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Supplemental Table 1: Diagnostic and Procedural Codes for Distal Radius Fracture Management

ICD-9 codes for identification of distal radius fractures:

Closed Colles' fracture: 813.41
Open Colles' fracture: 813.51
Other closed fractures of distal end of radius (alone): 813.42
Other open fractures of distal end of radius (alone): 813.52
Closed fracture of lower end of radius with ulna: 813.44
Open fracture of lower end of radius with ulna: 813.54

CPT codes for identifying treatment modalities:

Operative:

Open treatment: 25620, 25607, 25608, 25609
External Fixation: 20690, 20692
Percutaneous pinning: 25606, 25611

Non-operative:

Closed treatment: 25605, 25600

ICD-9 codes for identifying treatment modalities:

Operative:

Open treatment: 79.32, 79.22
External Fixation: 78.13
Percutaneous pinning: 79.12

Non-operative:

Closed treatment: 79.02

Supplemental Table 2: Codes Used for Distal Radius Outcomes		
90-Days Complications	ICD-9 Codes Used	ICD-9 Codes Description
Neurologic complications	997.0x	Nervous System Complications
Respiratory complications:	518.40, 518.5x, 518.81, 518.82, 518.83, 518.84, 997.3x	518.x - Other Disease of Lung, 997.3x - Respiratory Complications
Cardiac complications	410.x, 997.1	410 - Acute Myocardial Infarction, 997.1 - Cardiac Complications
Gastrointestinal complications	535.xx, 570, 575.0, 577.0, 997.4x	535.x - Gastritis and duodenitis, 570 - Acute and Sub-acute Necrosis of Liver, 575.0 - Acute Cholecystitis, Acute Pancreatitis, 997.4x - Digestive System Complications
Urinary and Renal complications	584.x, 997.5	584.x - Acute Kidney Failure, 997.5 - Urinary Complications
Pulmonary embolism	415.1x	Acute Cor Pulmonale
Deep Venous Thrombosis	451.xx, 452, 453.4x, 453.82	451.x - Phlebitis and Thrombophlebitis, 452 - Portal Vein Thrombosis, 453.xx - Acute Venous Embolism and Thrombosis of deep vessels
Wound-related complications, including infection, dehiscence, seroma and hematoma	998.1x, 998.2, 998.3x, 998.5x, 998.83, 999.31, 999.32	998.1x - Hemorrhage or Hematoma Complications, 998.2 - Accidental Puncture or Laceration During Procedure, 998.3x - Disruption of Operation wound, 998.5x - Postoperative Infection, 998.83 - Non-healing Surgical wound, 999.31;999.32 - Infection due to central venous catheter
1-year Complications	ICD-9 Codes Used	ICD-9 Codes Description
Fracture malunion	733.81	Fracture malunion
Fracture nonunion	733.82	Fracture nonunion
Osteoarthritis	715.04, 715.24, 715.23, 715.33, 715.34, 718.03	715 - Osteoarthritis and allied disorders, 718.03 - Articular Cartilage Disorder, Forearm
Carpal tunnel syndrome	354	Carpal tunnel syndrome
Lesion of the ulnar nerve	354.2	Lesion of the ulnar nerve
Upper Limb Complications	354.x, 355.9, 337.21	Mononeuritis of upper limb (354.0-354.5, 354.8, 354.9), complex regional pain syndrome (355.9), Reflex sympathetic dystrophy of the upper limb (337.21)
Tendons Complications	727.63, 727.64, 905.8, 727.05, 727.04	Rupture of the extensor tendons (727.63), Rupture of the flexor tendons (727.64), Late effect of tendon injury (905.8), Tenosynovitis (727.05, 727.04)
Compartment syndrome	958.91	Compartment syndrome
Hardware mechanical complication	996.4x	Hardware mechanical complication
Hardware infection	996.60, 996.66, 996.67	Hardware infection
Osteomyelitis	730.93, 730.94, 730.03, 730.04, 730.13, 730.14, 730.24, 730.23, 730.34, 730.33	Osteomyelitis peridotites and other infections involving bone
Radioulnar instability	718.33, 718.23, 833.01	Radioulnar instability
Radiocarpal dislocations	833.02	Radiocarpal dislocations
Stiffness	719.54, 719.53, 718.44, 718.43	Contracture of the hand or forearm (718.44, 718.43), Stiffness (719.54, 719.53)
Enthesopathy of wrist and carpus	726.4	Enthesopathy of wrist and carpus
Revision/Subsequent Procedure	CPT Codes Used	CPT Codes Description
Distal radius osteotomy	25350	Distal radius osteotomy

Carpal tunnel release	29848, 64721	Carpal tunnel release
Arthrodesis and resection of radioulnar joint	25830	Arthrodesis and resection of radioulnar joint
Distal radius or ulna arthroplasty	25441, 25442	Distal radius or ulna arthroplasty
Distal radioulnar joint stabilization	25676, 25337	Distal radioulnar joint stabilization
Distal radioulnar joint arthrotomy for repair of triangular cartilage complex	25107	Distal radioulnar joint arthrotomy for repair of triangular cartilage complex
Removal of deep implant	20680	Removal of deep implant
Reoperation - Surgical Treatment	25620, 25607, 25608, 25609, 20690, 20692, 25606, 25611	Surgical treatment modalities for distal radius: Open, External Fixation, Percutaneous Pinning
