranes; 2.5 cm or less	0.00	0.00	Inf
12052	Integumentary System Repair-Intermediate	Repair, intermediate, wounds of face, ears, eyelids, nose, lips and/or mucous membranes; 2.6 to 5.0 cm	0.00	0.00	Inf
12054	Integumentary System Repair-Intermediate	Repair, intermediate, wounds of face, ears, eyelids, nose, lips and/or mucous membranes;7.6 to 12.5 cm	0.00	0.00	0.07
12055	Integumentary System Repair-Intermediate	Repair, intermediate, wounds of face, ears, eyelids, nose, lips and/or mucous membranes; 12.6 to 20.0 cm	0.00	0.00	0.30
13100	Integumentary System Repair-Complex	Repair, complex, trunk; 1.1 to 2.5 cm	0.00	0.00	Inf
13101	Integumentary System Repair-Complex	Repair, complex, trunk; 2.6 to 7.5 cm	0.00	0.01	2.89
13102	Integumentary System Repair-Complex	Repair, complex, trunk; each additional 5 cm or less	0.00	0.01	Inf
13120	Integumentary System Repair-Complex	Repair, complex, scalp, arms, legs; 1.1 to 2.5 cm	0.03	0.01	0.30
13121	Integumentary System Repair-Complex	Repair, complex, scalp, arms, legs; 2.6 to 7.5 cm	0.17	0.05	0.26
13122	Integumentary System Repair-Complex	Repair, complex, scalp, arms, legs; each additional 5 cm or less	0.07	0.02	0.37
13131	Integumentary System Repair-Complex	Repair, complex, forehead, cheeks, chin, nouth, neck, axillae, genitalia, hands, feet; 1.1 cm to 2.5 cm	0.04	0.02	0.54
13132	Integumentary System Repair-Complex	Repair, complex, forehead, cheeks, chin, nouth, neck, axillae, genitalia, hands, feet; 2.6 to 7.5 cm	0.09	0.02	0.25
13133	Integumentary System Repair-Complex	Repair, complex, forehead, cheeks, chin, nouth, neck, axillae, genitalia, hands, feet; each additional 5 cm or less	0.02	0.00	0.27
13152	Integumentary System Repair-Complex	Repair, complex, eyelids, nose, ears and/ or lips; 2.6 to 7.5 cm	0.00	0.00	Inf
13160	Integumentary System Repair-Complex	Secondary closure of surgical wound or dehiscence, extensive or complicated	0.23	0.06	0.25
14000	Integumentary System Adjacent Tissue Transfer	Adjacent tissue transfer or rearrangement, trunk; defect 10 cm or less	0.00	0.00	Inf

Copyright @ by The Journal of Bone and Joint Surgery, Incorporated Kohring et al.

Operative Experience During Orthopaedic Residency Compared with Early Practice in the U.S. http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
14001	Integumentary System Adjacent Tissue Transfer	Adjacent tissue transfer or rearrangement, trunk; defect 10 cm or more	0.00	0.00	Inf
14020	Integumentary System Adjacent Tissue Transfer	Adjacent tissue transfer or rearrangement, scalp, arms and/or legs; defect 10 cm or less	0.03	0.02	0.53
14021	Integumentary System Adjacent Tissue Transfer	Adjacent tissue transfer or rearrangement, scalp, arms and/or legs	0.01	0.01	0.73
14040	Integumentary System Adjacent Tissue Transfer	Adjacent tissue transfer or rearrangement, forehead, cheeks, chin, mouth, neck, axillae, genitalia	0.20	0.08	0.38
14041	Integumentary System Adjacent Tissue Transfer	Adjacent tissue transfer or rearrangement, forehead, cheeks, chin, mouth, neck, axillae, genitalia	0.00	0.01	2.89
14060	Integumentary System Adjacent Tissue Transfer	Adjacent tissue transfer or rearrangement, eyelids, nose, ears and/or lips	0.00	0.00	Inf
14300	Integumentary System Adjacent Tissue Transfer		0.00	0.00	Inf
14301	Integumentary System Adjacent Tissue Transfer	Adjacent tissue transfer or rearrangement, any area	0.00	0.00	0.00
14350	Integumentary System Adjacent Tissue Transfer	Filleted finger or toe flap	0.00	0.00	0.59
15002	Integumentary System Skin Grafts	Surgical preparation or creation of recipient site by excision of open wounds, burn eschar, or scar, or incisional release of scar contracture, trunk, arms, legs; first 100 sq cm or 1% of bady area for infants and children	0.03	0.02	0.53
15003	Integumentary System Skin Grafts	Surgical preparation or creation of recipient site by excision of open wounds, burn eschar, or scar, or incisional release of scar contracture, trunk, arms, legs; each additional 100 sq cm or each additional 1% of bady area for infants and children	0.01	0.00	0.40
15004	Integumentary System Skin Grafts	Surgical preparation or creation of recipient site by excision of open wounds, burn eschar, or scar, or incisional release of scar contracture, face, scalp, eyelids,mouth, neck, ears, orbits, genitalia,	0.02	0.01	0.57

Copyright @ by The Journal of Bone and Joint Surgery, Incorporated Kohring et al.

Operative Experience During Orthopaedic Residency Compared with Early Practice in the U.S. http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		hands, feet, and/or multiple digits; first 100 sq cm or 1% of bady area for infants and children			
15005	Integumentary System Skin Grafts	Surgical preparation or creation of recipient site by excision of open wounds, burn eschar, or scar, or incisional release of scar contracture, face, scalp, eyelids,mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits; each additional 100 sq cm or each additional 1% of bady area for infants and children	0.00	0.01	Inf
15040	Integumentary System Skin Grafts	Harvest of skin for tissue cultured autograft, 100 sq cm or less	0.00	0.00	Inf
15050	Integumentary System Skin Grafts	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	0.01	0.00	0.45
15100	Integumentary System Skin Grafts	Split-thickness autograft, trunk, arms, legs,; first 100 sq cm or less, or 1% of body area of infants and children	0.10	0.06	0.66
15101	Integumentary System Skin Grafts	Split-thickness autograft, trunk, arms, legs; each additional 100 sq cm or less, or each additional 1% of body area of infants and children	0.02	0.03	1.53
15110	Integumentary System Skin Grafts	Epidermal autograft, trunk, arms, legs; first 100 sq cm or less, or 1% of body area of infants and children	0.00	0.00	Inf
15111	Integumentary System Skin Grafts	Epidermal autograft, trunk, arms, legs; each additional 100 sq cm or less, or each additional 1% of body area of infants and children	0.00	0.00	Inf
15115	Integumentary System Skin Grafts	Epidermal autograft, face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits; first 100 sq cm or less, or 1% of body area of infants and children	0.00	0.00	Inf
15120	Integumentary System Skin Grafts	Split thickness autograft, face, scalp, eyelids, mouth, neck,	0.01	0.02	1.32

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		ears, orbits, genitalia, hands, feet, and/or multiple digits; first 100 sq cm or less, or 1% of body area of infants and children			
15121	Integumentary System Skin Grafts	Split thickness autograft, face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits; each additional 100 sq cm or less, or each additional 1% of body area of infants and children	0.00	0.00	Inf
15130	Integumentary System Skin Grafts	Dermal autograft, trunk, arms, legs; first 100 sq cm or less, or 1% of body area of infants and children	0.00	0.00	Inf
15131	Integumentary System Skin Grafts	Dermal autograft, trunk, arms, legs; each additional 100 sq cm or less, or each additional 1% of body area of infants and children	0.00	0.00	Inf
15135	Integumentary System Skin Grafts	Dermal autograft, face, scalp, eyelids, mouth, neck, ears, orbits, genitalia, hands, feet, and/or multiple digits; first 100 sq cm or less, or 1% of body area of infants and children	0.00	0.00	Inf
15170	Integumentary System Skin Grafts		0.00	0.00	Inf
15171	Integumentary System Skin Grafts		0.00	0.00	Inf
15175	Integumentary System Skin Grafts		0.00	0.00	Inf
15200	Integumentary System Skin Grafts	Full thickness graft, free, including direct closure of donor site, trunk; 20 sq cm or less	0.00	0.01	Inf
15201	Integumentary System Skin Grafts	Full thickness graft, free, including direct closure of donor site, trunk; each additional 20 sq cm or part thereof	0.00	0.00	Inf
15220	Integumentary System Skin Grafts	Full thickness graft, free, including direct closure of donor site, scalp, arms and/ or legs; 20 sq cm or less	0.01	0.02	2.13
15221	Integumentary System Skin Grafts	Full thickness graft, free, including direct closure of donor site, scalp arms and/ or legs; each additional 20 sq cm	0.00	0.00	Inf

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		or part thereof			
15240	Integumentary System Skin Grafts	Full thickness graft, free, including direct closure of donor site, forehead, cheeks, chin, mouth, neck, axillae, genitalia,hands and/or feet; 20 sq cm or less	0.03	0.05	1.85
15241	Integumentary System Skin Grafts	Full thickness graft, free, including direct closure of donor site, forehead, cheeks, chin, mouth, neck, axillae, genitalia,hands and/or feet; each additional 20 sq cm or part thereof	0.00	0.01	Inf
15260	Integumentary System Skin Grafts	Full thickness graft, free, including direct closure of donor site, nose, ears, eyelids and/ or lips; 20 sq cm or less	0.00	0.00	Inf
15271	Integumentary System Skin Grafts	Application of skin substitute graft to trunk, arms legs, total wound surface area up to 100 sq cm; first 25 sq cm or less wound surface area	0.01	0.00	0.01
15272	Integumentary System Skin Grafts	Application of skin substitute graft to trunk, arms legs, total wound surface area up to 100 sq cm; each additional 25 sq cm wound surface area	0.01	0.00	0.02
15273	Integumentary System Skin Grafts	Application of skin substitute graft to trunk, arms legs, total wound surface area greater than or equal to 100 sq cm; first 100 sq cm or less wound surface area	0.00	0.00	0.00
15275	Integumentary System Skin Grafts	Application of skin substitute graft to trunk, arms legs, total wound surface area greater than or equal to 100 sq cm; each additional 100 sq cm wound surface area, or part thereof, or each additional 1% of body area of infants and children	0.01	0.00	0.00
20103	Other Musculoskeletal - Other	Exploration of penetrating wound extremity	0.22	0.03	0.13
20150	Other Musculoskeletal Excision	Excision of epiphyseal bar, with or without autogenous soft tissue graft obtained thorugh same fascial incision	0.05	0.04	0.81
20200	Other Musculoskeletal Excision	Biopsy, muscle, superficial	0.01	0.02	2.74

Copyright @ by The Journal of Bone and Joint Surgery, Incorporated Kohring et al.

 $Operative\ Experience\ During\ Orthopaedic\ Residency\ Compared\ with\ Early\ Practice\ in\ the\ U.S.$ 

http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
20205	Other Musculoskeletal Excision	Biopsy, muscle, deep	0.06	0.07	1.16
20206	Other Musculoskeletal Excision	Biopsy, muscle, percutaneous needle	0.01	0.01	1.73
20220	Other Musculoskeletal Excision	Biopsy, bone, trocar, or needle; superficial	0.01	0.02	1.54
20225	Other Musculoskeletal Excision	Biopsy, bone, trocar, or needle; deep	0.06	0.06	0.94
20240	Other Musculoskeletal Excision	Biopsy, bone, open; superficial	0.07	0.06	0.85
20245	Other Musculoskeletal Excision	Biopsy, bone, open; deep	0.41	0.25	0.61
20250	Other Musculoskeletal Excision	Biopsy, vertebral body, open; thoracic	0.00	0.00	0.30
20251	Other Musculoskeletal Excision	Biopsy, vertebral body, open; cervical or lumbar	0.00	0.00	0.59
20501	Other Musculoskeletal Introduction or Removal	Injection of sinus tract; therapeutic	0.00	0.00	Inf
20520	Other Musculoskeletal Introduction or Removal	Biopsy, bone, open; diagnostic	0.12	0.03	0.26
20525	Other Musculoskeletal Introduction or Removal	Removal of foreign body in muscle or tendon sheath; simple	0.17	0.03	0.19
20526	Other Musculoskeletal Introduction or Removal	Removal of foreign body in muscle or tendon sheath; deep or complicated	0.00	0.00	Inf
20550	Other Musculoskeletal Introduction or Removal	Injection(s); single tendon sheath, or ligament, aponeurosis	0.01	0.02	4.04
20551	Other Musculoskeletal Introduction or Removal	Injection(s); single tendon origin/insertion	0.00	0.02	6.75
20552	Other Musculoskeletal Introduction or Removal	Injection(s); single or multiple trigger point(s), 1 or 2 muscle(s)	0.01	0.01	1.45
20600	Other Musculoskeletal Introduction or Removal	Arthrocentesis, aspiration and/or injection; small joint or bursa	0.01	0.03	2.76
20605	Other Musculoskeletal Introduction or Removal	Arthrocentesis, aspiration and/or injection; intermediate joint or bursa	0.12	0.17	1.39
20610	Other Musculoskeletal - Intro or Removal	Arthrocentesis, aspiration and/or injection; major joint or bursa	0.42	0.61	1.45
20612	Other Musculoskeletal Introduction or Removal	Aspiration and/or injection of ganglion cyst(s) any location	0.01	0.00	0.70
20615	Other Musculoskeletal Introduction or Removal	Aspiration and injection for treatment of bone cyst	0.06	0.10	1.76
20650	Other Musculoskeletal Introduction or Removal	Insertion of wire or pin with application of skeletal traction, including removal	0.06	0.13	2.29
20660	Other Musculoskeletal	Application of cranial tongs,	0.01	0.02	2.72

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
	Introduction or Removal	caliper, or stereotactic frame, including removal			
20661	Other Musculoskeletal Introduction or Removal	Application of halo, including removal, cranial	0.05	0.06	1.09
20670	Other Musculoskeletal - Intro or Removal	Removal of implant; superficial (eg buried wire, pin or rod)	0.59	0.36	0.62
20680	Other Musculoskeletal - Intro or Removal	Removal of implant; deep (eg buried wire, pin, screw, metal band, nail, rod or plate)	4.97	5.19	1.04
20690	Other Musculoskeletal - Intro or Removal	Application of uniplane (pins or wires in 1 plane), unilateral, external fixation system	0.33	0.30	0.92
20692	Other Musculoskeletal - Intro or Removal	Application of multiplane (pins or wires in more than 1 plane), unilateral, external fixation system (eg Ilizarov, Monticelli type)	0.13	0.30	2.39
20693	Other Musculoskeletal Introduction or Removal	Adjustment or revision of external fixation system	0.09	0.10	1.04
20696	Other Musculoskeletal Introduction or Removal	Application of multiplane (pins or wires in more than 1 plane), unilateral, external fixation system with stereotactic computer-assisted adjustment (eg spatial frame), including imaging; intiial and subsequent alignment(s), assessments and computations of adjusment schedule	0.06	0.08	1.46
20697	Other Musculoskeletal Introduction or Removal	Application of multiplane (pins or wires in more than 1 plane), unilateral, external fixation system with stereotactic computer-assisted adjustment (eg spatial frame), including imaging; intiial and subsequent alignment(s), assessments and computations of adjusment schedule; exchange	0.01	0.03	4.08
20802	Other Musculoskeletal Reapir, Revision, or Reconstruction	Replantation, arm (includes surgical neck of humerus through elbow joint, complete amputation	0.00	0.00	Inf
20805	Other Musculoskeletal Reapir, Revision, or Reconstruction	Replantation, forearm (includes radius and ulna to radial carpal joint), complete amputation	0.00	0.00	0.07
20808	Other Musculoskeletal	Replantation, hand (includes	0.00	0.00	Inf

http://dx.doi.org/10.2106/JBJS.17.01115 Page 120

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
	Reapir, Revision, or Reconstruction	hand through metacarpophalangeal joints), complete			
20816	Other Musculoskeletal Reapir, Revision, or Reconstruction	Replantation, digit, excluding thumb (includes metacarophalangel joint to insertion of flexor sublimis tendon), complete amputation	0.01	0.01	0.96
20822	Other Musculoskeletal Reapir, Revision, or Reconstruction	Replantation, digit, excluding thumb (includes distal tip to sublimis tendon insertion), complete amputation	0.01	0.01	0.76
20824	Other Musculoskeletal Reapir, Revision, or Reconstruction	Replantation, thumb, complete amputation	0.00	0.00	Inf
20827	Other Musculoskeletal Reapir, Revision, or Reconstruction	Replantation thumb (includes distal tip to MP joint)	0.00	0.00	Inf
20900	Other Musculoskeletal Repair, Revision, or Reconstruction	Bone graft, any area; minor or small	0.12	0.05	0.41
20902	Other Musculoskeletal Reapir, Revision, or Reconstruction	Bone graft, any area; major or large	0.08	0.16	2.03
20910	Other Musculoskeletal Reapir, Revision, or Reconstruction	Cartilage graft; costochondral	0.00	0.00	Inf
20922	Other Musculoskeletal Reapir, Revision, or Reconstruction	Fascia lata graft; by incision	0.00	0.00	Inf
20924	Other Musculoskeletal Reapir, Revision, or Reconstruction	Tendon graft, from a distance	0.11	0.01	0.08
20926	Other Musculoskeletal Reapir, Revision, or Reconstruction	Tissue grafts, other	0.01	0.03	3.13
20930	Other Musculoskeletal - Intro or Removal	Allograft, morselized, or placement of osteopromotive material, for spine surgery only	0.61	0.83	1.36
20931	Other Musculoskeletal - Other	Allograft, structural, for spine surgery only	0.02	0.03	1.31
20936	Other Musculoskeletal - Intro or Removal	Autograft for spine surgery only; local; obtained from same incision	0.56	0.78	1.39
20937	Other Musculoskeletal - Other	Autograft for spine surgery only; local; obtained through separate incision	0.04	0.12	2.63
20938	Other Musculoskeletal Reapir, Revision, or Reconstruction	Autograft for spine surgery only; local; structural, bicortical or tricortical	0.01	0.02	3.30

CPT Code <sup>a</sup>	CPT Code Category	<b>CPT Code Description</b>	Practitioner %	Resident %	Relative Rate
20950	Other Musculoskeletal Other Procedures	Monitoring of interstitial fluid pressure in detection of muscle compartment syndrome	0.04	0.03	0.74
20955	Other Musculoskeletal Other Procedures	Bone graft with microvascular anastomosis; fibula	0.00	0.01	5.12
20956	Other Musculoskeletal Other Procedures	Bone graft with microvascular anastomosis; iliac crest	0.01	0.01	2.00
20969	Other Musculoskeletal Other Procedures	Free osteocutaneous flap with microvascular anastomsis; other than iliac creast, metatarsal, or great toe	0.00	0.00	Inf
20970	Other Musculoskeletal Other Procedures	Free osteocutaneous flap with microvascular anastomsis; iliac crest	0.00	0.00	Inf
20974	Other Musculoskeletal Other Procedures	Electrical stimulation to aid bone healing; noninvasive	0.00	0.00	Inf
20975	Other Musculoskeletal Other Procedures	Electrical stimulation to aid bone healing; invasive	0.00	0.00	Inf
20982	Other Musculoskeletal Other Procedures	Ablation, bone tumor, radiofrequency, percutaneous, including CT-guidance	0.00	0.01	Inf
20985	Other Musculoskeletal Other Procedures	Computer-assisted surgical navigational procedure for musculoskeletal procedures, image-less	0.01	0.00	0.12
20987	Other Musculoskeletal Other Procedures		0.00	0.00	Inf
20999	Other Musculoskeletal Other Procedures	Unlisted procedure, musculoskeletal system, general	0.01	0.04	4.75
22206	Spine Osteotomy	Osteotomy of spine, posterior or posterolateral approach, three columns, one vertebral segment (eg, pedicle/vertebral body subtraction); thoracic	0.02	0.01	0.50
22207	Spine Osteotomy	Osteotomy of spine, posterior or posterolateral approach, three columns, one vertebral segment (eg, pedicle/vertebral body subtraction); lumbar	0.01	0.01	0.53
22208	Spine Osteotomy	Osteotomy of spine, posterior or posterolateral approach, three columns, one vertebral segment (eg, pedicle/vertebral body subtraction); each additional vertebral segment	0.01	0.00	0.41
22210	Spine Osteotomy	Osteotomy of spine, posterior or posterolateral approach, 1 vertebral segment; cervical	0.00	0.01	2.15
22212	Spine Osteotomy	Osteotomy of spine, posterior	0.22	0.35	1.59

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		or posterolateral approach, one vertebral segment; thoracic			
22214	Spine Osteotomy	Osteotomy of spine, posterior or posterolateral approach, one vertebral segment; lumbar	0.03	0.16	4.75
22216	Spine Osteotomy	Osteotomy of spine, posterior or posterolateral approach, one vertebral segment; each additional vertebral segment	0.19	0.64	3.48
22220	Spine Osteotomy	Osteotomy of spine, including discectomy, anterior approach, single vertebral segment; cervical	0.00	0.00	Inf
22222	Spine Osteotomy	Osteotomy of spine, including discectomy, anterior approach, single vertebral segment; thoracic	0.00	0.02	Inf
22224	Spine Osteotomy	Osteotomy of spine, including discectomy, anterior approach, single vertebral segment; lumbar	0.00	0.02	Inf
22226	Spine Osteotomy	Osteotomy of spine, including discectomy, anterior approach, single vertebral segment; each additional vertebral segment (List separately in addition to code for primary procedure)	0.00	0.03	9.87
22305	Spine Fracture and/or Dislocation	Closed treatment of vertebral process fracture(s)	0.00	0.03	Inf
22310	Spine Fracture and/or Dislocation	Closed treatment of vertebral body fracture(s), without manipulation, requiring and including casting or bracing	0.00	0.06	Inf
22315	Spine Fracture and/or Dislocation	Closed treatment of vertebral fracture(s) and/or dislocation(s) requiring casting or bracing, with and including casting and/or bracing by manipulation or traction	0.01	0.03	4.82
22325	Spine Fracture and/or Dislocation	Open treatment and/or reduction of vertebral fracture(s) and/or dislocation(s), posterior approach, 1 fractured vertebra or dislocated segment; lumbar	0.01	0.03	2.11
22326	Spine Fracture and/or Dislocation	Open treatment and/or reduction of vertebral	0.01	0.01	0.98

http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		fracture(s) and/or dislocation(s), posterior approach, 1 fractured vertebra or dislocated segment; cervical Open treatment and/or reduction of vertebral			
22327	Spine Fracture and/or Dislocation	fracture(s) and/or dislocation(s), posterior approach, 1 fractured vertebra or dislocated segment; thoracic	0.01	0.01	2.00
22328	Spine Fracture and/or Dislocation	Open treatment and/or reduction of vertebral fracture(s) and/or dislocation(s), posterior approach, 1 fractured vertebra or dislocated segment; each additional fractured vertebra or dislocated segment (List separately in addition to code for primary procedure)	0.00	0.01	Inf
22548	Spine Arthrodesis/ Anterior	Arthrodesis, anterior transoral or extraoral technique, clivus-C1-C2 (atlas-axis), with or without excision of odontoid process	0.00	0.00	Inf
22551	Spine Arthrodesis/ Anterior	Arthrodesis, anterior interbody, including disc space preparation, discectomy, osteophytectomy and decompression of spinal cord and /or nerve roots; cervical below C2	0.02	0.00	0.00
22552	Spine Arthrodesis/ Anterior	Arthrodesis, anterior interbody, including disc space preparation, discectomy, osteophytectomy and decompression of spinal cord and/or nerve roots; cervical below C2, each additional interspace (List separately in addition to code for separate procedure)	0.01	0.00	0.00
22554	Spine Arthrodesis/ Anterior	Arthrodesis, anterior interbody technique, including minimal	0.01	0.03	3.41

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		discectomy to prepare interspace (other than for decompression) cervical below C2			
22556	Spine Arthrodesis/ Anterior	Arthrodesis, anterior interbody technique, including minimal discectomy to prepare interspace (other than for decompression); thoracic	0.00	0.05	Inf
22558	Spine Arthrodesis/ Anterior	Arthrodesis, anterior interbody technique, including minimal discectomy to prepare interspace (other than for decompression) lumbar	0.01	0.05	3.38
22585	Spine Arthrodesis/ Anterior	Arthrodesis, anterior interbody technique, including minimal discectomy to prepare interspace (other than for decompression); each additional interspace (List separately in addition to code for primary procedure)	0.00	0.07	25.66
22590	Spine Arthrodesis/ Posterior	Arthrodesis, posterior technique, craniocervical (occiput-C2)	0.01	0.01	2.41
22595	Spine Arthrodesis/ Posterior	Arthrodesis, posterior technique, Atlas-axis (C1-C2)	0.00	0.01	Inf
22600	Spine Arthrodesis/ Posterior	Arthrodesis, posterior or posterolateral technique, single level, cervical below C-2	0.02	0.05	2.73
22610	Spine Arthrodesis/ Posterior	Arthodesis, posterior or posterolateral technique, single level: thoracic (with or without lateral transverse technique)	0.02	0.35	15.95
22612	Spine Arthrodesis/ Posterior	Arthrodesis, Posterior or posterolateral technique, single level, lumbar (with or without lateral trasverse technique)	0.05	0.40	8.13
22614	Spine Arthrodesis/ Posterior	Arthrodesis, posterior or posterolateral technique, single level; each additional vertebral segment (List separately in addition to code for primary procedure)	0.04	1.01	28.01
22630	Spine Arthrodesis/ Posterior	Arthrodesis, posterior interbody technique, including laminectomy and /or	0.01	0.06	7.59

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		discectomy to prepare interspace (other than for decompression), single interspace: lumbar			
22632	Spine Arthrodesis/ Posterior	Arthrodesis, posterior interbody technique, including laminectomy and/or discectomy to prepare interspace (other than for decompression), single interspace; each additional interspace (List separately in addition to code for primary procedure)	0.00	0.13	Inf
22633	Spine Arthrodesis/ Posterior	Arthodesis, combined posterior or posterolateral technique with posterior interbody technique including laminectomy and /or discectomy sufficient to prepare interspace (other than for decompression), single interspace and segment, lumbar	0.02	0.00	0.00
22800	Spine Arthrodesis/ Deformity	Arthrodesis, posterior, for spinal deformity, with or without cast; up to 6 vertebral segments (levels)	0.09	0.31	3.60
22802	Spine Arthrodesis/ Deformity	Arthrodesis, posterior, for spinal deformity, with or without cast; 7 to 12 vertebral segments (levels)	0.54	1.50	2.76
22804	Spine Arthrodesis/ Deformity	Arthrodesis, posterior, for spinal deformity, with or without cast; 13 or more vertebral segments (levels)	0.40	0.95	2.39
22808	Spine Arthrodesis/ Deformity	Arthrodesis, anterior, for spinal deformity, with or without cast; 4 to 7 vertebral segments (levels)	0.00	0.04	Inf
22810	Spine Arthrodesis/ Deformity	Arthrodesis, anterior, for spinal deformity, with or without cast; 4 to 7 vertebral segments	0.01	0.13	9.58
22812	Spine Arthrodesis/ Deformity	Arthrodesis, anterior, for spinal deformity, with or without cast; 8 or more vertebral segments (levels)	0.01	0.05	8.27
22818	Spine Arthrodesis/ Deformity	Kyphectomy, circumferential exposure of spine and resection of vertebral	0.00	0.01	1.85

http://dx.doi.org/10.2106/JBJS.17.01115 Page 126

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		segments; single or 2 segments			
22819	Spine Arthrodesis/ Deformity	Kyphectomy, circumferential exposure of spine and resection of vertebral segments; 3 or more segments	0.00	0.00	Inf
22830	Spine Exploration		0.01	0.18	12.94
22840	Spine Instrumentation	Posterior non-segmental instrumentation (eg, Harrington rod technique, pedicle fixation across one interspace, atlantoaxial transarticular screw fixation, sublaminar wiring at C1, facet screw fixation)	0.05	0.17	3.25
22841	Spine Instrumentation	Internal spinal fixation by wiring of spinous processes	0.00	0.01	4.60
22842	Spine Instrumentation	Posterior segmental instrumentation (eg, pedicle fixation, dual rods with multiple hooks and sublaminar wires); 3 to 6 vertebral segments	0.10	0.41	4.27
22843	Spine Instrumentation	Posterior segmental instrumentation (eg, pedicle fixation, dual rods with multiple hooks and sublaminar wires); 7 to 12 vertebral segments	0.54	1.49	2.79
22844	Spine Instrumentation	Posterior segmental instrumentation (eg, pedicle fixation, dual rods with multiple hooks and sublaminar wires); 13 or more vertebral segments	0.40	0.92	2.32
22845	Spine Instrumentation	Anterior instrumentation; 2 to 3 vertebral segments	0.02	0.04	2.19
22846	Spine Instrumentation	Anterior instrumentation; 4 to 7 vertebral segments	0.00	0.06	21.81
22847	Spine Instrumentation	Anterior instrumentation; 8 or more vertebral segments	0.00	0.02	6.60
22848	Spine Instrumentation	Pelvic fixation (attachment of caudal end of instrumentation to pelvic bony structures) other than sacrum	0.08	0.23	2.75
22849	Spine Instrumentation	Reinsertion of spinal fixation device	0.08	0.45	5.82
22850	Spine Instrumentation	Removal of posterior non- segmental instrumentation	0.01	0.11	8.11
22851	Spine Instrumentation	Application of intervertebral	0.03	0.05	1.53

http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		biomechanical device(s) (eg, synthetic cage[s], methylmethacrylate) to vertebral defect or interspace.			
22852	Spine Instrumentation	Removal of posterior segmental instrumentation	0.02	0.25	11.27
22855	Spine Instrumentation	Removal of anterior instrumentation	0.00	0.00	Inf
22856	Spine Instrumentation	Total disc arthroplasty (artificial disc), anterior approach, including discectomy with end plate preparation (includes osteophytectomy for nerve root or spinal cord decompression and microdissection); single interspace, cervical	0.00	0.00	Inf
22861	Spine Instrumentation	Revision including replacement of total disc arthroplasty (artificial disc), anterior approach, single interspace; cervical	0.00	0.00	Inf
22864	Spine Instrumentation	Removal of total disc arthroplasty (artificial disc), anterior approach, single interspace; cervical	0.00	0.00	Inf
22899	Spine Other Procedures		0.05	0.48	10.14
23020	Shoulder Incision	Capsular contracture release	0.00	0.02	5.64
23030	Shoulder Incision	Incision and drainage, shoulder area; deep abscess or hematoma	0.03	0.03	1.15
23031	Shoulder Incision	Incision and drainage, shoulder area; infected bursa	0.00	0.00	0.96
23035	Shoulder Incision	Incision, bone cortex, shoulder area	0.03	0.02	0.49
23040	Shoulder Incision	Arthrotomy, glemohumeral joint, including exploration, drainage, or removal of foreign body	0.04	0.03	0.83
23044	Shoulder Incision	Arthorotomy, acromioclavicular, sternoclavicular joint, including exploration, drainage, or removal of foreign body	0.01	0.00	0.42
23065	Shoulder Excision	Biopsy, soft tissue of shoulder area; superficial	0.00	0.00	Inf
23066	Shoulder Excision	Biopsy, soft tissue of shoulder area; deep	0.01	0.01	1.24

http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
23071	Shoulder Excision	Excision, tumor, soft tissue of shoulder area, subcutaneous; 3 cm or greater	0.00	0.00	0.00
23073	Shoulder Excision	Excision, tumor, soft tissue of shoulder area, subfascial; 5cm or greater	0.01	0.00	0.00
23075	Shoulder Excision	Excision, tumor, soft tissue of shoulder area, subcutaneous; less than 3 cm	0.01	0.01	0.74
23076	Shoulder Excision	Excision, tumor, soft tissue of shoulder area, subfascial; less than 5 cm	0.00	0.01	5.12
23077	Shoulder Excision	Radical resection of tumor, soft tissue of shoulder area; less than 5 cm	0.00	0.01	Inf
23100	Shoulder Excision	Arthrotomy, glemohumeral joint, including biopsy	0.00	0.00	Inf
23101	Shoulder Excision	Arthrotomy, acromioclavicular joint or sternoclavicular joint, including biopsu and/or excision of torn cartilage	0.00	0.00	Inf
23105	Shoulder Excision	Arthrotomy; glenojumeral joint, with synovectomy, with or without biopsy	0.00	0.00	Inf
23106	Shoulder Excision	Arthrotomy; sternoclavicular joint, with synovectomy, with or without biopsy	0.00	0.00	Inf
23107	Shoulder Excision	Arthrotomy, glenohumeral joint, with joint exploration, with or without removal of loose or foreign body	0.00	0.00	1.41
23120	Shoulder Excision	Claviculectomy; partial	0.00	0.01	3.34
23130	Shoulder Excision	Acromioplasty or acromionectomy, partial, with or without coracoacromial ligament release	0.00	0.01	Inf
23140	Shoulder Excision	Excision or curettage of bone cyst or benign tumor of clavicle or scapula	0.05	0.05	1.00
23145	Shoulder Excision	Excision or curettage of bone cyst or benign tumor of clavicle or scapula; with autograft (includes obtaining graft)	0.00	0.00	Inf
23146	Shoulder Excision	Excision or curettage of bone cyst or benign tumor of clavicle or scapula; with allograft	0.01	0.01	0.82
23150	Shoulder Excision	Excision or curettage of bone cyst or benign tumor of proximal humerus;	0.05	0.04	0.87

http://dx.doi.org/10.2106/JBJS.17.01115 Page 129

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
23155	Shoulder Excision	Excision or curettage of bone cyst or benign tumor of proximal humerus; with autograft (includes obtaining graft)	0.00	0.01	Inf
23156	Shoulder Excision	Excision or curettage of bone cyst or benign tumor of proximal humerus; with allograft	0.02	0.04	1.98
23170	Shoulder Excision	Sequestrectomy (eg, for osteomyelitis or bone abscess), clavicle	0.00	0.00	Inf
23174	Shoulder Excision	Sequestrectomy (eg, for osteomyelitis or bone abscess), scapula	0.00	0.00	Inf
23180	Shoulder Excision	Sequestrectomy (eg, for osteomyelitis or bone abscess), humeral head to surgical neck	0.00	0.01	3.19
23182	Shoulder Excision	Partial excision (craterization, saucerization, or diaphysectomy) bone (eg, osteomyelitis), clavicle	0.00	0.00	Inf
23184	Shoulder Excision	Partial excision (craterization, saucerization, or diaphysectomy) bone (eg, osteomyelitis), scapula	0.00	0.00	Inf
23190	Shoulder Excision	Partial excision (craterization, saucerization, or diaphysectomy) bone (eg, osteomyelitis), proximal humerus	0.00	0.00	1.56
23200	Shoulder Excision	Ostectomy of scapula, partial (eg, superior medial angle)	0.00	0.00	0.59
23210	Shoulder Excision	Resection, humeral head	0.01	0.01	0.96
23220		Radical resection of tumor; clavicle	0.01	0.00	0.85
23395	Shoulder Repair Revision and/or Reconstruction	Muscle transfer, any type, shoulder or upper arn; single	0.02	0.03	1.90
23397	Shoulder Repair Revision and/or Reconstruction	multiple	0.01	0.04	2.98
23400	Shoulder Repair Revision and/or Reconstruction	Scapulopexy	0.00	0.01	4.15
23405	Shoulder Repair Revision and/or Reconstruction	Tenotomy, shoulder area, single tendon	0.01	0.03	5.16
23406	Shoulder Repair Revision and/or Reconstruction	multiple tendons through same incision	0.00	0.02	5.56
23410	Shoulder Repair Revision and/or Reconstruction	Repair of ruptured musculoteninous cuff, open; acute	0.01	0.01	1.05
23412	Shoulder Repair Revision	chronic	0.01	0.01	1.66

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
	and/or Reconstruction				
23415	Shoulder Repair Revision and/or Reconstruction	Coracoacromial ligament release, with or without acromioplasty	0.00	0.00	0.37
23420	Shoulder Repair Revision and/or Reconstruction	Reconstruction of complete shoulder (rotator) cuff avulsion, chronic (includes acromioplasty)	0.00	0.00	Inf
23430	Shoulder Repair Revision and/or Reconstruction	Tenodesis of long tendon of biceps	0.02	0.01	0.72
23440	Shoulder Repair Revision and/or Reconstruction	Resection or transplantation of long tendon of biceps	0.00	0.00	Inf
23450	Shoulder Repair Revision and/or Reconstruction	Capsulorrhaphy, anterior; Putti-Platt procedure or Magnuson type operation	0.00	0.01	1.93
23455	Shoulder Repair Revision and/or Reconstruction	with labral repair	0.03	0.13	4.23
23460	Shoulder Repair Revision and/or Reconstruction	Capsulorrhaphy, anterior, any type; with bone block	0.00	0.00	Inf
23462	Shoulder Repair Revision and/or Reconstruction	with coracoid process transfer]	0.01	0.01	0.54
23465	Shoulder Repair Revision and/or Reconstruction	Capsulorrhaphy, glenohumeral joint, posterior, with or without bone block	0.00	0.01	3.71
23466	Shoulder Repair Revision and/or Reconstruction	Capsulorrhaphy, glenohumeral joint, any type multi-directional instability	0.01	0.02	1.23
23470	Shoulder Repair Revision and/or Reconstruction	Arthroplasty, glenohumeral joint; hemiarthroplasty	0.01	0.01	1.58
23472	Shoulder Repair Revision and/or Reconstruction	Arthroplasty, glenohumeral joint; total shoulder (glenoid and proximal humeral replacement)	0.01	0.02	4.34
23480	Shoulder Repair Revision and/or Reconstruction	Osteotomy, clavicle, with or without internal fixation	0.00	0.01	4.15
23485	Shoulder Repair Revision and/or Reconstruction	with bone graft for nonunion or malunion (includes obtaining graft and/or necessary fixation)	0.01	0.01	1.46
23490	Shoulder Repair Revision and/or Reconstruction	Prophylactic treatment (nailing, pinning, plating, or wiring_ with or without methylmethacrylate; clavicle	0.00	0.00	Inf
23491	Shoulder Repair Revision and/or Reconstruction	Proximal humerus	0.00	0.00	Inf
23515	Shoulder Fracture and/or Dislocation	Open treatment of clavicular fracture, includes internal fixation, when performe	0.90	0.19	0.21
23530	Shoulder Fracture and/or Dislocation	Open treatment of sternoclavicular dislocation, acute or chronic;	0.02	0.03	1.31

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
23532	Shoulder Fracture and/or Dislocation	Open treatment of sternoclavicular dislocation, acute or chronic; with fascial graft (includes obtaining graft)	0.01	0.00	0.37
23550	Shoulder Fracture and/or Dislocation	Open treatment of acromioclavicular dislocation, acute or chronic;	0.03	0.01	0.28
23552	Shoulder Fracture and/or Dislocation	Open treatment of acromioclavicular dislocation, acute or chronic; with fascial graft (includes obtaining graft)	0.01	0.00	0.32
23585	Shoulder Fracture and/or Dislocation	Open treatment of scapular fracture (body, glenoid or acromion) includes internal fixation, when performed	0.01	0.01	1.59
23615	Shoulder Fracture and/or Dislocation	Open treatment of proximal humeral (surgical or anatomical neck) fracture, includes internal fixation, when performed, includes repair of tuberosity(s), when performed	0.17	0.15	0.84
23616	Shoulder Fracture and/or Dislocation	Open treatment of proximal humeral (surgical or anatomical neck) fracture, includes internal fixation, when performed, includes repair of tuberosity(s), when performed; with proximal humeral prosthetic replacement	0.00	0.01	Inf
23630	Shoulder Fracture and/or Dislocation	Open treatment of greater humeral tuberosity fracture, includes internal fixation, when performed	0.01	0.00	0.82
23660	Shoulder Fracture and/or Dislocation	Open treatment of acute shoulder dislocation	0.00	0.01	1.93
23665	Shoulder Fracture and/or Dislocation	Closed treatment of shoulder dislocation, with fracture of greater humeral tuberosity, includes internal fixation, when performed	0.00	0.01	Inf
23670	Shoulder Fracture and/or Dislocation	Open treatment of shoulder dislocation, with fracture of greater humeral tuberosity, includes internal fixation, when performed	0.00	0.00	Inf
23680	Shoulder Fracture and/or Dislocation	Open treatment of shoulder dislocation, with surgical or anatomical neck fracture, includes internal fixation,	0.00	0.00	Inf

http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	<b>CPT Code Description</b>	Practitioner %	Resident %	Relative Rate
		when performed			
23929	Shoulder Arthroscopy	unlisted procedure, shoulder	0.01	0.03	2.54
23930	Humerus/Elbow Incision	Incision and drainage, upper arm or elbow area; deep abscess or hematoma	0.07	0.07	0.87
23931	Humerus/Elbow Incision	Incision and drainage, upper arm or elbow area; bursa	0.01	0.02	2.15
23935	Humerus/Elbow Incision	Incision, deep, with opening of bone cortex, humerus or elbow	0.05	0.04	0.74
24000	Humerus/Elbow Incision	Arthrotomy, elbow, including exploration, drainage, or removal of foreign body	0.11	0.08	0.72
24006	Humerus/Elbow Incision	Arthrotomy of the elbow, with capsular excision for capsular release	0.03	0.04	1.27
24065	Humerus/Elbow Excision	Biopsy, soft tissue of upper arm or elbow area; superficial	0.01	0.00	0.48
24066	Humerus/Elbow Excision	Biopsy, soft tissue of upper arm or elbow area; deep (subfascial or intramuscular)	0.01	0.03	1.91
24071	Humerus/Elbow Excision	Excision, tumor, soft tissue of upper arm or elbow area, subcutaneous; 3 cm or greater	0.00	0.00	Inf
24073	Humerus/Elbow Excision	Excision, tumor, soft tissue of upper arm or elbow area, subfascial (eg, intramuscular); 5 cm or greater	0.01	0.00	0.07
24075	Humerus/Elbow Excision	Excision, tumor, soft tissue of upper arm or elbow area, subcutaneous; less than 3 cm	0.02	0.01	0.66
24076	Humerus/Elbow Excision	Excision, tumor, soft tissue of upper arm or elbow area, subfascial (eg, intramuscular); less than 5 cm	0.00	0.03	Inf
24077	Humerus/Elbow Excision	Radical resection of tumor (eg, sarcoma), soft tissue of upper arm or elbow area; less than 5 cm	0.00	0.01	2.45
24079	Humerus/Elbow Excision	Radical resection of tumor (eg, sarcoma), soft tissue of upper arm or elbow area; 5 cm or greater	0.00	0.00	0.00
24100	Humerus/Elbow Excision	Arthrotomy, elbow; with synovial biopsy only	0.00	0.00	Inf
24101	Humerus/Elbow Excision	Arthrotomy, elbow; with joint exploration, with or without biopsy, with or without removal of loose or foreign body	0.02	0.04	1.74
24102	Humerus/Elbow Excision	Arthrotomy, elbow; with	0.00	0.01	2.45

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		synovectomy			
24105	Humerus/Elbow Excision	Excision, olecranon bursa	0.02	0.01	0.52
24110	Humerus/Elbow Excision	Excision or curettage of bone cyst or benign tumor, humerus;	0.03	0.10	3.12
24115	Humerus/Elbow Excision	Excision or curettage of bone cyst or benign tumor, humerus; with autograft (includes obtaining graft)	0.00	0.01	5.34
24116	Humerus/Elbow Excision	Excision or curettage of bone cyst or benign tumor, humerus; with allog	0.03	0.08	2.64
24120	Humerus/Elbow Excision	Excision or curettage of bone cyst or benign tumor of head or neck of radius or olecranon process;	0.00	0.01	2.30
24125	Humerus/Elbow Excision	Excision or curettage of bone cyst or benign tumor of head or neck of radius or olecranon process; with autograft (includes obtaining graft)	0.01	0.00	0.11
24126	Humerus/Elbow Excision	Excision or curettage of bone cyst or benign tumor of head or neck of radius or olecranon process; with allograft	0.00	0.00	Inf
24130	Humerus/Elbow Excision	Excision, radial head	0.02	0.04	2.32
24134	Humerus/Elbow Excision	Sequestrectomy (eg, for osteomyelitis or bone abscess), shaft or distal humerus	0.01	0.00	0.56
24138	Humerus/Elbow Excision	Sequestrectomy (eg, for osteomyelitis or bone abscess), radial head or neck	0.00	0.00	Inf
24140	Humerus/Elbow Excision	Sequestrectomy (eg, for osteomyelitis or bone abscess), olecranon process	0.02	0.01	0.80
24145	Humerus/Elbow Excision	Partial excision (craterization, saucerization, or diaphysectomy) bone (eg, osteomyelitis), humerus	0.00	0.00	Inf
24147	Humerus/Elbow Excision	Partial excision (craterization, saucerization, or diaphysectomy) bone (eg, osteomyelitis), radial head or neck	0.01	0.00	0.32
24149	Humerus/Elbow Excision	Partial excision (craterization, saucerization, or diaphysectomy) bone (eg, osteomyelitis), olecranon process	0.03	0.03	0.84
24150	Humerus/Elbow Excision	Radical resection of capsule,	0.01	0.00	0.74

http://dx.doi.org/10.2106/JBJS.17.01115 Page 134

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		soft tissue, and heterotopic bone, elbow, with contracture release (separate procedure)			
24151	Humerus/Elbow Excision	Radical resection of tumor, shaft or distal humerus	0.00	0.00	Inf
24152	Humerus/Elbow Excision	Radical resection of tumor, radial head or neck	0.00	0.00	Inf
24155	Humerus/Elbow Excision	Resection of elbow joint (arthrectomy)	0.00	0.00	Inf
24160	Humerus/ Elbow Introduction or Removal	Implant removal; elbow joint	0.01	0.07	8.88
24164	Humerus/ Elbow Introduction or Removal	Implant removal; radial head	0.00	0.00	Inf
24200	Humerus/ Elbow Introduction or Removal	Removal of foreign body, upper arm or elbow area; subcutaneous	0.02	0.01	0.78
24201	Humerus/ Elbow Introduction or Removal	Removal of foreign body, upper arm or elbow area; deep	0.01	0.04	2.66
24220	Humerus/ Elbow Introduction or Removal	Injection procedure for elbow arthrography	0.40	0.09	0.22
24300	Humerus/ Elbow Repair, Revision and/or Reconstruction	Manipulation; elbow; under anesthesia	0.07	0.05	0.67
24301	Humerus/ Elbow Repair, Revision and/or Reconstruction	Muscle or tendon transfer, any type, upper arm or elbow, single	0.02	0.04	1.68
24305	Humerus/ Elbow Repair, Revision and/or Reconstruction	Tendon lengthening, upper arm or elbow, single, each	0.04	0.09	2.33
24310	Humerus/ Elbow Repair, Revision and/or Reconstruction	Tenotomy, open elbow to shoulder, single, each	0.02	0.03	1.71
24320	Humerus/ Elbow Repair, Revision and/or Reconstruction	Tenoplasty, with muscle transfer, with or without free graft, elbow to shoulder, single (Seddon- Brookes type procedure)	0.00	0.00	Inf
24330	Humerus/ Elbow Repair, Revision and/or Reconstruction	Flexor-plasty, elbow, (eg, Steindler type advancement)	0.00	0.00	1.48
24331	Humerus/ Elbow Repair, Revision and/or Reconstruction	with extensor advancement	0.00	0.00	Inf
24332	Humerus/ Elbow Repair, Revision and/or Reconstruction	Tenolysis, triceps	0.00	0.01	Inf
24340	Humerus/ Elbow Repair, Revision and/or Reconstruction	Tenodesis of biceps tendon at elbow, separate procedure	0.00	0.01	Inf
24341	Humerus/ Elbow Repair,	Repair, tendon or muscle,	0.03	0.01	0.34

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
	Revision and/or Reconstruction	upper arm or elbow, each tendon or muscle, primary or secondary (excludes rotator cuff)			
24342	Humerus/ Elbow Repair, Revision and/or Reconstruction	Reinsertion of ruptured biceps tendon, distal, with or without tendon graft (includes obtaining graft)	0.01	0.01	0.86
24343	Humerus/ Elbow Repair, Revision and/or Reconstruction	Repair lateral collateral ligament, elbow, with local tissue	0.02	0.02	1.00
24344	Humerus/ Elbow Repair, Revision and/or Reconstruction	Repair lateral collateral ligament, elbow, with tendon graft, including graft harvest	0.01	0.01	1.61
24345	Humerus/ Elbow Repair, Revision and/or Reconstruction	Repair medial collateral ligament, elbow, with local tissue	0.02	0.01	0.76
24346	Humerus/ Elbow Repair, Revision and/or Reconstruction	Repair medial collateral ligament, elbow, with tendon graft, including graft harvest	0.05	0.02	0.37
24350	Humerus/ Elbow Repair, Revision and/or Reconstruction	Percutaneous medial or lateral epicondyle tenotomy	0.00	0.00	Inf
24356	Humerus/ Elbow Repair, Revision and/or Reconstruction	Arthroplasty, elbow, with distal humeral prosthetic replacement	0.00	0.00	Inf
24357	Humerus/ Elbow Repair, Revision and/or Reconstruction	Arthroplasty, elbow, with implant and fascia lata ligament reconstruction	0.00	0.00	Inf
24358	Humerus/ Elbow Repair, Revision and/or Reconstruction	Arthroplasty, elbow, with distal humeral and proximal ulnar prosthetic replacement; total elbow	0.01	0.01	0.79
24359	Humerus/ Elbow Repair, Revision and/or Reconstruction	Arthroplasty, radial head	0.00	0.00	0.59
24360	Humerus/ Elbow Repair, Revision and/or Reconstruction	with implant	0.00	0.00	Inf
24361	Humerus/ Elbow Repair, Revision and/or Reconstruction	Revision of total elbow arthroplasty, including allograft when performed; humeral OR ulnar component	0.00	0.00	Inf
24362	Humerus/ Elbow Repair, Revision and/or Reconstruction	humeral AND ulnar component	0.00	0.00	Inf
24363	Humerus/ Elbow Repair, Revision and/or Reconstruction	Osteotomy, humerus, with or without internal fixation	0.00	0.01	Inf
24365	Humerus/ Elbow Repair, Revision and/or	Multiple osteotomies with realignment on intramedullary	0.00	0.00	0.45

CPT Code <sup>a</sup>	CPT Code Category	<b>CPT Code Description</b>	Practitioner %	Resident %	Relative Rate
	Reconstruction	rod, humeral shaft (Sofield type procedure)			
24366	Humerus/ Elbow Repair, Revision and/or Reconstruction	Osteoplasty, humerus	0.00	0.00	Inf
24400	Humerus/ Elbow Repair, Revision and/or Reconstruction	Repair of nonunion or malunion, humerus; without graft	0.04	0.12	3.09
24410	Humerus/ Elbow Repair, Revision and/or Reconstruction	with iliac or other autograft (includes obtaining graft)	0.00	0.00	Inf
24420	Humerus/ Elbow Repair, Revision and/or Reconstruction	Hemiepiphyseal arrest	0.01	0.01	1.67
24430	Humerus/ Elbow Repair, Revision and/or Reconstruction	Decompression fasciotomy, forearm, with brachial artery exploration	0.05	0.02	0.43
24435	Humerus/ Elbow Repair, Revision and/or Reconstruction	Prophylactic treatment (nailing, plating, pinnig, or wiring), with or without methylmethacrylate, humeral shaft	0.01	0.01	1.56
24470	Humerus/ Elbow Repair, Revision and/or Reconstruction	Hemiepiphyseal arrest (eg, for cubitus varus or valgus, distal humerus).	0.00	0.01	Inf
24495	Humerus/ Elbow Repair, Revision and/or Reconstruction	Decompression fasciotomy, forearm, with brachial artery exploration.	0.00	0.00	1.71
24498	Humerus/ Elbow Repair, Revision and/or Reconstruction	Prophylactic treatment (nailing, pinning, plating or wiring), with or without methylmethacrylate, humerus.	0.01	0.01	0.74
24515	Humerus/ Elbow Fracture and/or Dislocation	Open treatment of humeral shaft fracture with plate/screws, with or without cerclage.	0.12	0.10	0.90
24516	Humerus/ Elbow Fracture and/or Dislocation	Open treatment of humeral shaft fracture, with insertion of intramedullary implant, with or without cerclage and/or locking screws.	0.04	0.05	1.36
24538	Humerus/ Elbow Fracture and/or Dislocation	Percutaneous skeletal fixation of supracondylar or transcondylar humeral fracture, with or without intercondylar extension.	7.58	4.75	0.63
24545	Humerus/ Elbow Fracture and/or Dislocation	Open treatment of humeral supracondylar or transcondylar fracture, with or without internal or external fixation; without intercondylar	0.44	0.48	1.08

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		extension.			
24546	Humerus/ Elbow Fracture and/or Dislocation	Open treatment of humeral supracondylar or transcondylar fracture, with or without internal or external fixation; with intercondylar extension.	0.16	0.28	1.78
24566	Humerus/ Elbow Fracture and/or Dislocation	Percutaneous skeletal fixation of humeral epicondylar fracture, medial or lateral, with manipulation.	0.05	0.11	2.26
24575	Humerus/ Elbow Fracture and/or Dislocation	Open treatment of humeral epicondylar fracture, medial or lateral, with or without internal or external fixation.	0.65	0.35	0.53
24579	Humerus/ Elbow Fracture and/or Dislocation	Open treatment of humeral condylar fracture, medial or lateral, with or without internal or external fixation.	1.38	0.83	0.60
24582	Humerus/ Elbow Fracture and/or Dislocation	Percutaneous skeletal fixation of humeral condylar fracture, medial or lateral, with manipulation.	0.35	0.31	0.89
24586	Humerus/ Elbow Fracture and/or Dislocation	Open treatment of periarticular fracture and/or dislocation of the elbow (fracture distal humerus and proximal ulna and/ or proximal radius);.	0.05	0.10	2.10
24587	Humerus/ Elbow Fracture and/or Dislocation	Open treatment of periarticular fracture and/or dislocation of the elbow (fracture distal humerus and proximal ulna and/ or proximal radius); with implant arthroplasty.	0.00	0.01	Inf
24605	Humerus/ Elbow Fracture and/or Dislocation	Treatment of closed elbow dislocation; requiring anesthesia.	0.10	0.21	2.07
24615	Humerus/ Elbow Fracture and/or Dislocation	Open treatment of acute or chronic elbow dislocation.	0.06	0.05	0.77
24635	Humerus/ Elbow Fracture and/or Dislocation	Open treatment of Monteggia type of fracture dislocation at elbow (fracture proximal end of ulna with dislocation of radial head), with or without internal or external fixation.	0.20	0.14	0.72
24665	Humerus/ Elbow Fracture and/or Dislocation	Open treatment of radial head or neck fracture, with or without internal fixation or radial head excision;.	0.25	0.17	0.68
24666	Humerus/ Elbow Fracture and/or Dislocation	Open treatment of radial head or neck fracture, with or	0.00	0.01	Inf

http://dx.doi.org/10.2106/JBJS.17.01115 Page 138

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		without internal fixation or radial head excision; with radial head prosthetic replacement.			
24685	Humerus/ Elbow Fracture and/or Dislocation	Open treatment of ulnar fracture proximal end (olecranon process), with or without internal or external fixation.	0.37	0.24	0.64
25000	Forearm/Wrist Incision	Tendon sheath incision; at radial styloid (eg, for deQuervain's disease).	0.03	0.01	0.36
25001	Forearm/Wrist Incision	Incision, flexor tendon sheath, wrist ( eg, flexor carpi radialis	0.00	0.00	0.82
25020	Forearm/Wrist Incision	Decompression fasciotomy, forearm and/or wrist; flexor or extensor compartment; without debridement of nonviable muscle and/or nerve	0.06	0.03	0.52
25023	Forearm/Wrist Incision	Decompression fasciotomy, forearm and/or wrist; with debridement of nonviable muscle and/or nerve.	0.01	0.01	1.02
25024	Forearm/Wrist Incision	Decompression fasciotomy, forearm and/or wrist, flexor AND extensor compartment; without debridement of nonviable muscle and/or nerve	0.02	0.02	0.83
25025	Forearm/Wrist Incision	Decompression fasciotomy, forearm and/or wrist, flexor AND extensor compartment; with debridement of nonviable muscle and/or nerve	0.00	0.01	4.01
25028	Forearm/Wrist Incision	Incision and drainage, forearm and/or wrist; deep abscess or hematoma.	0.07	0.08	1.18
25031	Forearm/Wrist Incision	Incision and drainage, forearm and/or wrist; infected bursa.	0.00	0.02	Inf
25035	Forearm/Wrist Incision	Incision, deep, with opening of bone cortex (eg, for osteomyelitis or bone abscess), forearm and/or wrist.	0.04	0.04	0.93
25040	Forearm/Wrist Incision	Arthrotomy, radiocarpal or midcarpal joint, with exploration, drainage, or removal of foreign body.	0.01	0.01	1.00
25065	Forearm/Wrist Excision	Biopsy, soft tissue of forearm and/or wrist; superficial	0.00	0.02	Inf

http://dx.doi.org/10.2106/JBJS.17.01115 Page 139

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
25066	Forearm/Wrist Excision	Biopsy, soft tissue of forearm and/or wrist; deep (subfascial or intramuscular)	0.01	0.02	1.71
25071	Forearm/Wrist Excision	Excision, tumor, soft tissue of forearm and/or wrist area, subcutaneous; 3 cm or greater	0.00	0.00	0.07
25073	Forearm/Wrist Excision	Excision, tumor, soft tissue of forearm and/or wrist area, subfascial (eg, intramuscular); 3 cm or greater	0.01	0.00	0.07
25075	Forearm/Wrist Excision	Excision, tumor, soft tissue of forearm and/or wrist area, subcutaneous; less than 3 cm	0.01	0.02	1.41
25076	Forearm/Wrist Excision	Excision, tumor, soft tissue of forearm and/or wrist area, subfascial (eg, intramuscular); less than 3 cm	0.02	0.03	1.92
25077	Forearm/Wrist Excision	Radical resection of tumor (eg, sarcoma), soft tissue of forearm and/or wrist area; less than 3 cm	0.01	0.01	1.00
25085	Forearm/Wrist Excision	Capsulotomy, wrist (eg, contracture)	0.00	0.01	3.34
25100	Forearm/Wrist Excision	Arthrotomy, wrist joint; with biopsy	0.01	0.00	0.30
25101	Forearm/Wrist Excision	Arthrotomy, wrist joint; with joint exploration, with or without biopsy, with or without removal of loose or foreign body	0.02	0.00	0.19
25105	Forearm/Wrist Excision	Arthrotomy, wrist joint; with synovectomy	0.00	0.00	Inf
25107	Forearm/Wrist Excision	Arthrotomy, distal radioulnar joint including repair of triangular cartilage, complex	0.01	0.00	0.34
25109	Forearm/Wrist Excision	Excision of tendon, forearm and/or wrist, floexor or extensor, each	0.01	0.00	0.00
25110	Forearm/Wrist Excision	Excision, lesion of tendon sheath, forearm and/or wrist	0.00	0.01	Inf
25111	Forearm/Wrist Excision	Excision of ganglion, wrist (dorsal or volar); primary	0.73	0.23	0.31
25112	Forearm/Wrist Excision	Excision of ganglion, wrist (dorsal or volar); recurrent	0.02	0.01	0.68
25115	Forearm/Wrist Excision	Radical excision of bursa, synovia of wrist, or forearm tendon sheaths (eg, tenosynovitis, fungus, Tbc, or other granulomas, rheumatoid arthritis); flexor	0.01	0.00	0.35
25116	Forearm/Wrist Excision	Radical excision of bursa,	0.00	0.00	Inf

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		synovia of wrist, or forearm tendon sheaths (eg, tenosynovitis, fungus, Tbc, or other granulomas, rheumatoid arthritis); extensors, with or without transposition of dorsal retinaculum			
25118	Forearm/Wrist Excision	Synovectomy, extensor tendon sheath, wrist, single compartment;	0.01	0.00	0.42
25120	Forearm/Wrist Excision	Excision or curettage of bone cyst or benign tumor of radius or ulna (excluding head or neck of radius and olecranon process);	0.06	0.09	1.58
25125	Forearm/Wrist Excision	Excision or curettage of bone cyst or benign tumor of radius or ulna (excluding head or neck of radius and olecranon process); with autograft (includes obtaining graft)	0.00	0.01	Inf
25126	Forearm/Wrist Excision	Excision or curettage of bone cyst or benign tumor of radius or ulna (excluding head or neck of radius and olecranon process); with allograft	0.01	0.02	4.12
25130	Forearm/Wrist Excision	Excision or curettage of bone cyst or benign tumor of carpal bones;	0.02	0.01	0.41
25135	Forearm/Wrist Excision	Excision or curettage of bone cyst or benign tumor of carpal bones; with autograft (includes obtaining graft)	0.00	0.00	0.52
25136	Forearm/Wrist Excision	Excision or curettage of bone cyst or benign tumor of carpal bones; with allograft	0.00	0.00	Inf
25145	Forearm/Wrist Excision	Sequestrectomy (eg, for osteomyelitis or bone abscess), forearm and/or wrist	0.00	0.00	0.30
25150	Forearm/Wrist Excision	Partial excision (craterization, saucerization, or diaphysectomy) of bone (eg, for osteomyelitis); ulna	0.01	0.01	0.72
25151	Forearm/Wrist Excision	Partial excision (craterization, saucerization, or diaphysectomy) of bone (eg, for osteomyelitis); radius	0.01	0.01	1.82
25170	Forearm/Wrist Excision	Radical resection of tumor, radius or ulna	0.00	0.01	Inf
25210 25215	Forearm/Wrist Excision Forearm/Wrist Excision	Carpectomy; 1 bone Carpectomy; all bones of	0.02	0.00	0.27 1.19

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		proximal row			
25230	Forearm/Wrist Excision	Radial styloidectomy (separate procedure)	0.00	0.00	0.82
25240	Forearm/Wrist Excision	Excision distal ulna partial or complete (eg, Darrach type or matched resection)	0.01	0.01	0.91
25260	Forearm/ Wrist Repair, Revision and/or Reconstruction	Repair, tendon or muscle, flexor, forearm and/or wrist; primary, single, each tendon or muscle	0.10	0.10	1.01
25263	Forearm/ Wrist Repair, Revision and/or Reconstruction	secondary, single, each tendon or muscle	0.00	0.01	1.85
25265	Forearm/ Wrist Repair, Revision and/or Reconstruction	secondary, with free graft (includes obtaining	0.00	0.00	Inf
25270	Forearm/ Wrist Repair, Revision and/or Reconstruction	Repair, tendon or muscle, extensor, forearm and/or wrist; primary, single, each tendon or muscle	0.04	0.05	1.14
25272	Forearm/ Wrist Repair, Revision and/or Reconstruction	secondary, single, each tendon or muscle	0.01	0.01	0.67
25274	Forearm/ Wrist Repair, Revision and/or Reconstruction	secondary, with free graft (includes obtaining	0.00	0.00	Inf
25275	Forearm/ Wrist Repair, Revision and/or Reconstruction	Repair, tendon sheath, extensor, forearm and or wrist, with free graft includes graft harvest	0.01	0.00	0.26
25280	Forearm/ Wrist Repair, Revision and/or Reconstruction	Lengthening or shortening of flexor or extensor tendon, forearm and/or wrist, single, each tendon	0.06	0.13	2.03
25290	Forearm/ Wrist Repair, Revision and/or Reconstruction	Tenotomy, open flexor or extensor tendon, forearm and/or wrist, single, each tendon	0.06	0.09	1.44
25295	Forearm/ Wrist Repair, Revision and/or Reconstruction	Tenolysis, flexor or extensor tendon, forearm and/or wrist, single, each tendon	0.01	0.02	1.78
25300	Forearm/ Wrist Repair, Revision and/or Reconstruction	Tenodesis at wrist; flexors of fingers	0.00	0.00	0.96
25301	Forearm/ Wrist Repair, Revision and/or Reconstruction	extensors of fingers	0.00	0.01	2.08
25310	Forearm/ Wrist Repair, Revision and/or Reconstruction	Tendon transplantation or transfer, flexor or extensor, forearm and/or wrist, single; each tendon	0.05	0.17	3.21

CPT Code <sup>a</sup>	CPT Code Category	<b>CPT Code Description</b>	Practitioner %	Resident %	Relative Rate
25312	Forearm/ Wrist Repair, Revision and/or Reconstruction	with tendon graft(s) (includes obtaining graft), each tendon	0.00	0.02	Inf
25315	Forearm/ Wrist Repair, Revision and/or Reconstruction	Flexor origin slide (eg, for cerebral palsy, Volkmann contracture), forearm and/or wrist	0.00	0.00	1.71
25316	Forearm/ Wrist Repair, Revision and/or Reconstruction	with tendon transfer	0.00	0.01	Inf
25320	Forearm/ Wrist Repair, Revision and/or Reconstruction	Capsulorrhaphy or reconstruction, wrist, any method open	0.03	0.02	0.56
25332	Forearm/ Wrist Repair, Revision and/or Reconstruction	Arthroplasty, wrist, with or without interposition, with or wtihout external or internal fixation	0.00	0.00	Inf
25335	Forearm/ Wrist Repair, Revision and/or Reconstruction	Centralization of wrist on ulna eg, radial club hand)	0.00	0.03	9.12
25337	Forearm/ Wrist Repair, Revision and/or Reconstruction	Reconstruction for stabilization of unstable distal radioulnar joint, secondary by soft tissue stabilization with or without open reduction of distal radioulnar joint	0.01	0.01	1.59
25350	Forearm/ Wrist Repair, Revision and/or Reconstruction	Osteotomy, radius; distal third	0.07	0.06	0.88
25355	Forearm/ Wrist Repair, Revision and/or Reconstruction	middle or proximal third	0.02	0.02	1.01
25360	Forearm/ Wrist Repair, Revision and/or Reconstruction	Osteotomy; ulna	0.05	0.08	1.55
25365	Forearm/ Wrist Repair, Revision and/or Reconstruction	radius and ulna	0.02	0.03	2.02
25370	Forearm/ Wrist Repair, Revision and/or Reconstruction	Multiple osteotomies, with realignment on intramedullary rod (Sofield type procedure); radius OR ulna	0.00	0.00	Inf
25375	Forearm/ Wrist Repair, Revision and/or Reconstruction	radius AND ulna	0.00	0.00	Inf
25390	Forearm/ Wrist Repair, Revision and/or Reconstruction	Osteoplasty, radius OR ulna; shortening	0.05	0.03	0.56
25391	Forearm/ Wrist Repair, Revision and/or Reconstruction	lengthening with autograft	0.00	0.02	Inf

Copyright @ by The Journal of Bone and Joint Surgery, Incorporated Kohring et al.

 $Operative\ Experience\ During\ Orthopaedic\ Residency\ Compared\ with\ Early\ Practice\ in\ the\ U.S.$ 

http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
25392	Forearm/ Wrist Repair, Revision and/or Reconstruction	Osteoplasty, radius AND ulna; shortening (excluding 64876)	0.00	0.00	0.74
25393	Forearm/ Wrist Repair, Revision and/or Reconstruction	lengthening with autograft	0.00	0.00	Inf
25394	Forearm/ Wrist Repair, Revision and/or Reconstruction	Osteoplasty, carpal bone, shortening	0.00	0.01	Inf
25400	Forearm/ Wrist Repair, Revision and/or Reconstruction	Repair of nonunion or malunion, radius OR ulna; without graft	0.11	0.03	0.28
25405	Forearm/ Wrist Repair, Revision and/or Reconstruction	with autograft (includes obtaining graft)	0.02	0.02	1.09
25415	Forearm/ Wrist Repair, Revision and/or Reconstruction	Repair of nonunion or malunion, radius AND ulna; without graft	0.02	0.01	0.74
25420	Forearm/ Wrist Repair, Revision and/or Reconstruction	with autograft (includes obtaining graft)	0.00	0.00	1.78
25425	Forearm/ Wrist Repair, Revision and/or Reconstruction	Repair of defect with autograft; radius OR ulna	0.00	0.00	0.89
25426	Forearm/ Wrist Repair, Revision and/or Reconstruction	radius AND ulna	0.00	0.00	0.15
25430	Forearm/ Wrist Repair, Revision and/or Reconstruction	Insertion vascular pedicle into carpal bone	0.02	0.00	0.15
25431	Forearm/ Wrist Repair, Revision and/or Reconstruction	Repair of carpal bone nonunion other than scaphoid, each, including graft and fixation, each bone	0.01	0.01	0.87
25440	Forearm/ Wrist Repair, Revision and/or Reconstruction	Repair of nonunion, scaphoid navicular bone, with or without radial styloidectomy (includes obtaining graft and necessary fixation	0.17	0.04	0.25
25445	Forearm/ Wrist Repair, Revision and/or Reconstruction	trapezium	0.00	0.00	Inf
25446	Forearm/ Wrist Repair, Revision and/or Reconstruction	distal radius and partial or entire carpus (total wrist)	0.00	0.00	Inf
25447	Forearm/ Wrist Repair, Revision and/or Reconstruction	Interposition arthroplasty, intercarpal or carpometacarpal joints	0.00	0.01	Inf
25449	Forearm/ Wrist Repair, Revision and/or Reconstruction	Revision of arthroplasty, including removal of implant, wrist joint	0.00	0.00	Inf

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
25450	Forearm/ Wrist Repair, Revision and/or Reconstruction	Epiphyseal arrest by epiphysiodesis or stapling; distal radius OR ulna	0.07	0.05	0.67
25455	Forearm/ Wrist Repair, Revision and/or Reconstruction	distal radius AND ulna	0.02	0.01	0.35
25490	Forearm/ Wrist Repair, Revision and/or Reconstruction	Prophylactic treatment (nailing, pinning, plating or wiring) with or without methyl methacrylate; radius	0.00	0.00	Inf
25491	Forearm/ Wrist Repair, Revision and/or Reconstruction	ulna	0.00	0.00	Inf
25492	Forearm/ Wrist Repair, Revision and/or Reconstruction	radius AND ulna	0.00	0.00	0.59
25515	Forearm/ Wrist Fracture and/or Dislocation	Open treatment of radial shaft fracture, includes internal fixation	0.42	0.19	0.45
25525	Forearm/ Wrist Fracture and/or Dislocation	Open treatment of radial shaft fracture, includes internal fixation and closed treatment of dislocation of DRUJ	0.09	0.04	0.48
25526	Forearm/ Wrist Fracture and/or Dislocation	Open treatment of radial shaft fracture, includes internal fixaiton and open treatment of dislocation of DRUJ	0.02	0.02	0.81
25545	Forearm/ Wrist Fracture and/or Dislocation	Open treatment of ulnar shaft fracture, includes internal fixation	0.15	0.15	1.01
25574	Forearm/ Wrist Fracture and/or Dislocation	Open treatment of radial and ulnar shaft fractures with internal fixation of radius or ulna	0.60	0.22	0.37
25575	Forearm/ Wrist Fracture and/or Dislocation	Open treatment of radial and ulnar shaft fractures with internal fixation of radius and ulna	1.38	0.73	0.53
25606	Forearm/ Wrist Fracture and/or Dislocation	Percutaneous skeletal fixation of distal radial fracture or epiphyseal separation	1.93	0.53	0.28
25607	Forearm/ Wrist Fracture and/or Dislocation	Open treatment of distal radial extra-articular fracture or epiphyseal separation with internal fixation	0.57	0.19	0.34
25608	Forearm/ Wrist Fracture and/or Dislocation	Open treatment of distal radial intra-articular fracture or epiphyseal separation with internal fixation of 2 fragments	0.14	0.06	0.43
25609	Forearm/ Wrist Fracture and/or Dislocation	Open treatment of distal radial intra-articular fracture or	0.10	0.06	0.61

http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		epiphyseal separation with internal fixation of 3 fragments			
25611	Forearm/ Wrist Fracture and/or Dislocation		0.00	0.03	Inf
25620	Forearm/ Wrist Fracture and/or Dislocation		0.02	0.02	1.01
25628	Forearm/ Wrist Fracture and/or Dislocation	Open treatment of carpal scaphoid fracture, internal fixation	0.22	0.06	0.30
25645	Forearm/ Wrist Fracture and/or Dislocation	Open treatment of carpal bone fracture (excludes scaphoid)	0.03	0.01	0.28
25651	Forearm/ Wrist Fracture and/or Dislocation	Percutaneous skeletal fixation of ulnar stylod fracture	0.05	0.01	0.25
25652	Forearm/ Wrist Fracture and/or Dislocation	Open treatment of ulnar styloid fracture	0.03	0.01	0.38
25670	Forearm/ Wrist Fracture and/or Dislocation	Open treatment of radiocarpal or intercarpal dislocation, 1 or more bones	0.01	0.00	0.78
25671	Forearm/ Wrist Fracture and/or Dislocation	Percutaneous skeletal fixation of DRUJ	0.01	0.01	0.62
25676	Forearm/ Wrist Fracture and/or Dislocation	Open treatment of DRUJ dislocation	0.01	0.01	0.79
25685	Forearm/ Wrist Fracture and/or Dislocation	Open treatment of trans- scaphoiperilunate type of fracture dislocation	0.01	0.01	0.50
25695	Forearm/ Wrist Fracture and/or Dislocation	Open treatment of lunate dislocation	0.01	0.00	0.47
26010	Hand/Fingers Incision	Drainage of finger abscess; simple.	0.06	0.05	0.91
26011	Hand/Fingers Incision	Drainage of finger abscess; complicated (eg, felon).	0.15	0.08	0.57
26020	Hand/Fingers Incision	Drainage of tendon sheath, one digit and/or palm.	0.09	0.04	0.47
26025	Hand/Fingers Incision	Drainage of palmar bursa; single, ulnar or radial.	0.02	0.02	0.85
26030	Hand/Fingers Incision	Drainage of palmar bursa; multiple or complicated.	0.00	0.01	4.45
26034	Hand/Fingers Incision	Incision, deep, with opening of bone cortex (eg, for osteomyelitis or bone abscess), hand or finger.	0.02	0.02	1.23
26035	Hand/Fingers Incision	Decompression fingers and/or hand, injection injury (eg, grease gun).	0.00	0.00	Inf
26037	Hand/Fingers Incision	Decompressive fasciotomy, hand (excludes 26035).	0.02	0.01	0.61
26045	Hand/Fingers Incision	Fasciotomy, palmar, for Dupuytren's contracture; open, partial.	0.00	0.01	2.23
26055	Hand/Fingers Incision	Tendon sheath incision (eg, for trigger finger).	0.95	0.73	0.77

http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
26060	Hand/Fingers Incision	Tenotomy, percutaneous, single, each digit.	0.00	0.00	Inf
26070	Hand/Fingers Incision	Arthrotomy, with exploration, drainage, or removal of foreign body; carpometacarpal joint.	0.01	0.01	1.19
26075	Hand/Fingers Incision	Arthrotomy, with exploration, drainage, or removal of foreign body; metacarpophalangeal joint.	0.06	0.02	0.33
26080	Hand/Fingers Incision	Arthrotomy, with exploration, drainage, or removal of foreign body; interphalangeal joint, each.	0.04	0.02	0.56
26100	Hand/Fingers Excision	Arthrotomy with biopsy; carpometacarpal joint, each	0.00	0.00	Inf
26105	Hand/Fingers Excision	Arthrotomy with synovial biopsy; metacarpophalangeal joint.	0.00	0.00	0.45
26110	Hand/Fingers Excision	Arthrotomy with synovial biopsy; interphalangeal joint, each.	0.01	0.00	0.67
26111	Hand/Fingers Excision	Excision, tumor or vascular malformation, soft tissue of hand or finger, subcutaneous; 1.5 cm or greater	0.02	0.00	0.02
26113	Hand/Fingers Excision	Excision, tumor, soft tissue, or vascular malformation, of hand or finger, subfascial (eg, intramuscular); 1.5 cm or greater	0.02	0.00	0.01
26115	Hand/Fingers Excision	Excision, tumor or vascular malformation, soft tissue of hand or finger, subcutaneous; less than 1.5 cm	0.14	0.07	0.51
26116	Hand/Fingers Excision	Excision, tumor, soft tissue, or vascular malformation, of hand or finger, subfascial (eg, intramuscular); less than 1.5 cm	0.06	0.07	1.04
26117	Hand/Fingers Excision	Radical resection of tumor (eg, sarcoma), soft tissue of hand or finger; less than 3 cm	0.00	0.01	2.23
26121	Hand/Fingers Excision	Radical resection of tumor (eg, sarcoma), soft tissue of hand or finger; 3 cm or greater	0.00	0.01	4.90
26123	Hand/Fingers Excision	Fasciectomy, palm only, with or without Z-plasty, other local tissue rearrangement, or skin grafting (includes obtaining graft).	0.00	0.03	Inf

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
26125	Hand/Fingers Excision	Fasciectomy, partial palmar with release of single digit including proximal interphalangeal joint, with or without Z-plasty, other local tissue rearrangement, or skin grafting (includes obtaining graft);	0.00	0.01	Inf
26130	Hand/Fingers Excision	Fasciectomy, partial palmar with release of single digit including proximal interphalangeal joint, with or without Z-plasty, other local tissue rearrangement, or skin grafting (includes obtaining graft); each additional digit (List separately in addition.	0.00	0.00	Inf
26135	Hand/Fingers Excision	Synovectomy,	0.00	0.00	Inf
26145	Hand/Fingers Excision	carpometacarpal joint.  Synovectomy, proximal interphalangeal joint, including extensor reconstruction, each interphalangeal joint.	0.01	0.01	0.80
26160	Hand/Fingers Excision	Synovectomy tendon sheath, radical (tenosynovectomy), flexor, palm or finger, single, each digit.	0.13	0.10	0.77
26170	Hand/Fingers Excision	Excision of lesion of tendon sheath or capsule (eg, cyst, mucous cyst, or ganglion), hand or finger.	0.01	0.00	0.41
26180	Hand/Fingers Excision	Excision of tendon, palm, flexor, single (separate procedure), each.	0.03	0.01	0.34
26185	Hand/Fingers Excision	Excision of tendon, finger, flexor (separate procedure).	0.00	0.00	Inf
26200	Hand/Fingers Excision	Sesamoidectomy, thumb or finger (separate procedure).	0.02	0.02	0.96
26205	Hand/Fingers Excision	Excision or curettage of bone cyst or benign tumor of metacarpal;.	0.01	0.01	1.26
26210	Hand/Fingers Excision	Excision or curettage of bone cyst or benign tumor of metacarpal; with autograft (includes obtaining graft).	0.09	0.07	0.80
26215	Hand/Fingers Excision	Excision or curettage of bone cyst or benign tumor of proximal, middle, or distal phalanx of finger;.	0.01	0.01	1.06
26230	Hand/Fingers Excision	Excision or curettage of bone cyst or benign tumor of	0.00	0.00	Inf

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		proximal, middle, or distal phalanx of finger; with autograft (includes obtaining graft).			
26235	Hand/Fingers Excision	Partial excision (craterization, saucerization, or diaphysectomy) of bone (eg, for osteomyelitis); metacarpal.	0.00	0.01	3.04
26236	Hand/Fingers Excision	Partial excision (craterization, saucerization, or diaphysectomy) of bone (eg, for osteomyelitis); proximal or middle phalanx of finger.	0.02	0.01	0.45
26250	Hand/Fingers Excision	Partial excision (craterization, saucerization, or diaphysectomy) of bone (eg, for osteomyelitis); distal phalanx of finger.	0.00	0.00	0.82
26255	Hand/Fingers Excision	Radical resection (ostectomy) for tumor, metacarpal;.	0.00	0.00	Inf
26260	Hand/Fingers Excision	Radical resection (ostectomy) for tumor, proximal or middle phalanx of finger;.	0.00	0.01	Inf
26261	Hand/Fingers Excision	Radical resectin of tumor, distal phalanx of finger	0.00	0.00	Inf
26262	Hand/Fingers Excision	Manipulation finger joint under anesthesia, each joint	0.00	0.00	Inf
26340	Hand/Fingers Reapir, Revision and/or Reconstruction	Manipulation, palmar fascial cord, post enzyme injection, single cord	0.03	0.02	0.64
26350	Hand/Fingers Reapir, Revision and/or Reconstruction	secondary with free graft, each tendon	0.11	0.08	0.78
26352	Hand/Fingers Reapir, Revision and/or Reconstruction	Repair or advancement, flexor tendon, in zone 2 digital flexor tendon sheath; primary without free graft, each tendon	0.01	0.00	0.30
26356	Hand/Fingers Reapir, Revision and/or Reconstruction	secondary without free graft, each tendon	0.22	0.09	0.43
26357	Hand/Fingers Reapir, Revision and/or Reconstruction	secondary with free graft, each tendon	0.01	0.01	2.45
26358	Hand/Fingers Reapir, Revision and/or Reconstruction	Repair or advancement of profundus tendon, with intact superficialis tendon; primary, each tendon	0.00	0.01	Inf
26370	Hand/Fingers Reapir, Revision and/or Reconstruction	secondary with free graft, each tendon	0.07	0.02	0.26
26372	Hand/Fingers Reapir,	secondary without free	0.01	0.00	0.47

COPYRIGHT © BY THE JOURNAL OF BONE AND JOINT SURGERY, INCORPORATED KOHRING ET AL.

OPERATIVE EXPERIENCE DURING ORTHOPAEDIC RESIDENCY COMPARED WITH EARLY PRACTICE IN THE U.S. http://dx.doi.org/10.2106/JBJS.17.01115

Page	149

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
	Revision and/or Reconstruction	graft, each tendon			
26373	Hand/Fingers Reapir, Revision and/or Reconstruction	Flexor tendon excision, implantation of plastic tube or rod for delayed tendon graft, hand or finger, each rod	0.01	0.00	0.07
26390	Hand/Fingers Reapir, Revision and/or Reconstruction	Removal of tube or rod and insertion of flexor tendon graft (includes obtaining graft), hand or finger	0.02	0.00	0.22
26392	Hand/Fingers Reapir, Revision and/or Reconstruction	Extensor tendon repair, dorsum of hand, single, primary or secondary; without free graft, each tendon	0.01	0.00	0.13
26410	Hand/Fingers Reapir, Revision and/or Reconstruction	with free graft, (includes obtaining graft), each tendon	0.15	0.05	0.32
26412	Hand/Fingers Reapir, Revision and/or Reconstruction	Extensor tendon excision, implantation of plastic tube or rod for delayed tendon graft, hand or finger, each rod	0.00	0.00	Inf
26415	Hand/Fingers Reapir, Revision and/or Reconstruction	Removal of tube or rod and insertion of extensor tendon graft (includes obtaining graft), hand or finger	0.00	0.00	0.37
26416	Hand/Fingers Reapir, Revision and/or Reconstruction	Extensor tendon repair, finger, primary or secondary; without free graft, each tendon	0.00	0.00	0.45
26418	Hand/Fingers Reapir, Revision and/or Reconstruction	with free graft, (includes obtaining graft), each tendon	0.20	0.07	0.38
26420	Hand/Fingers Reapir, Revision and/or Reconstruction	Extensor tendon repair, central slip repair, secondary (boutonniere deformity); using local tissues, including lateral band(s), each finger	0.01	0.00	0.47
26426	Hand/Fingers Reapir, Revision and/or Reconstruction	with free graft, (includes obtaining graft), each finger	0.01	0.02	1.74
26428	Hand/Fingers Reapir, Revision and/or Reconstruction	Closed treatment of distal extensor tendon insertion, with or without percutaneous pinning	0.00	0.00	Inf
26432	Hand/Fingers Reapir, Revision and/or Reconstruction	Repair of extensor tendon, distal insetionk promary or secondary; without graft	0.04	0.01	0.34
26433	Hand/Fingers Reapir, Revision and/or Reconstruction	with free graft, (includes obtaining graft)	0.03	0.03	0.96
26434	Hand/Fingers Reapir, Revision and/or	Realignment of extensor tendon, hand, each tendon	0.00	0.00	Inf

 $Operative\ Experience\ During\ Orthopaedic\ Residency\ Compared\ with\ Early\ Practice\ in\ the\ U.S.$ 

http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
	Reconstruction				
26437	Hand/Fingers Reapir, Revision and/or Reconstruction	Tenolysis, flexor tendon; palm OR finger, each tendon	0.01	0.02	1.90
26440	Hand/Fingers Reapir, Revision and/or Reconstruction	palm AND finger, each tendon	0.02	0.03	1.04
26442	Hand/Fingers Reapir, Revision and/or Reconstruction	Tenolysis, extensor tendon, hand or finger, each tendon	0.01	0.01	1.09
26445	Hand/Fingers Reapir, Revision and/or Reconstruction	Tenolysis, complex, extensor tendon, finger, including forearm, each tendon	0.03	0.02	0.51
26449	Hand/Fingers Reapir, Revision and/or Reconstruction	Tenotomy, flexor, palm, open, each	0.00	0.00	Inf
26450	Hand/Fingers Reapir, Revision and/or Reconstruction	Tenotomy, flexor finger, , open, each	0.00	0.01	4.52
26455	Hand/Fingers Reapir, Revision and/or Reconstruction	Tenotomy, extensor hand or finger, single, open, each	0.01	0.02	1.57
26460	Hand/Fingers Reapir, Revision and/or Reconstruction	Tenodesis; for proximal interphalangeal joint stabilization	0.00	0.01	Inf
26471	Hand/Fingers Reapir, Revision and/or Reconstruction	of distal joint, each joint	0.00	0.01	2.23
26474	Hand/Fingers Reapir, Revision and/or Reconstruction	Tendon lengthening, extensor, hand or finger, single, each	0.01	0.00	0.82
26476	Hand/Fingers Reapir, Revision and/or Reconstruction	Tendon shortening, extensor, hand or finger, single, each	0.00	0.01	Inf
26477	Hand/Fingers Reapir, Revision and/or Reconstruction	Tendon lengthening, flexor, hand or finger, single, each	0.00	0.00	1.71
26478	Hand/Fingers Reapir, Revision and/or Reconstruction	Tendon shortening, flexor, hand or finger, single, each	0.02	0.07	3.56
26479	Hand/Fingers Reapir, Revision and/or Reconstruction	Tendon transfer or transplant, carpometacarpal area or dorsum of hand, single; without free graft, each	0.00	0.00	Inf
26480	Hand/Fingers Reapir, Revision and/or Reconstruction	with free tendon graft (includes obtaining graft), each tendon	0.03	0.04	1.34
26483	Hand/Fingers Reapir, Revision and/or Reconstruction	Tendon transfer or transplant, palmar, single, each tendon; without free tendon graft	0.00	0.00	Inf
26485	Hand/Fingers Reapir,	with free tendon graft	0.02	0.02	1.45

http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	<b>CPT Code Description</b>	Practitioner %	Resident %	Relative Rate
	Revision and/or Reconstruction	(includes obtaining graft), each tendon			
26489	Hand/Fingers Reapir, Revision and/or Reconstruction	Opopnensplasty, superficialis tendon transfer type, each tendon	0.00	0.00	Inf
26490	Hand/Fingers Reapir, Revision and/or Reconstruction	tendon transfer with graft (includes obtaining graft), each tendon	0.01	0.01	1.34
26492	Hand/Fingers Reapir, Revision and/or Reconstruction	hypothenar muscle transfer	0.00	0.00	1.78
26494	Hand/Fingers Reapir, Revision and/or Reconstruction	other methods	0.00	0.02	6.01
26496	Hand/Fingers Reapir, Revision and/or Reconstruction	Transfer of tendon to restore intrinsic function; ring and small finger	0.00	0.00	Inf
26497	Hand/Fingers Reapir, Revision and/or Reconstruction	all 4 fingers	0.00	0.00	Inf
26498	Hand/Fingers Reapir, Revision and/or Reconstruction	Correction claw finger, other methods	0.00	0.00	Inf
26499	Hand/Fingers Reapir, Revision and/or Reconstruction	Tendon pulley reconstruction, with local tissues separate procedure	0.00	0.01	Inf
26500	Hand/Fingers Reapir, Revision and/or Reconstruction	with tendon or fascial graft (includes obtaining graft) separate procedure	0.02	0.01	0.50
26502	Hand/Fingers Reapir, Revision and/or Reconstruction	Tendon pulley reconstruction; with tendon prosthesis (separate procedure).	0.00	0.00	1.41
26508	Hand/Fingers Reapir, Revision and/or Reconstruction	Thenar muscle release for thumb contracture	0.04	0.04	1.04
26510	Hand/Fingers Reapir, Revision and/or Reconstruction	Cross intrinsic transfer, each tendon	0.00	0.00	Inf
26516	Hand/Fingers Reapir, Revision and/or Reconstruction	Capsulodesis M-P joint; single digit	0.01	0.01	1.06
26517	Hand/Fingers Reapir, Revision and/or Reconstruction	2 digits	0.00	0.00	Inf
26518	Hand/Fingers Reapir, Revision and/or Reconstruction	3 or 4 digits	0.00	0.00	Inf
26520	Hand/Fingers Reapir, Revision and/or Reconstruction	Capsulectomy or capsulotomy; metacarpophalangeal joint, single, each	0.01	0.01	1.73

http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
26525	Hand/Fingers Reapir, Revision and/or Reconstruction	interphalangeal joint, single each	0.04	0.03	0.71
26530	Hand/Fingers Reapir, Revision and/or Reconstruction	Arthroplasty, metacarpophalangeal joint; single, each	0.00	0.00	1.04
26531	Hand/Fingers Reapir, Revision and/or Reconstruction	with prosthetic implant, single, each	0.00	0.00	Inf
26535	Hand/Fingers Reapir, Revision and/or Reconstruction	Arthroplasty, interphalangeal joint; single, each	0.00	0.00	Inf
26536	Hand/Fingers Reapir, Revision and/or Reconstruction	with prosthetic implant, single, each	0.00	0.00	Inf
26540	Hand/Fingers Reapir, Revision and/or Reconstruction	Repair of collateral ligament, metacarpophalangeal or interphalangeal joint	0.22	0.03	0.15
26541	Hand/Fingers Reapir, Revision and/or Reconstruction	Reconstruction, collateral ligament, metacarpophalangeal joint, singel; with tendon or fascial graft (includes obtaining graft)	0.02	0.01	0.64
26542	Hand/Fingers Reapir, Revision and/or Reconstruction	with local tissue	0.00	0.02	8.38
26545	Hand/Fingers Reapir, Revision and/or Reconstruction	Reconstruction, collateral ligament, interphalangeal joint, single, including graft, each joint	0.02	0.02	0.95
26546	Hand/Fingers Reapir, Revision and/or Reconstruction	Repair nonunion, metacarpal or phalanx, including bone graft with or without internal or external fixation	0.04	0.01	0.23
26548	Hand/Fingers Reapir, Revision and/or Reconstruction	Repair and reconstruction, finger volar plate, interphalangeal joint	0.01	0.02	3.63
26550	Hand/Fingers Reapir, Revision and/or Reconstruction	Pollicization of a digit	0.01	0.05	3.68
26551	Hand/Fingers Reapir, Revision and/or Reconstruction	Transfer, toe-to-hand with microvascular anastomosis; great toe wrap-around with bone graft	0.00	0.00	0.22
26553	Hand/Fingers Reapir, Revision and/or Reconstruction	other than great toe, single	0.00	0.00	Inf
26554	Hand/Fingers Reapir, Revision and/or Reconstruction	other than great toe, double	0.00	0.00	Inf
26555	Hand/Fingers Reapir,	Transfer, finger to another	0.00	0.00	Inf

 $Operative\ Experience\ During\ Orthopaedic\ Residency\ Compared\ with\ Early\ Practice\ in\ the\ U.S.$ 

http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
	Revision and/or Reconstruction	position without microvascualr anastomosis			
26556	Hand/Fingers Reapir, Revision and/or Reconstruction	Transfer, free toe joint with microvascular anastomosis	0.00	0.00	Inf
26560	Hand/Fingers Reapir, Revision and/or Reconstruction	Repair of syndactyly web finger each web space; with skin flaps	0.06	0.16	2.56
26561	Hand/Fingers Reapir, Revision and/or Reconstruction	with skin flaps and grafts	0.14	0.29	2.14
26562	Hand/Fingers Reapir, Revision and/or Reconstruction	complex, involving bone, nails, etc	0.01	0.10	6.90
26565	Hand/Fingers Reapir, Revision and/or Reconstruction	Osteotomy; metacarpal, each	0.03	0.03	1.04
26567	Hand/Fingers Reapir, Revision and/or Reconstruction	phalanx of finger, each	0.08	0.09	1.12
26568	Hand/Fingers Reapir, Revision and/or Reconstruction	Osteotomy; metacarpal, each	0.01	0.01	2.15
26580	Hand/Fingers Reapir, Revision and/or Reconstruction	Repair cleft hand	0.00	0.01	Inf
26587	Hand/Fingers Reapir, Revision and/or Reconstruction	Reconstruction of polydactylous digit, soft tissue and bone	0.29	0.29	0.98
26590	Hand/Fingers Reapir, Revision and/or Reconstruction	Repair macrodacylia, each digit	0.00	0.01	4.08
26591	Hand/Fingers Reapir, Revision and/or Reconstruction	Repair, intrinsic muscles of hand, each muscle	0.01	0.00	0.26
26593	Hand/Fingers Reapir, Revision and/or Reconstruction	Release, intrinsic muscles of hand	0.01	0.02	1.45
26596	Hand/Fingers Reapir, Revision and/or Reconstruction	Excision of constricting ring of finger, with multiple Z-plasties	0.01	0.04	7.27
26607	Hand/Fingers Fracture and/or Dislocation	Closed treatment of metacarpal fracture, with manipulation, with internal or external fixation, each bone.	0.03	0.04	1.16
26608	Hand/Fingers Fracture and/or Dislocation	Percutaneous skeletal fixation of metacarpal fracture, each bone.	0.56	0.16	0.28
26615	Hand/Fingers Fracture and/or Dislocation	Open treatment of metacarpal fracture, single, with or without internal or external fixation,	0.61	0.17	0.28

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		each bone.			
26650	Hand/Fingers Fracture and/or Dislocation	Percutaneous skeletal fixation of carpometacarpal fracture dislocation, thumb (Bennett fracture), with manipulation, with or without external fixation.	0.07	0.02	0.30
26665	Hand/Fingers Fracture and/or Dislocation	Open treatment of carpometacarpal fracture dislocation, thumb (Bennett fracture), with or without internal or external fixation.	0.04	0.02	0.43
26675	Hand/Fingers Fracture and/or Dislocation	Closed treatment of carpometacarpal dislocation, other than thumb (Bennett fracture), single, with manipulation; requiring anesthesia.	0.00	0.01	Inf
26676	Hand/Fingers Fracture and/or Dislocation	Percutaneous skeletal fixation of carpometacarpal dislocation, other than thumb (Bennett fracture), single, with manipulation.	0.06	0.02	0.29
26685	Hand/Fingers Fracture and/or Dislocation	Open treatment of carpometacarpal dislocation, other than thumb (Bennett fracture); single, with or without internal or external fixation.	0.02	0.01	0.41
26686	Hand/Fingers Fracture and/or Dislocation	Open treatment of carpometacarpal dislocation, other than thumb (Bennett fracture); complex, multiple or delayed reduction.	0.01	0.00	0.52
26706	Hand/Fingers Fracture and/or Dislocation	Percutaneous skeletal fixation of metacarpophalangeal dislocation, single, with manipulation.	0.01	0.01	1.21
26715	Hand/Fingers Fracture and/or Dislocation	Open treatment of metacarpophalangeal dislocation, single, with or without internal or external fixation.	0.05	0.02	0.40
26727	Hand/Fingers Fracture and/or Dislocation	Percutaneous skeletal fixation of unstable phalangeal shaft fracture, proximal or middle phalanx, finger or thumb, with manipulation, each.	1.31	0.25	0.19
26735	Hand/Fingers Fracture and/or Dislocation	Open treatment of phalangeal shaft fracture, proximal or middle phalanx, finger or	0.56	0.15	0.27

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		thumb, with or without internal or external fixation, each.			
26746	Hand/Fingers Fracture and/or Dislocation	Open treatment of articular fracture, involving metacarpophalangeal or interphalangeal joint, with or without internal or external fixation, each.	0.49	0.07	0.13
26756	Hand/Fingers Fracture and/or Dislocation	Percutaneous skeletal fixation of distal phalangeal fracture, finger or thumb, each.	0.14	0.06	0.39
26765	Hand/Fingers Fracture and/or Dislocation	Open treatment of distal phalangeal fracture, finger or thumb, with or without internal or external fixation, each.	0.29	0.08	0.28
26770	Hand/Fingers Fracture and/or Dislocation	Closed treatment of interphalangeal joint dislocation, single, with manipulation; without anesthesia	0.00	0.03	9.87
26775	Hand/Fingers Fracture and/or Dislocation	Closed treatment of interphalangeal joint dislocation, single, with manipulation; requiring anesthesia	0.01	0.02	1.80
26776	Hand/Fingers Fracture and/or Dislocation	Percutaneous skeletal fixation of interphalangeal joint dislocation, single, with manipulation.	0.04	0.02	0.57
26785	Hand/Fingers Fracture and/or Dislocation	Open treatment of interphalangeal joint dislocation, with or without internal or external fixation, single.	0.04	0.02	0.47
26910	Hand/Fingers Amputation	Amputation, metacarpal, with finger or thumb (ray amputation), single, with or without interosseous transfer.	0.02	0.03	1.60
26951	Hand/Fingers Amputation	Amputation, finger or thumb, primary or secondary, any joint or phalanx, single, including neurectomies; with direct closure.	0.21	0.28	1.31
26952	Hand/Fingers Amputation	Amputation, finger or thumb, primary or secondary, any joint or phalanx, single, including neurectomies; with local advancement flaps (V-Y, hood).	0.06	0.05	0.88
26989	Hand/Fingers Other Procedures	Unlisted procedure, hand or fingers	0.02	0.13	7.80

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
26990	Pelvis/ Hip Incision	Incision and drainage, pelvis or hip joint area; deep abscess or hematoma.	0.07	0.14	2.01
26991	Pelvis/ Hip Incision	Incision and drainage, pelvis or hip joint area; infected bursa.	0.00	0.01	4.45
26992	Pelvis/ Hip Incision	Incision, deep, with opening of bone cortex (eg, for osteomyelitis or bone abscess), pelvis and/or hip joint.	0.05	0.04	0.94
27000	Pelvis/ Hip Incision	Tenotomy, adductor of hip, subcutaneous, closed (separate procedure).	0.09	0.39	4.37
27001	Pelvis/ Hip Incision	Tenotomy, adductor of hip, subcutaneous, open.	0.45	1.07	2.37
27003	Pelvis/ Hip Incision	Tenotomy, adductor, subcutaneous, open, with obturator neurectomy.	0.02	0.08	4.34
27005	Pelvis/ Hip Incision	Tenotomy, iliopsoas, open (separate procedure).	0.12	0.39	3.35
27006	Pelvis/ Hip Incision	Tenotomy, abductors of hip, open (separate procedure).	0.02	0.09	3.43
27025	Pelvis/ Hip Incision	Fasciotomy, hip or thigh, any type.	0.01	0.02	1.83
27027	Pelvis/ Hip Incision	Decompression fasciotomy(ies), pelvic (buttock) compartment(s)	0.00	0.00	Inf
27030	Pelvis/ Hip Incision	Arthrotomy, hip, for infection, with drainage.	0.25	0.29	1.20
27033	Pelvis/ Hip Incision	Arthrotomy, hip, with exploration or removal of loose or foreign body.	0.03	0.05	1.79
27035	Pelvis/ Hip Incision	Hip joint denervation, intrapelvic or extrapelvic intra- articular branches of sciatic, femoral, or obturator nerves.	0.00	0.01	Inf
27036	Pelvis/ Hip Incision	Capsulectomy or capsulotomy of hip, with or without excision of heterotopic bone, with release of hip flexor muscles (ie, gluteus medius, gluteus minimus, tensor fascia latae, rectus femoris, sartorius, iliopsoas).	0.04	0.09	2.09
27040	Pelvis/ Hip Excision	Biopsy, soft tissue of pelvis and hip area; superficial.	0.00	0.00	Inf
27041	Pelvis/ Hip Excision	Biopsy, soft tissue of pelvis and hip area; deep.	0.01	0.03	1.97
27045	Pelvis/ Hip Excision	Excision, tumor, pelvis and hip area; subcutaneous, 3 cm or	0.00	0.00	0.00

http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		greater.			
27047	Pelvis/ Hip Excision	Excision, tumor, pelvis and hip area; deep, subfascial, intramuscular, 5 cm or greater	0.00	0.00	Inf
27048	Pelvis/ Hip Excision	Excision, tumor, pelvis and hip area; subcutaneous, less than 3 cm	0.00	0.02	8.68
27049	Pelvis/ Hip Excision	Excision, tumor, pelvis and hip area; deep, subfascial, intramuscular, less than 5 cm	0.00	0.01	Inf
27050	Pelvis/ Hip Excision	Radical resection of tumor (eg, malignant neoplasm), soft tissue of pelvis and hip area, less than 5 cm.	0.00	0.00	Inf
27052	Pelvis/ Hip Excision	Arthrotomy, with biopsy; sacroiliac joint.	0.01	0.01	2.45
27054	Pelvis/ Hip Excision	Arthrotomy, with biopsy; hip joint.	0.00	0.02	6.75
27057	Pelvis/ Hip Excision	Arthrotomy with synovectomy, hip joint.	0.00	0.00	Inf
27060	Pelvis/ Hip Excision	Radical resection of tumor (eg, malignant neoplasm), soft tissue of pelvis and hip area 5 cm or greater.	0.00	0.00	0.37
27062	Pelvis/ Hip Excision	Excision; ischial bursa.	0.00	0.01	2.00
27065	Pelvis/ Hip Excision	Excision; trochanteric bursa or calcification.	0.01	0.04	3.20
27066	Pelvis/ Hip Excision	Excision of bone cyst or benign tumor; superficial (wing of ilium, symphysis pubis, or greater trochanter of femur) with or without autograft.	0.03	0.13	4.31
27067	Pelvis/ Hip Excision	Excision of bone cyst or benign tumor; deep, with or without autograft.	0.00	0.01	Inf
27070	Pelvis/ Hip Excision	Excision of bone cyst or benign tumor; with autograft requiring separate incision.	0.00	0.01	Inf
27071	Pelvis/ Hip Excision	Partial excision (craterization, saucerization) (eg, for osteomyelitis); superficial (eg, wing of ilium, symphysis pubis or greater trochanter of femur).	0.02	0.02	1.24
27075	Pelvis/ Hip Excision	Partial excision (craterization, saucerization) (eg, for osteomyelitis); deep.	0.01	0.01	1.01
27076	Pelvis/ Hip Excision	Radical resection of tumor or infection; wing of ilium, one pubic or ischial ramus or symphysis pubis.	0.00	0.01	2.45

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
27077	Pelvis/ Hip Excision	Radical resection of tumor or infection; ilium, including acetabulum, both pubic rami, or ischium and acetabulum.	0.00	0.00	Inf
27078	Pelvis/ Hip Excision	Radical resection of tumor or infection; innominate bone, total.	0.00	0.00	Inf
27079	Pelvis/ Hip Excision	Radical resection of tumor or infection; ischial tuberosity and greater trochanter of femur.	0.00	0.00	Inf
27080	Pelvis/ Hip Excision	Radical resection of tumor or infection; ischial tuberosity and greater trochanter of femur, with skin flaps.	0.00	0.01	4.01
27086	Pelvis/ Hip Introduction or Removal	Coccygectomy, primary.	0.00	0.01	Inf
27087	Pelvis/ Hip Introduction or Removal	Removal of foreign body, pelvis or hip; subcutaneous tissue.	0.01	0.09	10.26
27090	Pelvis/ Hip Introduction or Removal	Removal of foreign body, pelvis or hip; deep.	0.00	0.08	Inf
27091	Pelvis/ Hip Introduction or Removal	Removal of hip prosthesis; (separate procedure).	0.00	0.01	2.97
27093	Pelvis/ Hip Introduction or Removal	Removal of hip prosthesis; complicated, including "total hip" and methylmethacrylate, when applicable.	0.03	0.02	0.80
27095	Pelvis/ Hip Introduction or Removal	Injection procedure for hip arthrography; without anesthesia.	0.76	0.87	1.15
27096	Pelvis/ Hip Introduction or Removal	Injection procedure for hip arthrography; with anesthesia.	0.00	0.01	2.23
27097	Pelvis/ Hip Repair, Revision and/or Reconstruction	Injection procedure for sacroiliac joint, anesthetic/steroid, with image guidance including arthrography when performed	0.01	0.06	7.59
27098	Pelvis/ Hip Repair, Revision and/or Reconstruction	Release or recession, hamstring, proximal	0.00	0.00	Inf
27100	Pelvis/ Hip Repair, Revision and/or Reconstruction	Transfer, adductor to ischium	0.00	0.01	Inf
27110	Pelvis/ Hip Repair, Revision and/or Reconstruction	Transfer external oblique muscle to greater trochanter including fascial or tendon extension (graft)	0.00	0.00	0.96
27111	Pelvis/ Hip Repair, Revision and/or Reconstruction	Transfer iliopsoas; to greater trochanter of femur	0.00	0.00	Inf
27120	Pelvis/ Hip Repair, Revision and/or Reconstruction	to femoral neck	0.02	0.07	3.24
27122	Pelvis/ Hip Repair, Revision	Acetabuloplasty; (eg,	0.02	0.07	3.86

http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
	and/or Reconstruction	Whitman, Colonna, Haygroves, or cup type)			
27125	Pelvis/ Hip Repair, Revision and/or Reconstruction	resection, femoral head (eg, Girdlestone procedure)	0.02	0.05	2.72
27130	Pelvis/ Hip Repair, Revision and/or Reconstruction	Hemiarthroplasty, hip, partial (eg, femoral stem prosthesis, bipolar arthroplasty)	0.04	0.16	3.94
27132	Pelvis/ Hip Repair, Revision and/or Reconstruction	Arthroplasty, acetabular and proximal femoral prosthetic replacement (total hip arthroplasty), with or without autograft or allograft	0.00	0.01	2.15
27134	Pelvis/ Hip Repair, Revision and/or Reconstruction	Conversion of previous hip surgery to total hip arthroplasty, with or without autograft or allograft	0.00	0.01	4.67
27137	Pelvis/ Hip Repair, Revision and/or Reconstruction	Revision of total hip arthroplasty; both components, with or without autograft or allograft	0.00	0.00	Inf
27138	Pelvis/ Hip Repair, Revision and/or Reconstruction	acetabular component only, with or without autograft or allograft	0.00	0.00	Inf
27140	Pelvis/ Hip Repair, Revision and/or Reconstruction	femoral component only, with or without allograft	0.04	0.08	2.06
27146	Pelvis/ Hip Repair, Revision and/or Reconstruction	Osteotomy and transfer of greater trochanter of femur (separate procedure)	0.09	0.40	4.27
27147	Pelvis/ Hip Repair, Revision and/or Reconstruction	Osteotomy, iliac, acetabular or innominate bone;	0.04	0.10	2.31
27151	Pelvis/ Hip Repair, Revision and/or Reconstruction	with open reduction of hip	0.13	0.27	2.10
27156	Pelvis/ Hip Repair, Revision and/or Reconstruction	with femoral osteotomy	0.13	0.30	2.38
27158	Pelvis/ Hip Repair, Revision and/or Reconstruction	with femoral osteotomy and with open reduction of hip	0.00	0.04	14.61
27161	Pelvis/ Hip Repair, Revision and/or Reconstruction	Osteotomy, pelvis, bilateral (eg, congenital malformation)	0.03	0.11	3.88
27165	Pelvis/ Hip Repair, Revision and/or Reconstruction	Osteotomy, femoral neck (separate procedure)	0.38	1.05	2.74
27170	Pelvis/ Hip Repair, Revision and/or Reconstruction	Osteotomy, intertrochanteric or subtrochanteric including internal or external fixation and/or cast	0.02	0.04	1.56
27175	Pelvis/ Hip Repair, Revision and/or Reconstruction	Bone graft, femoral head, neck, intertrochanteric or subtrochanteric area (includes obtaining bone graft)	0.00	0.01	Inf
27176	Pelvis/ Hip Repair, Revision and/or Reconstruction	Treatment of slipped femoral epiphysis; by traction, without reduction	0.85	0.94	1.11

http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
27177	Pelvis/ Hip Repair, Revision and/or Reconstruction	by single or multiple pinning, in situ	0.03	0.09	2.70
27178	Pelvis/ Hip Repair, Revision and/or Reconstruction	Open treatment of slipped femoral epiphysis; single or multiple pinning or bone graft (includes obtaining graft)	0.03	0.30	9.02
27179	Pelvis/ Hip Repair, Revision and/or Reconstruction	closed manipulation with single or multiple pinning	0.02	0.05	2.46
27181	Pelvis/ Hip Repair, Revision and/or Reconstruction	osteoplasty of femoral neck (Heyman type procedure)	0.02	0.04	2.03
27185	Pelvis/ Hip Repair, Revision and/or Reconstruction	osteotomy and internal fixation	0.02	0.05	2.06
27187	Pelvis/ Hip Repair, Revision and/or Reconstruction	Epiphyseal arrest by epiphysiodesis or stapling, greater trochanter of femur	0.03	0.04	1.17
27194	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Prophylactic treatment (nailing, pinning, plating or wiring) with or without methylmethacrylate, femoral neck and proximal femur	0.04	0.02	0.42
27202	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Closed treatment of pelvic ring fracture, dislocation, diastasis or subluxation; with manipulation, requiring more than local anesthesia.	0.00	0.00	Inf
27215	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Open treatment of coccygeal fracture.	0.02	0.01	0.54
27216	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Open treatment of iliac spine(s), tuberosity avulsion, or iliac wing fracture(s) (eg, pelvic fracture(s) which do not disrupt the pelvic ring), with internal fixation.	0.11	0.04	0.39
27217	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Percutaneous skeletal fixation of posterior pelvic ring fracture and/or dislocation (includes ilium, sacroiliac joint and/or sacrum).	0.05	0.04	0.68
27218	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Open treatment of anterior ring fracture and/or dislocation with internal fixation (includes pubic symphysis and/or rami).	0.04	0.03	0.77
27226	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Open treatment of posterior ring fracture and/or dislocation with internal fixation (includes ilium, sacroiliac joint and/ or sacrum).	0.02	0.01	0.68
27227	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Open treatment of posterior or anterior acetabular wall fracture, with internal fixation.	0.02	0.03	1.45

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
27228	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Open treatment of acetabular fracture(s) involving anterior or posterior (one) column, or a fracture running transversely across the acetabulum, with internal fixation.	0.02	0.02	1.01
27235	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Open treatment of acetabular fracture(s) involving anterior and posterior (two) columns, includes T-fracture and both column fracture with complete articular detachment, or single column or transverse fracture with associated acetabular wall fracture, wit.	0.12	0.21	1.78
27236	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Percutaneous skeletal fixation of femoral fracture, proximal end, neck, undisplaced, mildly displaced, or impacted fracture.	0.09	0.20	2.36
27244	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Open treatment of femoral fracture, proximal end, neck, internal fixation or prosthetic replacement (direct fracture exposure).	0.09	0.12	1.38
27245	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Open treatment of intertrochanteric, pertrochanteric, or subtrochanteric femoral fracture; with plate/screw type implant, with or without cerclage.	0.12	0.15	1.27
27248	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Open treatment of intertrochanteric, pertrochanteric, or subtrochanteric femoral fracture; with intramedullary implant, with or without interlocking screws and/or cerclage.	0.00	0.01	3.93
27253	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Open treatment of greater trochanteric fracture, with or without internal or external fixation.	0.01	0.01	1.30
27254	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Open treatment of hip dislocation, traumatic, without internal fixation.	0.02	0.01	0.66
27256	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Open treatment of hip dislocation, traumatic, with acetabular wall and femoral head fracture, with or without	0.01	0.06	5.49

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		internal or external fixation.			
27257	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Treatment of spontaneous hip dislocation (developmental, including congenital or pathological), by abduction, splint or traction; without anesthesia, without manipulation.	0.22	0.26	1.18
27258	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Treatment of spontaneous hip dislocation (developmental, including congenital or pathological), by abduction, splint or traction; with manipulation, requiring anesthesia.	0.08	0.21	2.55
27259	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Open treatment of spontaneous hip dislocation (developmental, including congenital or pathological), replacement of femoral head in acetabulum (including tenotomy, etc);.	0.02	0.09	4.54
27265	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Open treatment of spontaneous hip dislocation (developmental, including congenital or pathological), replacement of femoral head in acetabulum (including tenotomy, etc); with femoral shaft shortening.	0.00	0.00	Inf
27266	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Closed treatment of post hip arthroplasty dislocation; requiring anesthesia	0.00	0.01	3.49
27267	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Closed treatment of femoral fracture, proximal end, head; without manipulation	0.00	0.00	Inf
27268	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Closed treatment of femoral fracture, proximal end, head; with manipulation	0.00	0.00	Inf
27269	Pelvis/ Hip Trauma - Fracture and/or Dislocation	Open treatment of femoral fracture, proximal end, head, includes internal fixation, when performed	0.02	0.00	0.25
27275	Pelvis/ Hip Trauma - manipulation	, , , , , , , , , , , , , , , , , , , ,	0.01	0.11	7.74
27299	Pelvis/ Hip Other Procedures	Unlisted procedure, pelvis or hip joint	0.12	0.29	2.47
27301	Femur/ Knee Incision	Incision and drainage of deep abscess, infected bursa, or hematoma, thigh or knee region.	0.28	0.22	0.80

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
27303	Femur/ Knee Incision	Incision, deep, with opening of bone cortex (eg, for osteomyelitis or bone abscess), femur or knee.	0.17	0.14	0.82
27305	Femur/ Knee Incision	Fasciotomy, iliotibial (tenotomy), open.	0.03	0.03	1.00
27306	Femur/ Knee Incision	Tenotomy, subcutaneous, closed, adductor or hamstring, (separate procedure); single.	0.01	0.10	8.64
27307	Femur/ Knee Incision	Tenotomy, subcutaneous, closed, adductor or hamstring, (separate procedure); multiple.	0.02	0.28	14.45
27310	Femur/ Knee Incision	Arthrotomy, knee, for infection, with exploration, drainage or removal of foreign body.	0.36	0.29	0.80
27323	Femur/ Knee Excision	Biopsy, soft tissue of thigh or knee area; superficial.	0.00	0.01	3.93
27324	Femur/ Knee Excision	Biopsy, soft tissue of thigh or knee area; deep.	0.03	0.09	3.14
27325	Femur/ Knee Excision	Neurectomy, hamstring muscle	0.00	0.00	Inf
27326	Femur/ Knee Excision	Neurectomy, popliteal (gastrocnemius)	0.00	0.00	Inf
27327	Femur/ Knee Excision	Excision, tumor, thigh or knee area; subcutaneous less than 3 cm	0.02	0.03	1.78
27328	Femur/ Knee Excision	Excision, tumor, thigh or knee area; deep, subfascial, or intramuscular less than 5 cm	0.02	0.11	4.56
27329	Femur/ Knee Excision	Radical resection of tumor (eg, malignant neoplasm), soft tissue of thigh or knee area less than 5 cm	0.01	0.03	4.75
27330	Femur/ Knee Excision	Arthrotomy, knee; with synovial biopsy only.	0.01	0.01	1.11
27331	Femur/ Knee Excision	Arthrotomy, knee; with joint exploration, with or without biopsy, with or without removal of loose or foreign bodies.	0.09	0.06	0.70
27332	Femur/ Knee Excision	Arthrotomy, knee, with excision of semilunar cartilage (meniscectomy); medial OR lateral.	0.00	0.00	Inf
27333	Femur/ Knee Excision	Arthrotomy, knee, with excision of semilunar cartilage (meniscectomy); medial AND lateral.	0.00	0.00	Inf
27334	Femur/ Knee Excision	Arthrotomy, knee, with	0.02	0.02	1.09

 $Operative\ Experience\ During\ Orthopaedic\ Residency\ Compared\ with\ Early\ Practice\ in\ the\ U.S.$ 

http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		synovectomy; anterior OR posterior.			
27335	Femur/ Knee Excision	Arthrotomy, knee, with synovectomy; anterior AND posterior including popliteal area.	0.01	0.01	0.65
27337	Femur/ Knee Excision	Excision, tumor, thigh or knee area; subcutaneous 3 cm or greater	0.03	0.00	0.01
27339	Femur/ Knee Excision	Excision, tumor, thigh or knee area; deep, subfascial, or intramuscular5 cm or greater	0.01	0.00	0.01
27340	Femur/ Knee Excision	Excision, prepatellar bursa.	0.03	0.01	0.41
27345	Femur/ Knee Excision	Excision of synovial cyst of popliteal space (Baker's cyst).	0.01	0.02	1.65
27347	Femur/ Knee Excision	Excision of lesion of meniscus or capsule, knee	0.01	0.01	1.38
27350	Femur/ Knee Excision	Patellectomy or hemipatellectomy.	0.03	0.01	0.50
27355	Femur/ Knee Excision	Excision or curettage of bone cyst or benign tumor of femur;.	0.33	0.36	1.11
27356	Femur/ Knee Excision	Excision or curettage of bone cyst or benign tumor of femur; with allograft.	0.12	0.13	1.12
27357	Femur/ Knee Excision	Excision or curettage of bone cyst or benign tumor of femur; with autograft (includes obtaining graft).	0.01	0.02	1.67
27358	Femur/ Knee Excision	Excision or curettage of bone cyst or benign tumor of femur; with internal fixation (list in addition to 27355, 27356, or 27357).	0.04	0.03	0.97
27360	Femur/ Knee Excision	Partial excision (craterization, saucerization, or diaphysectomy) of bone (eg, for osteomyelitis), femur, proximal tibia and/ or fibula.	0.06	0.05	0.83
27364	Femur/ Knee Excision	Radical resection of tumor (eg, malignant neoplasm), soft tissue of thigh or knee area 5 cm or greater	0.00	0.00	0.00
27365	Femur/ Knee Excision	Radical resection of tumor, bone, femur or knee.	0.05	0.09	1.69
27372	Femur/ Knee Introduction or Removal		0.07	0.20	2.94
27380	Femur/ Knee repair, Revision and/or Reconstruction	Removal of foreign body, deep, thigh region or knee area.	0.10	0.08	0.74
27381	Femur/ Knee repair, Revision and/or	Suture of infrapatellar tendon; primary	0.00	0.02	5.49

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
	Reconstruction				
27385	Femur/ Knee repair, Revision and/or Reconstruction	secondary reconstruction, including fascial or tendon graft	0.07	0.03	0.34
27386	Femur/ Knee repair, Revision and/or Reconstruction	Suture of quadriceps or hamstring muscle rupture; primary	0.01	0.00	0.63
27390	Femur/ Knee repair, Revision and/or Reconstruction	secondary reconstruction, including fascial or tendon graft	0.01	0.03	2.47
27391	Femur/ Knee repair, Revision and/or Reconstruction	Tenotomy, open, hamstring, knee to hip; single tendon	0.01	0.10	8.73
27392	Femur/ Knee repair, Revision and/or Reconstruction	multiple tendons, one leg	0.02	0.26	11.90
27393	Femur/ Knee repair, Revision and/or Reconstruction	multiple tendons, bilateral	0.01	0.06	5.08
27394	Femur/ Knee repair, Revision and/or Reconstruction	Lengthening of hamstring tendon; single tendon	0.06	0.17	2.93
27395	Femur/ Knee repair, Revision and/or Reconstruction	multiple tendons, one leg	0.12	0.56	4.71
27396	Femur/ Knee repair, Revision and/or Reconstruction	multiple tendons, bilateral	0.02	0.05	2.72
27397	Femur/ Knee repair, Revision and/or Reconstruction	Transplant or transfer (with muscle redirection or rerouting), thigh; single tendon	0.00	0.01	3.19
27400	Femur/ Knee repair, Revision and/or Reconstruction	multiple tendons	0.01	0.07	8.80
27403	Femur/ Knee repair, Revision and/or Reconstruction	Transfer, tendon or muscle, hamstrings to femur	0.03	0.02	0.63
27405	Femur/ Knee repair, Revision and/or Reconstruction	Arthrotomy with meniscus repair, knee	0.16	0.05	0.31
27407	Femur/ Knee repair, Revision and/or Reconstruction	Repair, primary, torn ligament and/or capsule, knee; collateral	0.01	0.02	3.00
27409	Femur/ Knee repair, Revision and/or Reconstruction	cruciate	0.01	0.01	1.67
27412	Femur/ Knee repair, Revision and/or Reconstruction	collateral and cruciate ligaments	0.02	0.01	0.58
27415	Femur/ Knee repair, Revision and/or	Autologous chondrocyte implantation, knee	0.02	0.02	0.97

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
	Reconstruction				
27416	Femur/ Knee repair, Revision and/or Reconstruction	Osteohondral allograft, knee, open	0.02	0.01	0.48
27418	Femur/ Knee repair, Revision and/or Reconstruction	Osteochondral, knee, open (includes harvesting of autografts)	0.12	0.13	1.04
27420	Femur/ Knee repair, Revision and/or Reconstruction	Anterior tibial tubercleplasty	0.18	0.12	0.68
27422	Femur/ Knee repair, Revision and/or Reconstruction	Reconstruction of dislocating patella	0.35	0.28	0.80
27424	Femur/ Knee repair, Revision and/or Reconstruction	with extensor realignment and/or muscle advancement or release	0.00	0.00	0.82
27425	Femur/ Knee repair, Revision and/or Reconstruction	with patellectomy	0.07	0.13	1.94
27427	Femur/ Knee repair, Revision and/or Reconstruction	Lateral retinacular release, open	0.39	0.12	0.31
27428	Femur/ Knee repair, Revision and/or Reconstruction	Ligamentous reconstruction (augmentation), knee; extra-articular	0.02	0.02	1.26
27429	Femur/ Knee repair, Revision and/or Reconstruction	intra-articular (open)	0.01	0.02	1.95
27430	Femur/ Knee repair, Revision and/or Reconstruction	intra-articular (open) and extra-articular	0.04	0.08	2.22
27435	Femur/ Knee repair, Revision and/or Reconstruction	Quadricepsplasty (eg, Bennett or Thompson type)	0.01	0.05	8.49
27437	Femur/ Knee repair, Revision and/or Reconstruction	Capsulotomy, posterior capsular release, knee	0.00	0.00	0.67
27438	Femur/ Knee repair, Revision and/or Reconstruction	Arthroplasty, patella; without prosthesis	0.00	0.00	Inf
27440	Femur/ Knee repair, Revision and/or Reconstruction	with prosthesis	0.00	0.00	Inf
27441	Femur/ Knee repair, Revision and/or Reconstruction	Arthoroplasty, knee, tibial plateau	0.00	0.00	Inf
27442	Femur/ Knee repair, Revision and/or Reconstruction	with debridement and partial synovectomy	0.01	0.01	0.72
27443	Femur/ Knee repair, Revision and/or	Arthroplasty, femoral condyles or tibial plateay(s), knee	0.00	0.00	Inf

http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	<b>CPT Code Description</b>	Practitioner %	Resident %	Relative Rate
	Reconstruction				
27445	Femur/ Knee repair, Revision and/or Reconstruction	with debridement and partial synovectomy	0.01	0.04	3.25
27446	Femur/ Knee repair, Revision and/or Reconstruction	Arthroplasty, knee, hinge prosthesis	0.00	0.01	Inf
27447	Femur/ Knee repair, Revision and/or Reconstruction	Arthroplasty, knee, condyle and plateau; medial OR lateral compartment	0.04	0.19	4.78
27448	Femur/ Knee repair, Revision and/or Reconstruction	medial AND lateral compartments with or without parella resurfacing (total knee arthroplasty)	0.01	0.04	4.94
27450	Femur/ Knee repair, Revision and/or Reconstruction	Osteotomy, femur, shaft or supracondylar; without fixation	0.19	0.82	4.34
27454	Femur/ Knee repair, Revision and/or Reconstruction	with fixation	0.03	0.10	3.44
27455	Femur/ Knee repair, Revision and/or Reconstruction	Osteotomy, multiple, with realignment on intramedullary rod, femoral shaft	0.04	0.13	3.32
27457	Femur/ Knee repair, Revision and/or Reconstruction	Osteotomy, proximal tibia, including fibular excision or osteotomy (includes correction of genu varus [bowleg] or genu valgus [knock knee]); before epiphyseal closure	0.01	0.08	5.56
27465	Femur/ Knee repair, Revision and/or Reconstruction	after epiphyseal closure	0.01	0.06	6.90
27466	Femur/ Knee repair, Revision and/or Reconstruction	Osteoplasty, femyr;shortening	0.03	0.09	2.57
27468	Femur/ Knee repair, Revision and/or Reconstruction	lengthening	0.00	0.01	3.78
27470	Femur/ Knee repair, Revision and/or Reconstruction	combined, lengthing and shortening with femoral segment transfer	0.02	0.02	0.76
27472	Femur/ Knee repair, Revision and/or Reconstruction	Repair, nonunion or malunion, femyr, distal to head and neck: without graft	0.01	0.02	1.50
27475	Femur/ Knee repair, Revision and/or Reconstruction	with iliac or other autogenous bone graft (includes obtaining graft)	0.12	0.55	4.75
27477	Femur/ Knee repair, Revision and/or Reconstruction	Arrest, epiphyseal, any method; distal femur	0.04	0.29	6.94
27479	Femur/ Knee repair,	tibial and fibula, proximal	0.12	0.32	2.76

 $Operative\ Experience\ During\ Orthopaedic\ Residency\ Compared\ with\ Early\ Practice\ in\ the\ U.S.$ 

http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	<b>CPT Code Description</b>	Practitioner %	Resident %	Relative Rate
	Revision and/or Reconstruction				
27485	Femur/ Knee repair, Revision and/or Reconstruction	combined distal femur, proximal tibial or fibula	0.43	0.73	1.68
27486	Femur/ Knee repair, Revision and/or Reconstruction	Arrest, hemiepiphyseal, distal femur or proximal tibia or fibula	0.01	0.02	3.12
27487	Femur/ Knee repair, Revision and/or Reconstruction	Revison of total knee arthroplasty, with or without allograft; 1 component	0.00	0.02	Inf
27488	Femur/ Knee repair, Revision and/or Reconstruction	femoral and entire tibial component	0.00	0.04	Inf
27495	Femur/ Knee repair, Revision and/or Reconstruction	Removal of prosthesis, including total knee prosthesis, methylmethacrylate with or without insertion of spacer, knee	0.02	0.04	1.74
27496	Femur/ Knee repair, Revision and/or Reconstruction	Prophylactic treatment (nailing, pinning, plating,or wiring) with or without methylmethacrylate, femur	0.00	0.01	Inf
27497	Femur/ Knee repair, Revision and/or Reconstruction	Decompression fasciotomy, thigh and/or knee, one compartment (flexor or extensor or adductor);	0.01	0.00	0.17
27498	Femur/ Knee repair, Revision and/or Reconstruction	with debridement of nonviable muscle and/or nerve	0.01	0.01	1.26
27499	Femur/ Knee repair, Revision and/or Reconstruction	Decompression fasciotomy, thigh and/or knee, multiple compartments;	0.01	0.00	0.41
27506	Femur/Knee Trauma - Fracture and/ or Dislocation	with debridement of nonviable muscle and/or nerve	1.13	1.62	1.43
27507	Femur/Knee Trauma - Fracture and/ or Dislocation	Open treatment of femoral shaft fracture, with or without external fixation, with insertion of intramedullary implant, with or without cerclage and/or locking screws.	0.28	0.33	1.16
27509	Femur/Knee Trauma - Fracture and/ or Dislocation	Open treatment of femoral shaft fracture with plate/screws, with or without cerclage.	0.17	0.23	1.33
27511	Femur/Knee Trauma - Fracture and/ or Dislocation	Percutaneous skeletal fixation of femoral fracture, distal end, medial or lateral condyle, or supracondylar or	0.11	0.10	0.90

OPERATIVE EXPERIENCE DURING ORTHOPAEDIC RESIDENCY COMPARED WITH EARLY PRACTICE IN THE U.S. http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		transcondylar, with or without intercondylar extension, or distal femoral epiphyseal separation.			
27513	Femur/Knee Trauma - Fracture and/ or Dislocation	Open treatment of femoral supracondylar or transcondylar fracture without intercondylar extension, with or without internal or external fixation.	0.04	0.07	1.74
27514	Femur/Knee Trauma - Fracture and/ or Dislocation	Open treatment of femoral supracondylar or transcondylar fracture with intercondylar extension, with or without internal or external fixation.	0.12	0.09	0.71
27519	Femur/Knee Trauma - Fracture and/ or Dislocation	Open treatment of femoral fracture, distal end, medial or lateral condyle, with or without internal or external fixation.	0.08	0.07	0.80
27524	Femur/Knee Trauma - Fracture and/ or Dislocation	Open treatment of distal femoral epiphyseal separation, with or without internal or external fixation.	0.17	0.12	0.74
27535	Femur/Knee Trauma - Fracture and/ or Dislocation	Open treatment of patellar fracture, with internal fixation and/or partial or complete patellectomy and soft tissue repair.	0.17	0.13	0.74
27536	Femur/Knee Trauma - Fracture and/ or Dislocation	Open treatment of tibial fracture, proximal (plateau); unicondylar, with or without internal or external fixation.	0.03	0.06	2.24
27540	Femur/Knee Trauma - Fracture and/ or Dislocation	Open treatment of tibial fracture, proximal (plateau); bicondylar, with or without internal fixation.	0.40	0.16	0.39
27552	Femur/Knee Trauma - Fracture and/ or Dislocation	Open treatment of intercondylar spine(s) and/or tuberosity fracture(s) of the knee, with or without internal or external fixation.	0.01	0.01	0.80
27556	Femur/Knee Trauma - Fracture and/ or Dislocation	Closed treatment of knee dislocation; requiring anesthesia.	0.01	0.01	0.77
27557	Femur/Knee Trauma - Fracture and/ or Dislocation	Open treatment of knee dislocation, with or without internal or external fixation; without primary ligamentous repair or augmentation/reconstruction.	0.00	0.01	2.08

http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
27558	Femur/Knee Trauma - Fracture and/ or Dislocation	Open treatment of knee dislocation, with or without internal or external fixation; with primary ligamentous repair.	0.00	0.01	Inf
27562	Femur/Knee Trauma - Fracture and/ or Dislocation	Open treatment of knee dislocation, with or without internal or external fixation; with primary ligamentous repair, with augmentation/reconstruction.	0.00	0.01	Inf
27566	Femur/Knee Trauma - Fracture and/ or Dislocation	Closed treatment of patellar dislocation; requiring anesthesia.	0.02	0.02	1.07
27570	Femur/ Knee Trauma - Manipulation	Open treatment of patellar dislocation, with or without partial or total patellectomy.	0.17	0.13	0.77
27599	Femur/ Knee Other Procedures	Disarticulation at knee.	0.06	0.28	4.42
27600	Leg/Ankle Incision	Decompression fasciotomy, leg; anterior and/or lateral compartments only.	0.09	0.11	1.20
27601	Leg/Ankle Incision	Decompression fasciotomy, leg; posterior compartment(s) only.	0.01	0.01	0.80
27602	Leg/Ankle Incision	Decompression fasciotomy, leg; anterior and/or lateral, and posterior compartment(s).	0.15	0.12	0.78
27603	Leg/Ankle Incision	Incision and drainage, leg or ankle; deep abscess or hematoma.	0.20	0.22	1.09
27604	Leg/Ankle Incision	Incision and drainage, leg or ankle; infected bursa.	0.01	0.02	2.27
27605	Leg/Ankle Incision	Tenotomy, Achilles tendon, subcutaneous (separate procedure); local anesthesia.	0.13	0.15	1.13
27606	Leg/Ankle Incision	Tenotomy, Achilles tendon, subcutaneous (separate procedure); general anesthesia.	0.69	2.05	2.95
27607	Leg/Ankle Incision	Incision, deep, with opening of bone cortex (eg, for osteomyelitis or bone abscess), leg or ankle.	0.23	0.15	0.66
27610	Leg/Ankle Incision	Arthrotomy, ankle, for infection, with exploration, drainage, or removal of foreign body.	0.13	0.08	0.63
27612	Leg/Ankle Incision	Arthrotomy, ankle, posterior capsular release, with or without Achilles tendon	0.07	0.28	4.01

http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		lengthening.			
27613	Leg/Ankle Excision	Biopsy, soft tissue of leg or ankle area; superficial.	0.02	0.01	0.59
27614	Leg/Ankle Excision	Biopsy, soft tissue of leg or ankle area; deep.	0.03	0.05	1.93
27615	Leg/Ankle Excision	Radical resection of tumor (eg, malignant neoplasm), soft tissue of leg or ankle area less than 5 cm	0.01	0.01	2.48
27616	Leg/Ankle Excision	Radical resection of tumor (eg, malignant neoplasm), soft tissue of leg or ankle area 5 cm or greater	0.00	0.00	0.00
27618	Leg/Ankle Excision	Excision, tumor, leg or ankle area; subcutaneous; less than 3 cm	0.01	0.02	4.12
27619	Leg/Ankle Excision	Excision, tumor, leg or ankle area; deep, subfascial or intramuscular; less than 5 cm	0.02	0.07	2.80
27620	Leg/Ankle Excision	Arthrotomy, ankle, with joint exploration, with or without biopsy, with or without removal of loose or foreign body.	0.04	0.03	0.75
27625	Leg/Ankle Excision	Arthrotomy, ankle, with synovectomy;.	0.02	0.01	0.35
27626	Leg/Ankle Excision	Arthrotomy, ankle, with synovectomy; including tenosynovectomy.	0.01	0.00	0.48
27630	Leg/Ankle Excision	Excision of lesion of tendon sheath or capsule (eg, cyst or ganglion), leg and/or ankle.	0.02	0.03	1.10
27632	Leg/Ankle Excision	Excision, tumor, leg or ankle area; subcutaneous; 3 cm or greater	0.01	0.00	0.00
27634	Leg/Ankle Excision	Excision, tumor, leg or ankle area; deep, subfascial or intramuscular; 5 cm or greater	0.00	0.00	0.07
27635	Leg/Ankle Excision	Excision or curettage of bone cyst or benign tumor, tibia or fibula;.	0.31	0.34	1.09
27637	Leg/Ankle Excision	Excision or curettage of bone cyst or benign tumor, tibia or fibula; with autograft (includes obtaining graft).	0.01	0.03	2.26
27638	Leg/Ankle Excision	Excision or curettage of bone cyst or benign tumor, tibia or fibula; with allograft.	0.08	0.15	1.93
27640	Leg/Ankle Excision	Partial excision (craterization, saucerization, or diaphysectomy) of bone (eg,	0.10	0.10	0.99

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		for osteomyelitis or exostosis); tibia.			
27641	Leg/Ankle Excision	Partial excision (craterization, saucerization, or diaphysectomy) of bone (eg, for osteomyelitis or exostosis); fibula.	0.01	0.03	1.94
27645	Leg/Ankle Excision	Radical resection of tumor, bone; tibia.	0.02	0.04	1.83
27646	Leg/Ankle Excision	Radical resection of tumor, bone; fibula.	0.01	0.01	1.24
27647	Leg/Ankle Excision	Radical resection of tumor, bone; talus or calcaneus.	0.00	0.00	Inf
27650	Leg/ Ankle Repair, Revision, and/or Reconstruction	Repair, primary, open or percutaneous, ruptured Achilles tendon;	0.08	0.06	0.72
27652	Leg/ Ankle Repair, Revision, and/or Reconstruction	with graft (includes obtaining graft)	0.00	0.01	Inf
27654	Leg/ Ankle Repair, Revision, and/or Reconstruction	Repair, secondary, Achilles tendon, with or without graft	0.00	0.01	3.78
27656	Leg/ Ankle Repair, Revision, and/or Reconstruction	Repair, fascial defect of leg	0.00	0.00	1.78
27658	Leg/ Ankle Repair, Revision, and/or Reconstruction	Repair, flexor tendon, leg; primary, without graft, each tendon	0.04	0.02	0.51
27659	Leg/ Ankle Repair, Revision, and/or Reconstruction	secondary, with or without graft, each tendon	0.01	0.00	0.15
27664	Leg/ Ankle Repair, Revision, and/or Reconstruction	Repair, extensor tendon, leg; primary, without graft, each tendon	0.02	0.02	0.85
27665	Leg/ Ankle Repair, Revision, and/or Reconstruction	secondary, with or without graft, each tendon	0.00	0.00	1.19
27675	Leg/ Ankle Repair, Revision, and/or Reconstruction	Repair, dislocating peroneal tendons; without fibular osteotomy	0.01	0.01	0.96
27676	Leg/ Ankle Repair, Revision, and/or Reconstruction	with fibular osteotomy	0.02	0.01	0.38
27680	Leg/ Ankle Repair, Revision, and/or Reconstruction	Tenolysis, flexor or extensor tendon, leg and/or ankle; single, each tendon	0.05	0.07	1.27
27681	Leg/ Ankle Repair, Revision, and/or Reconstruction	multiple tendons (through separate incision[s])	0.01	0.03	3.68
27685	Leg/ Ankle Repair, Revision, and/or	Lengthening or shortening of tendon, leg or ankle; single	0.36	1.39	3.86

CPT Code <sup>a</sup>	CPT Code Category	<b>CPT Code Description</b>	Practitioner %	Resident %	Relative Rate
	Reconstruction	tendon			
27686	Leg/ Ankle Repair, Revision, and/or Reconstruction	multiple tendons (through same incision[s])	0.10	0.51	5.08
27687	Leg/ Ankle Repair, Revision, and/or Reconstruction	Gastrocnemius recession	0.40	0.87	2.18
27690	Leg/ Ankle Repair, Revision, and/or Reconstruction	Transfer or transplant of single tendon (with muscle redirection or rerouting); superficial	0.13	0.44	3.38
27691	Leg/ Ankle Repair, Revision, and/or Reconstruction	deep	0.14	0.55	3.88
27692	Leg/ Ankle Repair, Revision, and/or Reconstruction	each additional tendon	0.00	0.09	Inf
27695	Leg/ Ankle Repair, Revision, and/or Reconstruction	Repair, primary, disrupted ligament, ankle; collateral	0.08	0.04	0.52
27696	Leg/ Ankle Repair, Revision, and/or Reconstruction	both collateral ligaments	0.04	0.01	0.22
27698	Leg/ Ankle Repair, Revision, and/or Reconstruction	Repair, secondary, disrupted ligament, ankle, collateral (eg, Watson-Jones procedure)	0.10	0.03	0.28
27700	Leg/ Ankle Repair, Revision, and/or Reconstruction	Arthroplasty, ankle	0.00	0.00	Inf
27702	Leg/ Ankle Repair, Revision, and/or Reconstruction	with implant (total ankle)	0.00	0.00	Inf
27703	Leg/ Ankle Repair, Revision, and/or Reconstruction	revision, total ankle	0.00	0.00	Inf
27704	Leg/ Ankle Repair, Revision, and/or Reconstruction	Removla of ankle implant	0.02	0.12	7.38
27705	Leg/ Ankle Repair, Revision, and/or Reconstruction	Osteotomy; tibial	0.15	0.55	3.53
27707	Leg/ Ankle Repair, Revision, and/or Reconstruction	fibula	0.02	0.05	3.13
27709	Leg/ Ankle Repair, Revision, and/or Reconstruction	tibia and fibula	0.15	0.58	3.88
27712	Leg/ Ankle Repair, Revision, and/or Reconstruction	multiple, with realignment on intramedullary rod	0.01	0.08	15.02
27715	Leg/ Ankle Repair,	Osteoplasty, tibia and fibula,	0.05	0.08	1.60

OPERATIVE EXPERIENCE DURING ORTHOPAEDIC RESIDENCY COMPARED WITH EARLY PRACTICE IN THE U.S. http://dx.doi.org/10.2106/JBJS.17.01115 Page 174

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
	Revision, and/or Reconstruction	lengthening or shortening			
27720	Leg/ Ankle Repair, Revision, and/or Reconstruction	Repair of nonunion or malunion, tibia: without graft	0.04	0.03	0.71
27722	Leg/ Ankle Repair, Revision, and/or Reconstruction	with sliding graft	0.00	0.00	Inf
27724	Leg/ Ankle Repair, Revision, and/or Reconstruction	with iliac or other autograft (includes obtaining graft)	0.02	0.04	2.24
27725	Leg/ Ankle Repair, Revision, and/or Reconstruction	by synostosis, with fibula, any method	0.01	0.01	1.08
27726	Leg/ Ankle Repair, Revision, and/or Reconstruction	Repair of fibula nonunion and/or malunion with internal fixation	0.01	0.01	0.84
27727	Leg/ Ankle Repair, Revision, and/or Reconstruction	Repair of congenital pseudarthrosis, tibia	0.01	0.02	1.95
27730	Leg/ Ankle Repair, Revision, and/or Reconstruction	Arrest, epiphyseal (epiphysiodesis), open; distal tibia	0.07	0.19	2.55
27732	Leg/ Ankle Repair, Revision, and/or Reconstruction	distal fibula	0.02	0.05	2.77
27734	Leg/ Ankle Repair, Revision, and/or Reconstruction	distal tibia and fibula	0.02	0.06	2.79
27740	Leg/ Ankle Repair, Revision, and/or Reconstruction	Arrest, epiphyseal (epiphysiodesis), any method, combined, proximal and distal tibia and fibula	0.00	0.07	24.18
27742	Leg/ Ankle Repair, Revision, and/or Reconstruction	and distal femur	0.00	0.05	19.58
27745	Leg/ Ankle Repair, Revision, and/or Reconstruction	Prophylactic treatment (nailing, pinning, plating or wiring) with or without methylmethacrylate, tibia	0.01	0.02	4.49
27756	Leg/ Ankle Trauma - Fracture and/or Dislocation	Percutaneous skeletal fixation of tibial shaft fracture (with or without fibular fracture) (eg, pins or screws).	0.18	0.21	1.14
27758	Leg/ Ankle Trauma - Fracture and/or Dislocation	Open treatment of tibial shaft fracture, (with or without fibular fracture) with plate/screws, with or without cerclage.	0.30	0.26	0.87
27759	Leg/ Ankle Trauma - Fracture and/or Dislocation	Open treatment of tibial shaft fracture (with or without fibular	0.64	0.53	0.83

OPERATIVE EXPERIENCE DURING ORTHOPAEDIC RESIDENCY COMPARED WITH EARLY PRACTICE IN THE U.S. http://dx.doi.org/10.2106/JBJS.17.01115 Page 175

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		fracture) by intramedullary implant, with or without interlocking screws and/or cerclage.			
27766	Leg/ Ankle Trauma - Fracture and/or Dislocation	Open treatment of medial malleolus fracture, with or without internal or external fixation.	0.56	0.26	0.46
27769	Leg/ Ankle Trauma - Fracture and/or Dislocation	Open treatment of posterior malleous fracture,includes internal fixation, when performed	0.03	0.00	0.07
27784	Leg/ Ankle Trauma - Fracture and/or Dislocation	Open treatment of proximal fibula or shaft fracture, with or without internal or external fixation.	0.06	0.02	0.42
27792	Leg/ Ankle Trauma - Fracture and/or Dislocation	Open treatment of distal fibular fracture (lateral malleolus), with or without internal or external fixation.	0.81	0.27	0.34
27814	Leg/ Ankle Trauma - Fracture and/or Dislocation	Open treatment of bimalleolar ankle fracture, with or without internal or external fixation.	0.54	0.40	0.75
27822	Leg/ Ankle Trauma - Fracture and/or Dislocation	Open treatment of trimalleolar ankle fracture, with or without internal or external fixation, medial and/or lateral malleolus; without fixation of posterior lip.	0.14	0.06	0.47
27823	Leg/ Ankle Trauma - Fracture and/or Dislocation	Open treatment of trimalleolar ankle fracture, with or without internal or external fixation, medial and/or lateral malleolus; with fixation of posterior lip.	0.04	0.05	1.18
27826	Leg/ Ankle Trauma - Fracture and/or Dislocation	Open treatment of fracture of weight bearing articular surface/ portion of distal tibia (eg, pilon or tibial plafond), with internal or external fixation; of fibula only.	0.06	0.02	0.36
27827	Leg/ Ankle Trauma - Fracture and/or Dislocation	Open treatment of fracture of weight bearing articular surface/ portion of distal tibia (eg, pilon or tibial plafond), with internal or external fixation; of tibia only.	0.76	0.39	0.52
27828	Leg/ Ankle Trauma - Fracture and/or Dislocation	Open treatment of fracture of weight bearing articular surface/ portion of distal tibia (eg, pilon or tibial plafond),	0.14	0.10	0.67

http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		with internal or external fixation; of both tibia and fibula.			
27829	Leg/ Ankle Trauma - Fracture and/or Dislocation	Open treatment of distal tibiofibular joint (syndesmosis) disruption, with or without internal or external fixation.	0.60	0.17	0.29
27831	Leg/ Ankle Trauma - Fracture and/or Dislocation	Closed treatment of proximal tibiofibular joint dislocation; requiring anesthesia.	0.00	0.00	Inf
27832	Leg/ Ankle Trauma - Fracture and/or Dislocation	Open treatment of proximal tibiofibular joint dislocation, with or without internal or external fixation, or with excision of proximal fibula.	0.01	0.00	0.25
27842	Leg/ Ankle Trauma - Fracture and/or Dislocation	Closed treatment of ankle dislocation; requiring anesthesia, with or without percutaneous skeletal fixation.	0.00	0.05	18.91
27846	Leg/ Ankle Trauma - Fracture and/or Dislocation	Open treatment of ankle dislocation, with or without percutaneous skeletal fixation; without repair or internal fixation.	0.00	0.01	Inf
27848	Leg/ Ankle Trauma - Fracture and/or Dislocation	Open treatment of ankle dislocation, with or without percutaneous skeletal fixation; with repair or internal or external fixation.	0.01	0.03	3.13
27880	Leg/ Ankle Amputation	Amputation, leg, through tibia and fibula;.	0.02	0.05	2.76
27881	Leg/ Ankle Amputation	Amputation, leg, through tibia and fibula; with immediate fitting technique including application of first cast.	0.00	0.00	Inf
27882	Leg/ Ankle Amputation	Amputation, leg, through tibia and fibula; open, circular (guillotine).	0.00	0.01	2.52
27884	Leg/ Ankle Amputation	Amputation, leg, through tibia and fibula; secondary closure or scar revision.	0.00	0.02	Inf
27886	Leg/ Ankle Amputation	Amputation, leg, through tibia and fibula; re-amputation.	0.03	0.06	1.92
27888	Leg/ Ankle Amputation	Amputation, ankle, through malleoli of tibia and fibula (Syme, Pirogoff type procedures), with plastic closure and resection of nerves.	0.05	0.06	1.27
27889	Leg/ Ankle Amputation	Ankle disarticulation.	0.00	0.01	2.60
27892	Leg/ Ankle Other	Decompression fasciotomy,	0.01	0.01	0.79

OPERATIVE EXPERIENCE DURING ORTHOPAEDIC RESIDENCY COMPARED WITH EARLY PRACTICE IN THE U.S. http://dx.doi.org/10.2106/JBJS.17.01115 Page 177

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
	Procedures	leg; anterior and/or lateral compartments only, with debridement of nonviable muscle and/or nerve			
27893	Leg/ Ankle Other Procedures	Decompression fasciotomy, leg; posterior compartments only, with debridement of nonviable muscle and/or nerve	0.00	0.00	0.59
27894	Leg/ Ankle Other Procedures	Decompression fasciotomy, leg; anterior and/or lateral compartments only, with debridement of nonviable muscle and/or nerve	0.02	0.04	1.52
27899	Leg/ Ankle Other Procedures	Unlisted procedure, leg or ankle	0.04	0.20	5.19
28001	Foot/ Toes Incision	Incision and drainage, infected bursa, foot.	0.01	0.03	4.52
28002	Foot/ Toes Incision	Deep dissection below fascia, for deep infection of foot, with or without tendon sheath involvement; single bursal space, specify.	0.04	0.05	1.16
28003	Foot/ Toes Incision	Deep dissection below fascia, for deep infection of foot, with or without tendon sheath involvement; multiple areas.	0.04	0.06	1.80
28005	Foot/ Toes Incision	Incision, deep, with opening of bone cortex (eg, for osteomyelitis or bone abscess), foot.	0.06	0.07	1.03
28008	Foot/ Toes Incision	Fasciotomy, foot and/or toe.	0.03	0.06	1.94
28010	Foot/ Toes Incision	Tenotomy, subcutaneous, toe; single.	0.02	0.06	3.57
28011	Foot/ Toes Incision	Tenotomy, subcutaneous, toe; multiple.	0.02	0.10	5.76
28020	Foot/ Toes Incision	Arthrotomy, with exploration, drainage, or removal of loose or foreign body; intertarsal or tarsometatarsal joint.	0.02	0.01	0.43
28022	Foot/ Toes Incision	Arthrotomy, with exploration, drainage, or removal of loose or foreign body; metatarsophalangeal joint.	0.02	0.01	0.47
28024	Foot/ Toes Incision	Arthrotomy, with exploration, drainage, or removal of loose or foreign body; interphalangeal joint.	0.02	0.01	0.58
28035	Foot/ Toes Incision	Neurectomy of intrinsic musculature of foot.	0.01	0.01	0.73
28039	Foot/ Toes Excision	Tarsal tunnel release	0.01	0.00	0.06

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		(posterior tibial nerve decompression).			
28041	Foot/ Toes Excision	Excision, tumor, foot; subcutaneous; 1.5 cm or greater	0.02	0.00	0.01
28043	Foot/ Toes Excision	Excision, tumor, foot; deep, subfascial, intramuscular; 1.5 cm or greater	0.02	0.05	2.94
28045	Foot/ Toes Excision	Excision, tumor, foot; subcutaneous; less than1.5 cm	0.02	0.05	1.93
28046	Foot/ Toes Excision	Excision, tumor, foot; deep, subfascial, intramuscular; less than 1.5 cm	0.00	0.01	Inf
28050	Foot/ Toes Excision	Radical resection of tumor (eg, malignant neoplasm), soft tissue of foot; 3 cm or greater	0.00	0.00	Inf
28052	Foot/ Toes Excision	Arthrotomy for synovial biopsy; intertarsal or tarsometatarsal joint.	0.00	0.00	Inf
28054	Foot/ Toes Excision	Arthrotomy for synovial biopsy; metatarsophalangeal joint.	0.00	0.00	Inf
28055	Foot/ Toes Excision	Arthrotomy for synovial biopsy; interphalangeal joint.	0.00	0.00	Inf
28060	Foot/ Toes Excision	Neurectomy, intrinsic musculature of foot	0.01	0.09	15.39
28062	Foot/ Toes Excision	Fasciectomy, excision of plantar fascia; partial (separate procedure).	0.01	0.05	8.72
28070	Foot/ Toes Excision	Fasciectomy, excision of plantar fascia; radical (separate procedure).	0.00	0.00	0.89
28072	Foot/ Toes Excision	Synovectomy; intertarsal or tarsometatarsal joint, each.	0.00	0.00	0.45
28080	Foot/ Toes Excision	Synovectomy; metatarsophalangeal joint, each.	0.00	0.00	Inf
28086	Foot/ Toes Excision	Excision of interdigital (Morton) neuroma, single, each.	0.01	0.00	0.45
28088	Foot/ Toes Excision	Synovectomy, tendon sheath, foot; flexor.	0.00	0.00	Inf
28090	Foot/ Toes Excision	Synovectomy, tendon sheath, foot; extensor.	0.03	0.05	1.46
28092	Foot/ Toes Excision	Excision of lesion of tendon or fibrous sheath or capsule (including synovectomy) (cyst or ganglion); foot.	0.01	0.01	2.56
28100	Foot/ Toes Excision	Excision of lesion of tendon or fibrous sheath or capsule	0.02	0.04	1.48

OPERATIVE EXPERIENCE DURING ORTHOPAEDIC RESIDENCY COMPARED WITH EARLY PRACTICE IN THE U.S. http://dx.doi.org/10.2106/JBJS.17.01115 Page 179

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		(including synovectomy) (cyst or ganglion); toes.			
28102	Foot/ Toes Excision	Excision or curettage of bone cyst or benign tumor, talus or calcaneus;.	0.00	0.01	Inf
28103	Foot/ Toes Excision	Excision or curettage of bone cyst or benign tumor, talus or calcaneus; with iliac or other autograft (includes obtaining graft).	0.02	0.03	1.25
28104	Foot/ Toes Excision	Excision or curettage of bone cyst or benign tumor, talus or calcaneus; with allograft.	0.03	0.03	0.92
28106	Foot/ Toes Excision	Excision or curettage of bone cyst or benign tumor, tarsal or metatarsal bones, except talus or calcaneus;.	0.00	0.00	Inf
28107	Foot/ Toes Excision	Excision or curettage of bone cyst or benign tumor, tarsal or metatarsal bones, except talus or calcaneus; with iliac or other autograft (includes obtaining graft).	0.01	0.01	0.93
28108	Foot/ Toes Excision	Excision or curettage of bone cyst or benign tumor, tarsal or metatarsal bones, except talus or calcaneus; with allograft.	0.05	0.05	1.15
28110	Foot/ Toes Excision	Excision or curettage of bone cyst or benign tumor, phalanges of foot.	0.01	0.01	0.61
28111	Foot/ Toes Excision	Ostectomy, partial excision, fifth metatarsal head (bunionette) (separate procedure).	0.00	0.00	Inf
28112	Foot/ Toes Excision	Ostectomy, complete excision; first metatarsal head.	0.00	0.00	Inf
28113	Foot/ Toes Excision	Ostectomy, complete excision; other metatarsal head (second, third or fourth).	0.00	0.00	Inf
28114	Foot/ Toes Excision	Ostectomy, complete excision; fifth metatarsal head.	0.00	0.00	Inf
28116	Foot/ Toes Excision	Ostectomy, complete excision; all metatarsal heads, with partial proximal phalangectomy, excluding first metatarsal (Clayton type procedure).	0.16	0.32	1.94
28118	Foot/ Toes Excision	Ostectomy, excision of tarsal coalition.	0.02	0.06	3.19
28119 28120	Foot/ Toes Excision Foot/ Toes Excision	Ostectomy, calcaneus;. Ostectomy, calcaneus; for	0.01	0.01	1.37 0.48

OPERATIVE EXPERIENCE DURING ORTHOPAEDIC RESIDENCY COMPARED WITH EARLY PRACTICE IN THE U.S. http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		spur, with or without plantar fascial release.			
28122	Foot/ Toes Excision	Partial excision (craterization, saucerization, sequestrectomy, or diaphysectomy) of bone (eg, for osteomyelitis or talar bossing), talus or calcaneus.	0.06	0.06	0.99
28124	Foot/ Toes Excision	Partial excision (craterization, saucerization, or diaphysectomy) of bone (eg, for osteomyelitis or tarsal bossing), tarsal or metatarsal bone, except talus or calcaneus.	0.03	0.02	0.53
28126	Foot/ Toes Excision	Partial excision (craterization, saucerization, or diaphysectomy) of bone (eg, for osteomyelitis or dorsal bossing), phalanx of toe.	0.00	0.01	Inf
28130	Foot/ Toes Excision	Resection, partial or complete, phalangeal base, single toe, each.	0.01	0.04	4.77
28140	Foot/ Toes Excision	Talectomy (astragalectomy).	0.00	0.01	Inf
28150	Foot/ Toes Excision	Metatarsectomy.	0.00	0.04	Inf
28153	Foot/ Toes Excision	Phalangectomy of toe, single, each.	0.00	0.00	Inf
28160	Foot/ Toes Excision	Resection, head of phalanx, toe.	0.00	0.01	Inf
28171	Foot/ Toes Excision	Hemiphalangectomy or interphalangeal joint excision, toe, single, each.	0.00	0.00	Inf
28173	Foot/ Toes Excision	Radical resection of tumor, bone; tarsal (except talus or calcaneus).	0.00	0.00	Inf
28175	Foot/ Toes Excision	Radical resection of tumor, bone; metatarsal.	0.00	0.00	Inf
28190	Foot/ Toes Introduction or Removal	Removal of foreign body, foot; subcutaneous	0.07	0.05	0.67
28192	Foot/ Toes Introduction or Removal	Removal of foreign body, foot; deep	0.17	0.11	0.66
28193	Foot/ Toes Introduction or Removal	Removal of foreign body, foot; complicated	0.02	0.02	0.68
28200	Foot/ Toes Repair, Revision and/or Reconstruction	Radical resection of tumor, bone; phalanx of toe.	0.04	0.02	0.68
28202	Foot/ Toes Repair, Revision and/or Reconstruction	Repair, tendon, flexor, foot; primary or secondary, without free graft, each tendon	0.00	0.00	0.67
28208	Foot/ Toes Repair, Revision and/or Reconstruction	Repair, tendon, flexor, foot; secondary with free graft, each tendon (includes	0.07	0.07	0.91

http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		obtaining graft)			
28210	Foot/ Toes Repair, Revision and/or Reconstruction	Repair, tendon, extensor, foot; primary or secondary, each tendon	0.00	0.00	Inf
28220	Foot/ Toes Repair, Revision and/or Reconstruction	Repair, tendon, extensor, foot; secondary with free graft, each tendon (includes obtaining graft)	0.00	0.03	10.90
28222	Foot/ Toes Repair, Revision and/or Reconstruction	Tenolysis, flexor, foot; single tendon	0.00	0.04	Inf
28225	Foot/ Toes Repair, Revision and/or Reconstruction	Tenolysis, flexor, foot; multiple tendons	0.01	0.02	2.82
28226	Foot/ Toes Repair, Revision and/or Reconstruction	Tenolysis, extensor, foot; single tendon	0.00	0.01	Inf
28230	Foot/ Toes Repair, Revision and/or Reconstruction	Tenolysis, extensor, foot; multiple tendons	0.05	0.27	5.24
28232	Foot/ Toes Repair, Revision and/or Reconstruction	Tenotomy, open, tendon flexor; foot, single or multiple tendon(s)	0.13	0.31	2.45
28234	Foot/ Toes Repair, Revision and/or Reconstruction	Tenotomy, open, tendon flexor; toe single tendon	0.02	0.15	6.16
28238	Foot/ Toes Repair, Revision and/or Reconstruction	Tenotomy, open, extensor, foot or toe, each tendon	0.16	0.19	1.16
28240	Foot/ Toes Repair, Revision and/or Reconstruction	Reconstruction (advancement), posterior tibial tendon with excision of accessory tarsal navicular bone	0.02	0.08	3.37
28250	Foot/ Toes Repair, Revision and/or Reconstruction	Tenotomy, lengthening, or release, abductor hallucis muscle	0.08	0.21	2.65
28260	Foot/ Toes Repair, Revision and/or Reconstruction	Division of plantar fascia and muscle (eg, Steindler stripping)	0.04	0.09	2.22
28261	Foot/ Toes Repair, Revision and/or Reconstruction	Capsulotomy, midfoot; medial release only	0.01	0.08	13.61
28262	Foot/ Toes Repair, Revision and/or Reconstruction	Capsulotomy, midfoot; with tendon lengthening	0.08	0.70	8.73
28264	Foot/ Toes Repair, Revision and/or Reconstruction	Capsulotomy, midfoot; extensive, including posterior talotibial capsulotomy and tendon(s) lengthening	0.01	0.02	2.94
28270	Foot/ Toes Repair, Revision and/or Reconstruction	Capsulotomy, midtarsal (eg, Heyman type procedure)	0.02	0.04	1.80
28272	Foot/ Toes Repair, Revision and/or Reconstruction	Capsulotomy; metatarsophalangeal joint, with or without tenorrhaphy, each joint	0.01	0.02	3.78
28280	Foot/ Toes Repair, Revision and/or Reconstruction	Capsulotomy; interphalangeal joint, each joint	0.00	0.01	Inf
28285	Foot/ Toes Repair, Revision	Syndactylization, toes (eg,	0.04	0.11	2.45

 $Operative\ Experience\ During\ Orthopaedic\ Residency\ Compared\ with\ Early\ Practice\ in\ the\ U.S.$ 

http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
	and/or Reconstruction	webbing or Kelikian type procedure)			
28286	Foot/ Toes Repair, Revision and/or Reconstruction	Correction, hammertoe (eg, interphalangeal fusion, partial or total phalangectomy)	0.00	0.01	4.23
28288	Foot/ Toes Repair, Revision and/or Reconstruction	Correction, cock-up fifth toe, with plastic skin closure (eg, Ruiz-Mora type procedure)	0.00	0.01	4.82
28289	Foot/ Toes Repair, Revision and/or Reconstruction	Ostectomy, partial, exostectomy or condylectomy, metatarsal head, each metatarsal head	0.00	0.01	Inf
28290	Foot/ Toes Repair, Revision and/or Reconstruction	Hallux rigidus correction with cheilectomy, debridement and capsular release of the first metatarsophalangeal joint	0.01	0.02	3.08
28292	Foot/ Toes Repair, Revision and/or Reconstruction	Hallux rigidus correction with cheilectomy, debridement and capsular release of the first metatarsophalangeal joint, with implant	0.03	0.03	0.96
28293	Foot/ Toes Repair, Revision and/or Reconstruction	Correction, hallux valgus, with sesamoidectomy, when performed; with resection of proximal phalanx base, when performed, any method	0.00	0.00	Inf
28294	Foot/ Toes Repair, Revision and/or Reconstruction	Correction, hallux valgus, with sesamoidectomy, when performed; with proximal metatarsal osteotomy, any method	0.00	0.00	Inf
28296	Foot/ Toes Repair, Revision and/or Reconstruction	Correction, hallux valgus, with sesamoidectomy, when performed; with distal metatarsal osteotomy, any method	0.04	0.11	2.89
28297	Foot/ Toes Repair, Revision and/or Reconstruction	Correction, hallux valgus, with sesamoidectomy, when performed; with first metatarsal and medial cuneiform joint arthrodesis, any method	0.00	0.01	4.01
28298	Foot/ Toes Repair, Revision and/or Reconstruction	Correction, hallux valgus, with sesamoidectomy, when performed; with phalanx osteotomy, any method	0.02	0.03	1.63
28299	Foot/ Toes Repair, Revision and/or Reconstruction	Correction, hallux valgus, with sesamoidectomy, when performed; with double osteotomy, any method	0.04	0.04	1.09
28300	Foot/ Toes Repair, Revision	Osteotomy; calcaneus (eg,	0.35	0.86	2.50

http://dx.doi.org/10.2106/JBJS.17.01115 Page 183

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
	and/or Reconstruction	Dwyer or Chambers type procedure), with or without internal fixation			
28302	Foot/ Toes Repair, Revision and/or Reconstruction	Osteotomy; talus	0.00	0.02	6.68
28304	Foot/ Toes Repair, Revision and/or Reconstruction	Osteotomy, tarsal bones, other than calcaneus or talus	0.18	0.51	2.86
28305	Foot/ Toes Repair, Revision and/or Reconstruction	Osteotomy, tarsal bones, other than calcaneus or talus; with autograft	0.03	0.10	3.03
28306	Foot/ Toes Repair, Revision and/or Reconstruction	Osteotomy, with or without lengthening, shortening or angular correction, metatarsal; first metatarsal	0.06	0.18	3.28
28307	Foot/ Toes Repair, Revision and/or Reconstruction	Osteotomy, with or without lengthening, shortening or angular correction, metatarsal; first metatarsal with autograft (other than first toe)	0.01	0.02	4.01
28308	Foot/ Toes Repair, Revision and/or Reconstruction	Osteotomy, with or without lengthening, shortening or angular correction, metatarsal; first metatarsal with autograft (other than first toe)	0.06	0.09	1.55
28309	Foot/ Toes Repair, Revision and/or Reconstruction	Osteotomy, with or without lengthening, shortening or angular correction, metatarsal; multiple	0.02	0.04	1.63
28310	Foot/ Toes Repair, Revision and/or Reconstruction	Osteotomy, shortening, angular or rotational correction; proximal phalanx, first toe	0.02	0.04	2.41
28312	Foot/ Toes Repair, Revision and/or Reconstruction	Osteotomy, shortening, angular or rotational correction; other phalanges, any toe	0.01	0.04	2.67
28313	Foot/ Toes Repair, Revision and/or Reconstruction	Reconstruction, angular deformity of toe, soft tissue procedures only	0.02	0.11	4.62
28315	Foot/ Toes Repair, Revision and/or Reconstruction	Sesamoidectomy, first toe (separate procedure)	0.02	0.00	0.23
28320	Foot/ Toes Repair, Revision and/or Reconstruction	Repair, nonunion or malunion; tarsal bones	0.00	0.00	Inf
28322	Foot/ Toes Repair, Revision and/or Reconstruction	Repair, nonunion or malunion; metatarsal, with or without bone graft	0.01	0.01	0.96
28340	Foot/ Toes Repair, Revision and/or Reconstruction	Reconstruction, toe, macrodactyly; soft tissue resection	0.00	0.01	Inf
28341	Foot/ Toes Repair, Revision and/or Reconstruction	Reconstruction, toe, macrodactyly; requiring bone	0.01	0.02	3.30

http://dx.doi.org/10.2106/JBJS.17.01115 Page 184

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		resection			
28344	Foot/ Toes Repair, Revision and/or Reconstruction	Reconstruction, toe(s); polydactyly	0.20	0.34	1.72
28345	Foot/ Toes Repair, Revision and/or Reconstruction	Reconstruction, toe(s); syndactyly, with or without skin graft(s), each web	0.03	0.10	3.55
28360	Foot/ Toes Repair, Revision and/or Reconstruction	Reconstruction, cleft foot	0.00	0.02	7.34
28406	Foot/ Toes Trauma - Fracture and/ or Dislocation	Percutaneous skeletal fixation of calcaneal fracture, with manipulation	0.01	0.01	1.26
28415	Foot/ Toes Trauma - Fracture and/ or Dislocation	Open treatment of calcaneal fracture, includes internal fixation, when performed	0.04	0.03	0.70
28420	Foot/ Toes Trauma - Fracture and/ or Dislocation	Open treatment of calcaneal fracture, includes internal fixation, when performed; with primary iliac or other autogenous bone graft	0.00	0.00	1.34
28436	Foot/ Toes Trauma - Fracture and/ or Dislocation	Percutaneous skeletal fixation of talus fracture, with manipulation	0.00	0.01	Inf
28445	Foot/ Toes Trauma - Fracture and/ or Dislocation	Open treatment of talus fracture, includes internal fixation, when performed; with primary iliac or other autogenous bone graft	0.07	0.05	0.63
28446	Foot/ Toes Trauma - Fracture and/ or Dislocation	Open osteochondral allograft, talus (includes obtaining graft)	0.00	0.00	1.48
28450	Foot/ Toes Trauma - Fracture and/ or Dislocation	Treatment of tarsal bone fracture (except talus and calcaneus); without manipulation, each	0.02	0.02	0.79
28455	Foot/ Toes Trauma - Fracture and/ or Dislocation	Treatment of tarsal bone fracture (except talus and calcaneus); with manipulation, each	0.01	0.00	0.56
28456	Foot/ Toes Trauma - Fracture and/ or Dislocation	Percutaneous skeletal fixation of tarsal bone fracture (except talus and calcaneus), with manipulation, each	0.01	0.00	0.85
28465	Foot/ Toes Trauma - Fracture and/ or Dislocation	Open treatment of tarsal bone fracture (except talus and calcaneus), includes internal fixation, when performed	0.05	0.03	0.56
28476	Foot/ Toes Trauma - Fracture and/ or Dislocation	Percutaneous skeletal fixation of metatarsal fracture, with manipulation	0.10	0.07	0.65
28485	Foot/ Toes Trauma - Fracture and/ or Dislocation	Open treatment of metatarsal fracture, includes internal fixation, when performed	0.20	0.11	0.58

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
28496	Foot/ Toes Trauma - Fracture and/ or Dislocation	Percutaneous skeletal fixation of fracture of great toe, phalanx or phalanges, with manipulation	0.07	0.04	0.52
28505	Foot/ Toes Trauma - Fracture and/ or Dislocation	Open treatment of fracture, great toe, phalanx or phalanges, includes internal fixation, when performed	0.16	0.05	0.34
28525	Foot/ Toes Trauma - Fracture and/ or Dislocation	Open treatment of fracture, phalanx or phalanges, other than great toe, includes internal fixation, when performed, each	0.06	0.03	0.52
28531	Foot/ Toes Trauma - Fracture and/ or Dislocation	Open treatment of sesamoid fracture, with or without internal fixation	0.00	0.00	Inf
28546	Foot/ Toes Trauma - Fracture and/ or Dislocation	Percutaneous skeletal fixation of tarsal bone dislocation, other than talotarsal, with manipulation	0.00	0.00	Inf
28555	Foot/ Toes Trauma - Fracture and/ or Dislocation	Open treatment of tarsal bone dislocation, includes internal fixation, when performed	0.02	0.02	0.99
28576	Foot/ Toes Trauma - Fracture and/ or Dislocation	Percutaneous skeletal fixation of talotarsal joint dislocation, with manipulation.	0.02	0.02	1.05
28585	Foot/ Toes Trauma - Fracture and/ or Dislocation	Open treatment of talotarsal joint dislocation, with or without internal or external fixation.	0.01	0.02	1.39
28606	Foot/ Toes Trauma - Fracture and/ or Dislocation	Percutaneous skeletal fixation of tarsometatarsal joint dislocation, with manipulation.	0.02	0.01	0.79
28615	Foot/ Toes Trauma - Fracture and/ or Dislocation	Open treatment of tarsometatarsal joint dislocation, with or without internal or external fixation.	0.11	0.04	0.34
28636	Foot/ Toes Trauma - Fracture and/ or Dislocation	Percutaneous skeletal fixation of metatarsophalangeal joint dislocation, with manipulation.	0.01	0.01	1.34
28645	Foot/ Toes Trauma - Fracture and/ or Dislocation	Open treatment of metatarsophalangeal joint dislocation, with or without internal or external fixation.	0.01	0.01	0.70
28666	Foot/ Toes Trauma - Fracture and/ or Dislocation	Percutaneous skeletal fixation of interphalangeal joint dislocation, with manipulation.	0.02	0.01	0.64
28675	Foot/ Toes Trauma - Fracture and/ or Dislocation	Open treatment of interphalangeal joint dislocation, with or without internal or external fixation.	0.04	0.01	0.28

OPERATIVE EXPERIENCE DURING ORTHOPAEDIC RESIDENCY COMPARED WITH EARLY PRACTICE IN THE U.S. http://dx.doi.org/10.2106/JBJS.17.01115 Page 186

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
28705	Foot/ Toes Arthrodesis	Pantalar arthrodesis.	0.00	0.00	Inf
28715	Foot/ Toes Arthrodesis	Triple arthrodesis.	0.02	0.13	6.10
28725	Foot/ Toes Arthrodesis	Subtalar arthrodesis.	0.02	0.11	4.40
28730	Foot/ Toes Arthrodesis	Arthrodesis, midtarsal or tarsometatarsal, multiple or transverse;.	0.01	0.03	1.97
28735	Foot/ Toes Arthrodesis	Arthrodesis, midtarsal or tarsometatarsal, multiple or transverse; with osteotomy as for flatfoot correction.	0.04	0.05	1.21
28737	Foot/ Toes Arthrodesis	Arthrodesis, midtarsal navicular-cuneiform, with tendon lengthening and advancement (Miller type procedure).	0.00	0.01	5.19
28740	Foot/ Toes Arthrodesis	Arthrodesis, midtarsal or tarsometatarsal, single joint.	0.04	0.05	1.42
28750	Foot/ Toes Arthrodesis	Arthrodesis, great toe; metatarsophalangeal joint.	0.02	0.11	5.03
28755	Foot/ Toes Arthrodesis	Arthrodesis, great toe; interphalangeal joint.	0.02	0.07	2.67
28760	Foot/ Toes Arthrodesis	Arthrodesis, great toe, interphalangeal joint, with extensor hallucis longus transfer to first metatarsal neck (Jones type procedure).	0.01	0.05	8.75
28800	Foot/ Toes Amputation	Amputation, foot; midtarsal (Chopart type procedure).	0.01	0.02	2.00
28805	Foot/ Toes Amputation	Amputation, foot; transmetatarsal.	0.01	0.01	0.99
28810	Foot/ Toes Amputation	Amputation, metatarsal, with toe, single.	0.02	0.05	1.99
28820	Foot/ Toes Amputation	Amputation, toe; metatarsophalangeal joint.	0.03	0.13	4.33
28825	Foot/ Toes Amputation	Amputation, toe; interphalangeal joint.	0.05	0.06	1.13
28899	Foot/ Toes Other Procedures		0.04	0.20	4.76
29805	Shoulder Other Procedures	Arthroscopy, shoulder, diagnostic, with or without synovial biopsy	0.04	0.11	2.92
29806	Shoulder Arthroscopy	Arthroscopy, shoulder, surgical;capsulorrhaphy	1.04	0.18	0.17
29807	Shoulder Arthroscopy	with repair of SLAP lesion	0.31	0.17	0.56
29819	Shoulder Arthroscopy	with removal of loose or foreign body	0.06	0.02	0.26
29820	Shoulder Arthroscopy	with synovectomy, partial	0.01	0.01	0.99
29821	Shoulder Arthroscopy	with synovectomy, complete	0.01	0.00	0.45
29822	Shoulder Arthroscopy	with debridement, limited	0.14	0.09	0.62
29823	Shoulder Arthroscopy	with debridement,	0.08	0.04	0.50

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		extensive			
29824	Shoulder Arthroscopy	with distal claviculectomy including distal articular surface (Mumford procedure)	0.01	0.03	2.41
29825	Shoulder Arthroscopy	with lysis and resection of adhesions, with or without manipulation	0.02	0.02	0.99
29826	Shoulder Arthroscopy	with decompression of subacromial space with partial acromioplasty, with coracoacromial ligament release, whem performed	0.04	0.10	2.23
29827	Shoulder Arthroscopy	with rotator cuff repair	0.03	0.07	2.14
29828	Shoulder Arthroscopy	with biceps tenodesis	0.01	0.01	1.45
29830	Humerus/ Elbow Arthroscopy	Arthroscopy, elbow, diagnostic, with or without synovial biopsy	0.03	0.03	0.94
29834	Humerus/ Elbow Arthroscopy	Arthroscopy, elbow, surgical; with removal of loose or foreign body	0.09	0.07	0.76
29835	Humerus/ Elbow Arthroscopy	with synovectomy, partial	0.03	0.02	0.64
29836	Humerus/ Elbow Arthroscopy	with synovectomy, complete	0.00	0.01	2.23
29837	Humerus/ Elbow Arthroscopy	with debridement, limited	0.06	0.04	0.67
29838	Humerus/ Elbow Arthroscopy	with debridement, extensive	0.05	0.04	0.74
29840	Forearm/ Wrist Arthroscopy	Arthroscopy, wrist, diagnostic, with or without synovial biopsy	0.02	0.02	0.95
29843	Forearm/ Wrist Arthroscopy	Arthroscopy, wrist, surgical; for infection, lavage and drainage	0.00	0.00	Inf
29844	Forearm/ Wrist Arthroscopy	with synovectomy, partial	0.02	0.01	0.69
29845	Forearm/ Wrist Arthroscopy	with synovectomy, complete	0.00	0.00	0.67
29846	Forearm/ Wrist Arthroscopy	with excision and/or repair of triangular fibrocartilage and/or joint debridement	0.14	0.05	0.37
29847	Forearm/ Wrist Arthroscopy	with internternal fixation for fracture or instability	0.01	0.00	0.56
29848	Forearm/ Wrist Arthroscopy	Endoscopy, wrist, surgical, with release of transverse carpal ligament	0.01	0.01	1.05
29850	Femur/ Knee Arthroscopy	Arthroscopically aided treatment of intercondylar spine(s) and/or tuberosity fracture(s) of the knee, with or without manipulation; without internal or external fixation	0.03	0.01	0.48
29851	Femur/ Knee Arthroscopy	with internal or external	0.17	0.06	0.38

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		fixation			
29855	Femur/ Knee Arthroscopy	Arthroscopically aided treatment of tibial fracture, proximal (plateau); unicondylar, includes internal fixation, when perforned	0.02	0.01	0.35
29856	Femur/ Knee Arthroscopy	bicondylar, in cludes internal fixation, when performed	0.00	0.00	0.89
29860	Pelvis/ Hip Arthroscopy	Arthroscopy,hip, diagnostic,with or without synovial biopsy	0.01	0.01	1.61
29861	Pelvis/ Hip Arthroscopy	Arthroscopy, hip, surgical; with removal of loose or foreign body	0.03	0.01	0.28
29862	Pelvis/ Hip Arthroscopy	with debridement/shaving of articular cartilage (chondroplasty), abrasion arthroplasty, and/or resection of labrum	0.05	0.11	2.14
29863	Pelvis/ Hip Arthroscopy	with synovectomy	0.02	0.02	0.76
29866	Femur/ Knee Arthroscopy	Arthroscopy, knee, surgical; osteochondral autograft(s) (includes harvesting of the autograft[s])	0.02	0.01	0.87
29867	Femur/ Knee Arthroscopy	osteochodral allograft	0.01	0.01	0.64
29868	Femur/ Knee Arthroscopy	meniscal translplantation, medial or lateral	0.01	0.00	0.85
29870	Femur/ Knee Arthroscopy	Arthroscopy, knee, diagnostic, with or without synovial biopsy	0.43	0.61	1.43
29871	Femur/ Knee Arthroscopy	Arthroscopy, knee, surgical; for infection, lavage and drainage	0.20	0.10	0.51
29873	Femur/ Knee Arthroscopy	with lateral release	0.37	0.24	0.65
29874	Femur/ Knee Arthroscopy	for removal of loose or foreign body	0.59	0.23	0.40
29875	Femur/ Knee Arthroscopy	with synovectomy, limited	0.68	0.31	0.46
29876	Femur/ Knee Arthroscopy	with synovectomy, major, 2 or more compartments	0.19	0.09	0.50
29877	Femur/ Knee Arthroscopy	debridement/shaving of articular cartilage	0.69	0.38	0.55
29879	Femur/ Knee Arthroscopy	abrasion arthoplasty (includes chondroplsty where necessary) or multiple drilling or microfracture	0.42	0.18	0.43
29880	Femur/ Knee Arthroscopy	with meniscectomy (medial AND lateral, including any meniscal shaving) including debridement/ shaving of articular cartilage, same or separate	0.17	0.13	0.76

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		compartment(s), when performed			
29881	Femur/ Knee Arthroscopy	with meniscectomy (medial OR lateral, including any meniscal shaving) including debridement/ shaving of articular cartilage, same or separate compartment(s), when performed	2.84	1.02	0.36
29882	Femur/ Knee Arthroscopy	with meniscus repair (medial OR lateral)	2.25	0.58	0.26
29883	Femur/ Knee Arthroscopy	with meniscus repair (medial AND lateral)	0.25	0.06	0.24
29884	Femur/ Knee Arthroscopy	with lysis of adhesions, with or with out manipulation	0.12	0.05	0.41
29885	Femur/ Knee Arthroscopy	driling for ostiochondritis dissecans with bone grafting, withour without internal fixation (including debridement of base of lesion)	0.07	0.06	0.81
29886	Femur/ Knee Arthroscopy	drilling for intact ostiochondritis dissecans lesion	0.09	0.13	1.33
29887	Femur/ Knee Arthroscopy	drilling for intact ostiochondritis dissecans lesion with internal fixation	0.12	0.07	0.60
29888	Femur/ Knee Arthroscopy	Arthroscopically aided anterior cruciate ligament repair/ augmentation or reconstruction	4.08	1.49	0.36
29889	Femur/ Knee Arthroscopy	Arthroscopically aided posterior cruciate ligament repair/ augmentation or reconstruction	0.06	0.03	0.52
29891	Leg/ Ankle Arthroscopy	Arthroscopy, ankle, surgical, excision of osteochondral defect of talus and/or tibia, including drilling of the defect	0.18	0.04	0.24
29892	Leg/ Ankle Arthroscopy	Arthroscopically aided repair of large osteochondritis dissecans lesion, talar dome fracture, or tibial plafond fracture, with or without internal fixation	0.03	0.01	0.45
29893	Leg/ Ankle Arthroscopy	Endoscopic plantar fasciotomy	0.00	0.00	Inf
29894	Leg/ Ankle Arthroscopy	Arthroscopy, ankle, surgical; with removal of loose or foreign body	0.05	0.03	0.62
29895	Leg/ Ankle Arthroscopy	with synovectomy, partial	0.06	0.03	0.55
29897	Leg/ Ankle Arthroscopy	with debridement, limited	0.10	0.08	0.71

h	nttp://dx.doi.org/10.2106/J
F	Page 190

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
29898	Leg/ Ankle Arthroscopy	with debridement, extensive	0.12	0.05	0.45
29899	Leg/ Ankle Arthroscopy	with ankle arthrodesis	0.00	0.00	Inf
29900	Foot/ Toes Arthroscopy	Arthroscopy, metatarsophalangeal joint, diagnostic, includes synovial biopsy	0.00	0.00	Inf
29901	Foot/ Toes Arthroscopy	Arthroscopy, metatarsophalangeal joint, surgical; with debridement	0.00	0.00	Inf
29902	Foot/ Toes Arthroscopy	with reduction of displaced ulnar collateral ligament	0.00	0.00	Inf
29904	Foot/ Toes Arthroscopy	Arthroscopy, subtalar joint, surgical; with removal of loose or foreign body	0.01	0.00	0.00
29905	Foot/ Toes Arthroscopy	with synovectomy	0.01	0.00	0.00
29906	Foot/ Toes Arthroscopy	with debridement	0.01	0.00	0.06
29907	Foot/ Toes Arthroscopy	with subtalar arthrodesis	0.00	0.00	Inf
29914	Pelvis/ Hip Arthroscopy	with femoroplasty	0.27	0.00	0.00
29915	Pelvis/ Hip Arthroscopy	with acetabuloplasty	0.13	0.00	0.00
29916	Pelvis/ Hip Arthroscopy	with labral repair	0.35	0.00	0.00
29999	Foot/ Toes Arthroscopy	unlisted procedure, arthroscopy	0.17	0.05	0.28
63001	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decompression of Neural Elements or Excision of Herniated Intervertebral Disc	Laminectomy with exploration and /or decompression of spinal cord and/or cauda equina, without facetectomy, foraminotomy or discectomy (e.g., spinal stenosis), 1 or 2 vertebral segments, cervical	0.00	0.01	Inf
63003	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decompression of Neural Elements or Excision of Herniated Intervertebral Disc	Laminectomy with exploration and /or decompression of spinal cord and/or cauda equina, without facetectomy, foraminotomy or discectomy (e.g., spinal stenosis), 1 or 2 vertebral segments, thoracic	0.00	0.01	Inf
63005	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decompression of Neural Elements or Excision of Herniated Intervertebral Disc	Laminectomy with exploration and /or decompression of spinal cord and/or cauda equina, without facetectomy, foraminotomy or discectomy (e.g., spinal stenosis), 1 or 2 vertebral segments, lumbar, except for spondylolistheseis	0.00	0.03	Inf
63011	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for	Laminectomy with exploration and/or decompression of spinal cord and/or cauda equina, without facetectomy,	0.00	0.00	Inf

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
	Exploration/Decompression of Neural Elements or Excision of Herniated Intervertebral Disc	foraminotomy or discectomy (eg, spinal stenosis), 1 or 2 vertebral segments; sacral			
63012	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decompression of Neural Elements or Excision of Herniated Intervertebral Disc	Laminectomy with removal of abnormal facets and/or pars inter-articularis with decompression of cauda equina and nerve roots for spondylolisthesis, lumbar (Gill type procedure)	0.02	0.02	0.76
63015	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decompression of Neural Elements or Excision of Herniated Intervertebral Disc	Laminectomy with exploration and /or decompression of spinal cord and /or cauda equina, without facetectomy, foraminotomy or discectomy (e.g., spinal stenosis), more than 2 vertebral segments, cervical	0.00	0.00	Inf
63016	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decompression of Neural Elements or Excision of Herniated Intervertebral Disc	Laminectomy with exploration and /or decompression of spinal cord and /or cauda equina, without facetectomy, foraminotomy or discectomy (e.g., spinal stenosis), more than 2 vertebral segments, thoracic	0.00	0.01	2.23
63017	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decompression of Neural Elements or Excision of Herniated Intervertebral Disc	Laminectomy with exploration and /or decompression of spinal cord and /or cauda equina, without facetectomy, foraminotomy or discectomy (e.g., spinal stenosis), more than 2 vertebral segments, lumbar	0.00	0.03	Inf
63020	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decompression of Neural Elements or Excision of Herniated Intervertebral Disc	Laminotomy (hemilaminectomy). with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or excision of herniated intervertebral disc, including open and edoscopically assisted approaches, 1 interspace, cervical	0.00	0.00	1.48
63030	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decompression	Laminotomy (hemilaminectomy). with decompression of nerve root(s), including partial facetectomy, foraminotomy	0.07	0.04	0.57

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
	of Neural Elements or Excision of Herniated Intervertebral Disc	and/or excision of herniated intervertebral disc, including open and edoscopically assisted approaches, 1 interspace, lumbar			
63035	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decompression of Neural Elements or Excision of Herniated Intervertebral Disc	Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or excision of herniated intervertebral disc; each additional interspace, cervical or lumbar (List separately in addition to code for primary procedure)	0.01	0.01	0.93
63040	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decompression of Neural Elements or Excision of Herniated Intervertebral Disc	Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or excision of herniated intervertebral disc, reexploration, single interspace; cervical	0.00	0.00	Inf
63042	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decompression of Neural Elements or Excision of Herniated Intervertebral Disc	Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or excision of herniated intervertebral disc, reexploration, single interspace; lumbar	0.00	0.01	Inf
63043	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decompression of Neural Elements or Excision of Herniated Intervertebral Disc	Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or excision of herniated intervertebral disc, reexploration, single interspace; each additional cervical interspace (List separately in addition to code for primary	0.00	0.00	Inf

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		procedure)			
63044	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decompression of Neural Elements or Excision of Herniated Intervertebral Disc	Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or excision of herniated intervertebral disc, reexploration, single interspace; each additional lumbar interspace (List separately in addition to code for primary procedure)	0.00	0.01	Inf
63045	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decompression of Neural Elements or Excision of Herniated Intervertebral Disc	Laminectomy, facetectomy and foraminotomy (unilateral or bilateral with decompression of spinal cord, cauda equina and /or nerve root(s), (e.g., spinal or lateral recess stenosis), single vertebral segment, cervical	0.00	0.00	Inf
63046	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decompression of Neural Elements or Excision of Herniated Intervertebral Disc	Laminectomy, facetectomy and foraminotomy (unilateral or bilateral with decompression of spinal cord, cauda equina and/or nerve root[s], [eg, spinal or lateral recess stenosis]), single vertebral segment; thoracic	0.00	0.01	Inf
63047	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decompression of Neural Elements or Excision of Herniated Intervertebral Disc	Laminectomy, facetectomy and foraminotomy (unilateral or bilateral with decompression of spinal cord, cauda equina and /or nerve root(s), (e.g., spinal or lateral recess stenosis), single vertebral segment, lumbar	0.03	0.05	1.74
63048	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decompression of Neural Elements or Excision of Herniated Intervertebral Disc	Laminectomy, facetectomy and foraminotomy (unilateral or bilateral with decompression of spinal cord, cauda equina and/or nerve root[s], [eg, spinal or lateral recess stenosis]), single vertebral segment; each additional segment, cervical, thoracic, or lumbar (List separately in addition to code for primary procedure)	0.01	0.04	4.55

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
63050	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decompression of Neural Elements or Excision of Herniated Intervertebral Disc	Laminoplasty, cervical, with decompression of the spinal cord, 2 or more vertebral segments;	0.00	0.00	Inf
63051	Nervous System Spine & Spinal Cord Posterior Extradural Laminotomy or Laminectomy for Exploration/Decompression of Neural Elements or Excision of Herniated Intervertebral Disc	Laminoplasty, cervical, with decompression of the spinal cord, 2 or more vertebral segments; with reconstruction of the posterior bony elements (including the application of bridging bone graft and non-segmental fixation devices [eg, wire, suture, mini-plates], when performed)	0.00	0.00	Inf
63075	Nervous System Spine & Spinal Cord Anterior or Anterolateral Approach for Extradural Exploration/Decompression	Discectomy, anterior, with decompression of spinal cord and/or nerve root(s), including osteophytectomy; cervical, single interspace	0.00	0.01	Inf
63076	Nervous System Spine & Spinal Cord Anterior or Anterolateral Approach for Extradural Exploration/Decompression	Discectomy, anterior, with decompression of spinal cord and/or nerve root(s), including osteophytectomy; cervical, each additional interspace (List separately in addition to code for primary procedure)	0.00	0.01	Inf
63077	Nervous System Spine & Spinal Cord Anterior or Anterolateral Approach for Extradural Exploration/Decompression	Discectomy, anterior, with decompression of spinal cord and/or nerve root(s), including osteophytectomy; thoracic, single interspace	0.00	0.01	Inf
63078	Nervous System Spine & Spinal Cord Anterior or Anterolateral Approach for Extradural Exploration/Decompression	Discectomy, anterior, with decompression of spinal cord and/or nerve root(s), including osteophytectomy; thoracic, each additional interspace (List separately in addition to code for primary procedure)	0.00	0.03	Inf
63081	Nervous System Spine & Spinal Cord Anterior or Anterolateral Approach for Extradural Exploration/Decompression	Vertebral corpectomy (vertebral body resection), partial or complete, anterior approach with decompression of spinal cord and/or nerve root(s); cervical, single	0.00	0.01	2.45

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		segment			
63082	Nervous System Spine & Spinal Cord Anterior or Anterolateral Approach for Extradural Exploration/Decompression	Vertebral corpectomy (vertebral body resection), partial or complete, anterior approach with decompression of spinal cord and/or nerve root(s); cervical, each additional segment (List separately in addition to code for primary procedure)	0.00	0.00	Inf
63085	Nervous System Spine & Spinal Cord Anterior or Anterolateral Approach for Extradural Exploration/Decompression	Vertebral corpectomy (vertebral body resection), partial or complete, transthoracic approach with decompression of spinal cord and/or nerve root(s); thoracic, single segment	0.00	0.01	2.30
63086	Nervous System Spine & Spinal Cord Anterior or Anterolateral Approach for Extradural Exploration/Decompression	Vertebral corpectomy (vertebral body resection), partial or complete, transthoracic approach with decompression of spinal cord and/or nerve root(s); thoracic, each additional segment	0.00	0.01	Inf
63087	Nervous System Spine & Spinal Cord Anterior or Anterolateral Approach for Extradural Exploration/Decompression	Vertebral corpectomy (vertebral body resection), partial or complete, combined thoracolumbar approach with decompression of spinal cord, cauda equina or nerve root(s), lower thoracic or lumbar; single segment	0.00	0.02	Inf
63088	Nervous System Spine & Spinal Cord Anterior or Anterolateral Approach for Extradural Exploration/Decompression	Vertebral corpectomy (vertebral body resection), partial or complete, combined thoracolumbar approach with decompression of spinal cord, cauda equina or nerve root(s), lower thoracic or lumbar; each additional segment (List separately in addition to code for primary procedure)	0.00	0.01	Inf
63090	Nervous System Spine & Spinal Cord Anterior or Anterolateral Approach for Extradural Exploration/Decompression	Vertebral corpectomy (vertebral body resection), partial or complete, transperitoneal or retroperitoneal approach with decompression of spinal cord, cauda equina or nerve root(s), lower thoracic, lumbar,	0.00	0.01	Inf

http://dx.doi.org/10.2106/JBJS.17.01115

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
		or sacral; single segment			
63091	Nervous System Spine & Spinal Cord Anterior or Anterolateral Approach for Extradural Exploration/Decompression	Vertebral corpectomy (vertebral body resection), partial or complete, transperitoneal or retroperitoneal approach with decompression of spinal cord, cauda equina or nerve root(s), lower thoracic, lumbar, or sacral; each additional segment (List separately in addition to code for primary procedure)	0.00	0.00	Inf
64702	Nervous System Spine & Spinal Cord Neuroplasty	Neuroplasty; digital, 1 or both, same digit	0.04	0.01	0.33
64704	Nervous System Spine & Spinal Cord Neuroplasty	Neuroplasty; nerve of hand or foot	0.00	0.01	Inf
64708	Nervous System Spine & Spinal Cord Neuroplasty	Neuroplasty, major peripheral nerve, arm or leg, open; other than specified	0.13	0.06	0.44
64712	Nervous System Spine & Spinal Cord Neuroplasty	Neuroplasty, major peripheral nerve, arm or leg, open; sciatic nerve	0.01	0.01	1.13
64713	Nervous System Spine & Spinal Cord Neuroplasty	Neuroplasty, major peripheral nerve, arm or leg, open; brachial plexus	0.02	0.03	1.27
64714	Nervous System Spine & Spinal Cord Neuroplasty	Neuroplasty, major peripheral nerve, arm or leg, open; lumbar plexus	0.00	0.00	0.74
64718	Nervous System Spine & Spinal Cord Neuroplasty	Neuroplasty and/or transposition; ulnar nerve at elbow	0.20	0.10	0.49
64719	Nervous System Spine & Spinal Cord Neuroplasty	Neuroplasty and/or transposition; ulnar nerve at wrist	0.01	0.01	0.62
64721	Nervous System Spine & Spinal Cord Neuroplasty	Neuroplasty and/or transposition; median nerve at carpal tunnel	0.13	0.13	0.99
64722	Nervous System Spine & Spinal Cord Neuroplasty	Decompression; unspecified nerve(s) (specify)	0.01	0.02	1.56
64726	Nervous System Spine & Spinal Cord Neuroplasty	Decompression; plantar digital nerve	0.00	0.00	Inf
64727	Nervous System Spine & Spinal Cord Neuroplasty	Internal neurolysis, requiring use of operating microscope (List separately in addition to code for neuroplasty) (Neuroplasty includes external neurolysis)	0.01	0.01	0.95
64831	Nervous System Spine & Spinal Cord Neurorrhaphy	Suture of digital nerve, hand or foot; 1 nerve	0.25	0.06	0.23
64832	Nervous System Spine &	Suture of digital nerve, hand	0.02	0.02	0.80

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
	Spinal Cord Neurorrhaphy	or foot; each additional digital nerve (List separately in addition to code for primary procedure)			
64834	Nervous System Spine & Spinal Cord Neurorrhaphy	Suture of 1 nerve; hand or foot, common sensory nerve	0.02	0.01	0.45
64835	Nervous System Spine & Spinal Cord Neurorrhaphy	Suture of 1 nerve; median motor thenar	0.01	0.00	0.63
64836	Nervous System Spine & Spinal Cord Neurorrhaphy	Suture of 1 nerve; ulnar motor	0.01	0.01	1.74
64837	Nervous System Spine & Spinal Cord Neurorrhaphy	Suture of each additional nerve, hand or foot (List separately in addition to code for primary procedure)	0.00	0.01	Inf
64840	Nervous System Spine & Spinal Cord Neurorrhaphy	Suture of posterior tibial nerve	0.00	0.00	0.37
64856	Nervous System Spine & Spinal Cord Neurorrhaphy	Suture of major peripheral nerve, arm or leg, except sciatic; including transposition	0.04	0.01	0.26
64857	Nervous System Spine & Spinal Cord Neurorrhaphy	Suture of major peripheral nerve, arm or leg, except sciatic; without transposition	0.09	0.03	0.32
64859	Nervous System Spine & Spinal Cord Neurorrhaphy	Suture of each additional major peripheral nerve (List separately in addition to code for primary procedure)	0.01	0.00	0.18
64861	Nervous System Spine & Spinal Cord Neurorrhaphy	Suture of nerve; requiring extensive mobilization, or transposition of nerve (List separately in addition to code for nerve suture)	0.01	0.01	1.89
64874	Nervous System Spine & Spinal Cord Neurorrhaphy	Suture of nerve; requiring extensive mobilization, or transposition of nerve (List separately in addition to code for nerve suture)	0.00	0.00	Inf
64885	Nervous System Spine & Spinal Cord Neurorrhaphy with Nerve Graft, Vein Graft or Conduit	Nerve graft, head or neck; up to 4 cm in length	0.01	0.00	0.24
64890	Nervous System Spine & Spinal Cord Neurorrhaphy with Nerve Graft, Vein Graft or Conduit	Nerve graft, single strand, hand or foot; up to 4 cm in length	0.00	0.00	0.89
64891	Nervous System Spine & Spinal Cord Neurorrhaphy with Nerve Graft, Vein Graft or Conduit	Nerve graft, single strand, hand or foot; more than 4 cm in length	0.00	0.00	Inf
64892	Nervous System Spine & Spinal Cord Neurorrhaphy	Nerve graft, single strand, arm or leg; up to 4 cm in length	0.00	0.01	Inf

CPT Code <sup>a</sup>	CPT Code Category	CPT Code Description	Practitioner %	Resident %	Relative Rate
	with Nerve Graft, Vein Graft or Conduit				
64893	Nervous System Spine & Spinal Cord Neurorrhaphy with Nerve Graft, Vein Graft or Conduit	Nerve graft, single strand, arm or leg; more than 4 cm in length	0.01	0.00	0.70
64895	Nervous System Spine & Spinal Cord Neurorrhaphy with Nerve Graft, Vein Graft or Conduit	Nerve graft, multiple strands, hand or foot; up to 4 cm in length	0.00	0.00	0.30
64896	Nervous System Spine & Spinal Cord Neurorrhaphy with Nerve Graft, Vein Graft or Conduit	Nerve graft, multiple strands, hand or foot; more than 4 cm in length	0.00	0.00	0.89
64897	Nervous System Spine & Spinal Cord Neurorrhaphy with Nerve Graft, Vein Graft or Conduit	Nerve graft, multiple strands, arm or leg; up to 4 cm in length	0.00	0.00	1.63
64898	Nervous System Spine & Spinal Cord Neurorrhaphy with Nerve Graft, Vein Graft or Conduit	Nerve graft, multiple strands, arm or leg; more than 4 cm in length	0.01	0.01	0.56
64901	Nervous System Spine & Spinal Cord Neurorrhaphy with Nerve Graft, Vein Graft or Conduit	Nerve graft, additional nerve; single strand	0.00	0.00	Inf
64902	Nervous System Spine & Spinal Cord Neurorrhaphy with Nerve Graft, Vein Graft or Conduit	Nerve graft, additional nerve; multiple strands	0.02	0.01	0.28
64905	Nervous System Spine & Spinal Cord Neurorrhaphy with Nerve Graft, Vein Graft or Conduit	Nerve pedicle transfer; first stage	0.04	0.00	0.11
64907	Nervous System Spine & Spinal Cord Neurorrhaphy with Nerve Graft, Vein Graft or Conduit	Nerve pedicle transfer; second stage	0.00	0.00	Inf
64910	Nervous System Spine & Spinal Cord Neurorrhaphy with Nerve Graft, Vein Graft or Conduit	Nerve repair; with synthetic conduit or vein allograft, each nerve	0.06	0.02	0.28
64911	Nervous System Spine & Spinal Cord Neurorrhaphy with Nerve Graft, Vein Graft or Conduit	Nerve repair; with synthetic conduit or vein autogenous, each nerve	0.00	0.00	Inf

a Sorted by this column.