Appendix

Coding Algorithm Used to Identify Inclusion Criteria, Exclusion Criteria, Diagnosis, and Complications


81.11: Ankle fusion
81.56: Total ankle replacement

**Inclusion Code, Diagnosis (ICD-9-CM Diagnosis Code)**

715, 715.0, 715.00, 715.07, 715.09, 715.1, 715.10, 715.17, 715.2, 715.20, 715.27, 715.3, 715.30, 715.37, 715.8, 715.80, 715.87, 715.89, 715.9, 715.90, 715.97: Degenerative disease
714, 714.0: Rheumatoid arthritis
733.4, 733.40, 733.44: Aseptic necrosis

**Exclusion Code, Procedure (ICD-9-CM Procedure Code)**

81.59: Revision of joint replacement of lower extremity
80.07: Arthrotomy for removal of prosthesis, ankle

**Exclusion Code, Diagnosis (ICD-9-CM Diagnosis Code)**

170.7, 213.8: Neoplasm of short bones of lower limb
170.8, 213.7: Neoplasm of long bones of lower limb
171.3, 215.3: Neoplasm of connective tissue, lower limb
173.7: Neoplasm of skin of lower limb
711.0, 711.06, 711.07: Arthropathy associated with infections
730.0, 730.06, 730.07: Acute or subacute osteomyelitis
730.1, 730.16, 730.17: Chronic osteomyelitis
996.4: Mechanical complication of internal orthopedic device
996.60: Infection or inflammation due to unspecified device, implant, or graft
996.66: Infection or inflammation due to internal joint device or prosthesis
996.67: Infection or inflammation due to presence of unspecified orthopaedic device or implant
996.7: Complication of internal prosthetic device, implant, and graft
996.70: Complication due to unspecified device, implant, or graft
996.77: Complication due to joint prosthesis
996.78: Complication of unspecified orthopaedic internal device, implant, or graft

**Complications (ICD-9-CM Diagnosis Code)**

410, 410.0, 410.00, 410.01, 410.1, 410.10, 410.11, 410.2, 410.20, 410.21, 410.3, 410.30, 410.31, 410.4, 410.40, 410.41, 410.5, 410.50, 410.51, 510.6, 410.60, 410.61, 410.7,
410.70, 410.71, 410.8, 410.80, 410.81, 410.9, 410.90, 410.91: Acute myocardial infarction
480, 480.0, 480.1, 480.2, 480.3, 480.8, 481, 482, 482.0, 482.1, 482.2, 482.3, 482.30, 482.31, 482.32, 482.39, 482.4, 482.40, 482.41, 482.42, 482.49, 482.81, 482.82, 482.83, 482.84, 482.89, 482.9, 483, 483.0, 483.1, 483.8, 485, 486, 487.0, 488.01, 488.11, 507.0: Pneumonia
038, 038.0, 038.1, 038.10, 038.11, 038.12, 038.19, 038.2, 038.3, 038.4, 038.40, 038.41, 038.42, 038.43, 038.44, 038.49, 038.8, 038.9, 785.52, 785.59, 790.7, 995.91, 995.92, 998.0: Sepsis/septicemia/shock
415.1, 415.11, 415.19: Pulmonary embolism
996.4, 996.40, 996.41, 996.42, 996.44, 996.47, 996.49: Mechanical complications
998.1, 998.11, 998.12, 998.13, 719.10, 719.16, 719.17: Surgical site bleeding
998.6, 998.83, 998.8, 998.31, 998.32, 998.33, 998.5, 998.51, 998.59, 996.67, 996.66: Periprosthetic joint infection/wound infection

Reoperation (ICD-9-CM Procedure Code)
80.07: Arthrotomy for removal of prosthesis, ankle
81.11: Ankle fusion
81.12: Triple arthrodesis
81.13: Subtalar fusion
81.14: Midtarsal fusion
81.15: Tarsometatarsal fusion
81.16: Metatarsophalangeal fusion
81.17: Other fusion of foot
81.54: Total knee replacement
81.56: Total ankle replacement
81.59: Revision of joint replacement of lower extremity, not elsewhere classified
84.10: Amputation NOS (not otherwise specified)
84.11: Amputation of toe
84.12: Amputation through foot
84.13: Disarticulation of ankle
84.14: Amputation of ankle through malleoli of tibia and fibula
84.15: Other amputation below knee
84.16: Disarticulation of knee
84.17: Amputation above knee