Supplementary Online Content

This supplementary material has been provided by the authors to give readers additional information about their work.

Inclusion
Surgically treated appendicular fracture,
based on CPT codes, between Jan 1, 2003
and Dec 31, 2016
(n= 12,790)

Exclusions
No Social Security Number (n = 864)
Subsequent fracture after index and before 12/31/17 (n = 195)
Severe traumatic brain injury (AIS Head >= 5) (n = 20)
Severe spinal cord injury (AIS Spine >=5) (n = 38)

Sample population (n = 11,673)

**Post-operative infection
patients (n=403)**

**Uninfected control patients
(n=11,270)**

eFigure 2. Attrition in Tax Filing
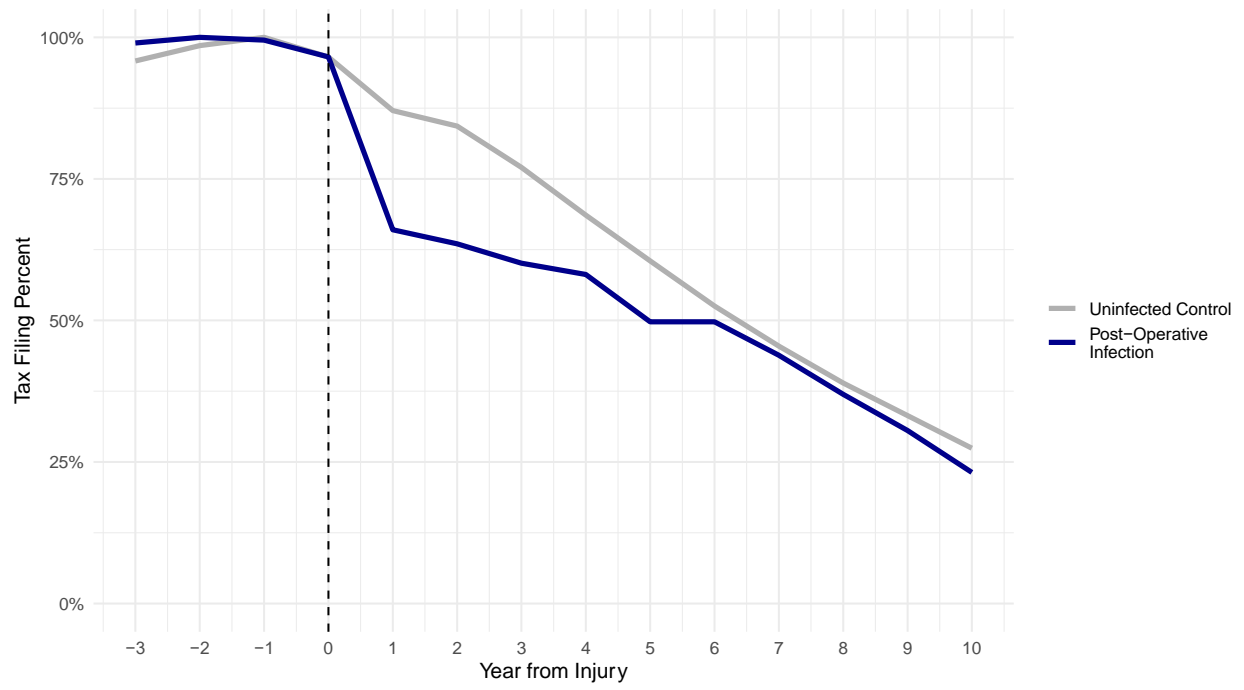
eFigure 3. Proportion of Patients Receiving Social Security Benefits

Proportion Receiving Social Security Benefits

eFigure 4. Proportion of Patients Receiving Unemployment Insurance

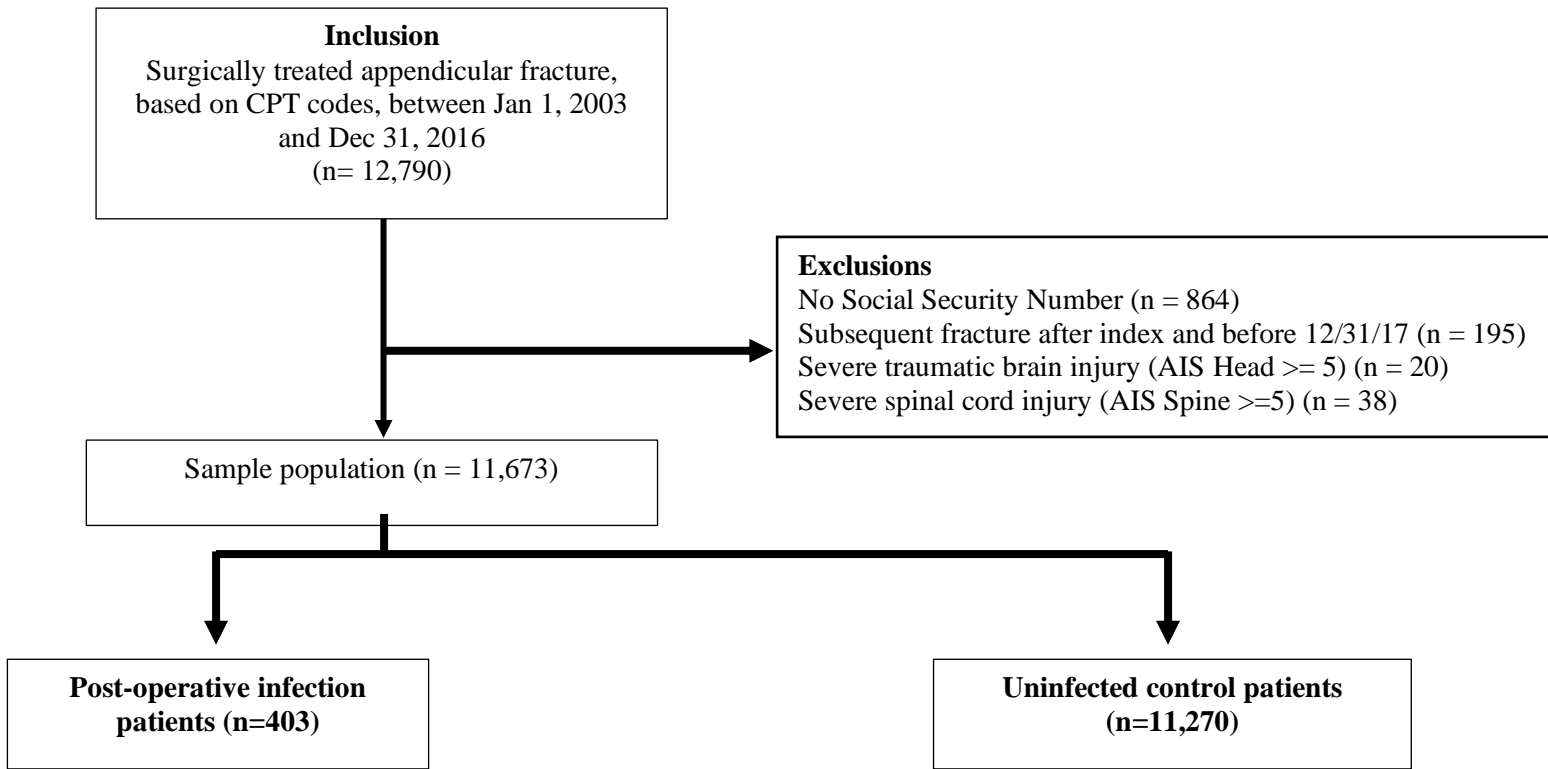Proportion Receiving Unemployment Insurance

eTable 1. *Current Procedural Terminology* (CPT), *International Classification of Diseases, 9th Revision* (ICD-9), and *10th Revision* (ICD-10) Codes Used to Identify Patients With a Suspected Postoperative Infection
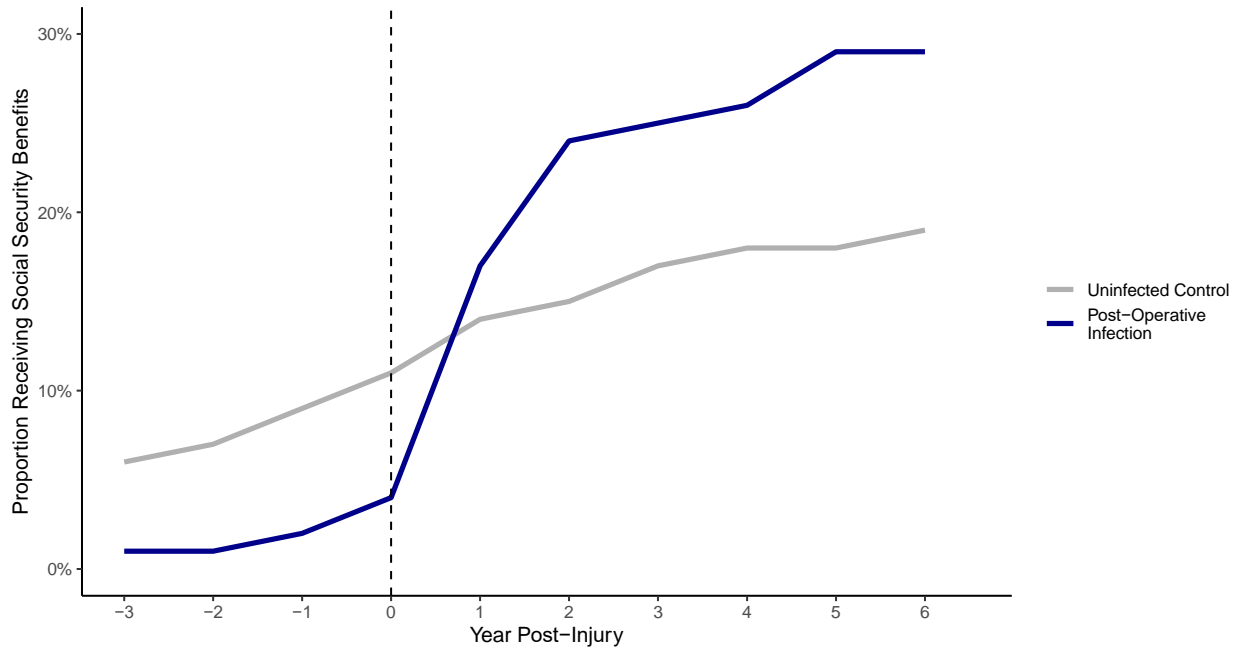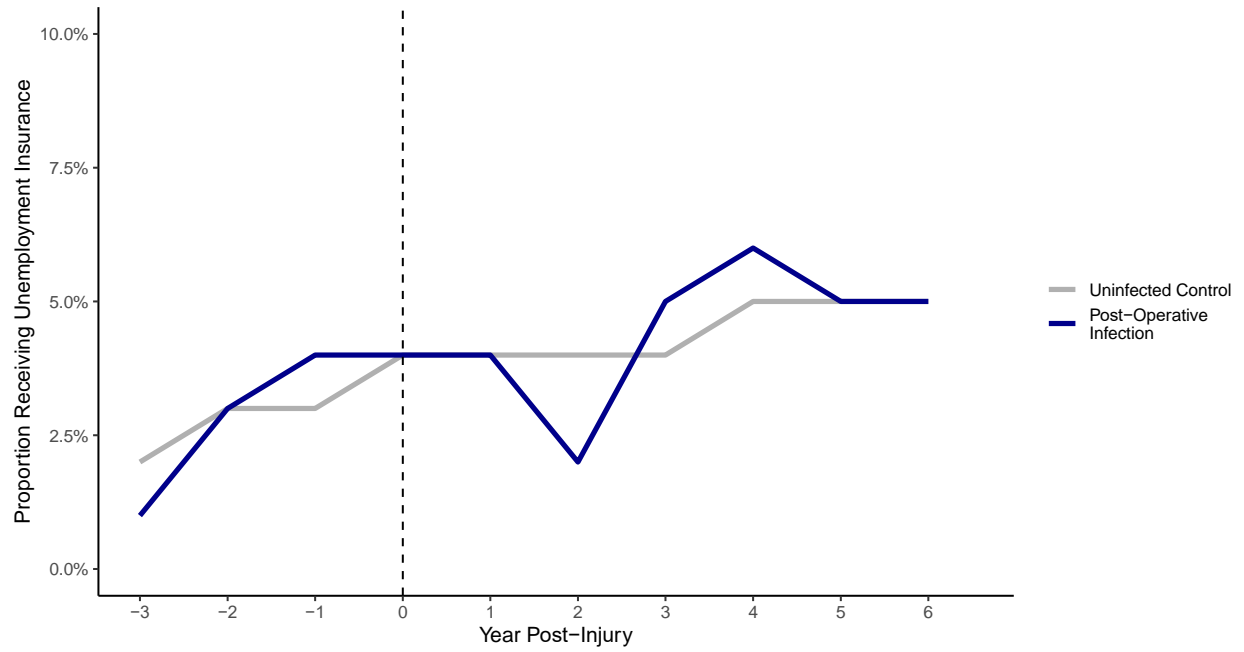
Code	Description
ICD-9	
730.2	Unspecified osteomyelitis
730.20	Unspecified osteomyelitis site unspecified
730.21	Unspecified osteomyelitis involving shoulder region
730.22	Unspecified osteomyelitis involving upper arm
730.23	Unspecified osteomyelitis involving forearm
730.24	Unspecified osteomyelitis involving hand
730.25	Unspecified osteomyelitis involving pelvic region and thigh
730.26	Unspecified osteomyelitis involving lower leg
730.27	Unspecified osteomyelitis involving ankle and foot
730.28	Unspecified osteomyelitis involving other specified sites
730.29	Unspecified osteomyelitis involving multiple sites
998.5	Postoperative infection not elsewhere classified
996.67	Infection and inflammatory reaction due to other internal orthopedic device implant and graft
ICD-10	
T81.3	Disruption of wound, not elsewhere classified
T81.30	Disruption of wound, unspecified
T81.31	Disruption of external operation (surgical) wound, not elsewhere classified
T81.32	Disruption of internal operation (surgical) wound, not elsewhere classified
T81.33	Disruption of traumatic injury wound repair
T81.4	Code for Infection following a procedure
T81.40	Code for Infection following a procedure, unspecified
T81.41	Infection following a procedure, superficial incisional surgical site
T81.42	Infection following a procedure, deep incisional surgical site
T81.43	Infection following a procedure, organ and space surgical site
T81.44	Sepsis following a procedure
T81.49	Infection following a procedure, other surgical site
T84.5	Infection and inflammatory reaction due to internal joint prosthesis
T84.51	Infection and inflammatory reaction due to internal right hip prosthesis
T84.52	Infection and inflammatory reaction due to internal left hip prosthesis
T84.53	Infection and inflammatory reaction due to internal right knee prosthesis
T84.54	Infection and inflammatory reaction due to internal left knee prosthesis
T84.59	Infection and inflammatory reaction due to other internal joint prosthesis
T84.6	Infection and inflammatory reaction due to internal fixation device
T84.60	Infection and inflammatory reaction due to internal fixation device of unspecified site
T84.61	Infection and inflammatory reaction due to internal fixation device of arm
T84.62	Infection and inflammatory reaction due to internal fixation device of leg
T84.63	Code for Infection and inflammatory reaction due to internal fixation device of spine
T84.69	Infection and inflammatory reaction due to internal fixation device of other site
T84.7	Infection and inflammatory reaction due to other internal orthopedic prosthetic devices, implants and grafts
T84.7XXA	Infection and inflammatory reaction due to other internal orthopedic prosthetic devices, implants and grafts, initial encounter

T84.7XXD	Infection and inflammatory reaction due to other internal orthopedic prosthetic devices, implants and grafts, initial encounter
T84.7XXS	Infection and inflammatory reaction due to other internal orthopedic prosthetic devices, implants and grafts, sequela
M86.9	Osteomyelitis, unspecified
CPT Codes	
11011	Debridement including removal of foreign material associated with open fracture(s) and/or dislocation(s)
11012	Debridement including removal of foreign material associated with open fracture(s) and/or dislocation(s)
11043	Under Debridement Procedures on the Skin
11044	Under Debridement Procedures on the Skin
10180	Under Incision and Drainage Procedures on the Skin, Subcutaneous and Accessory Structures
27360	Under Excision Procedures on the Femur (Thigh Region) and Knee Joint
27640	Under Excision Procedures on the Leg (Tibia and Fibula) and Ankle Joint
28120	Under Excision Procedures on the Foot and Toes
28122	Under Excision Procedures on the Foot and Toes

eTable 2. Summary of Missing Data and Methods of Imputations

Covariate	Missing Data (n=11,673)	Imputation Method
Age, n (%)	0 (0%)	NA
Male, n (%)	0 (0%)	NA
Race, n (%)	133 (1.1%)	Polytomous logistic regression
Area Deprivation Index, n (%)	2214 (19.0%)	Predictive mean matching
Mechanism of injury, n (%)	0 (0%)	NA
Injury type, n (%)	0 (0%)	NA
Glasgow Comma Score, n (%)	0 (0%)	NA
Health insurance, n (%)	0 (0%)	NA
Abbreviated Injury Scale		NA
Lower extremity, n (%)	0 (0%)	NA
Upper extremity, n (%)	0 (0%)	NA
Abdominal, n (%)	0 (0%)	NA
Face, n (%)	0 (0%)	NA
Head, n (%)	0 (0%)	NA
Neck, n (%)	0 (0%)	NA
Spine, n (%)	0 (0%)	NA
Chest, n (%)	0 (0%)	NA
Comorbidities		NA
Alcohol dependence, n (%)	0 (0%)	NA
Cancer, n (%)	0 (0%)	NA
Depression, n (%)	0 (0%)	NA
Diabetes, n (%)	0 (0%)	NA
IV drug use, n (%)	0 (0%)	NA
Non-IV drug use, n (%)	0 (0%)	NA
Hypertension, n (%)	0 (0%)	NA
Tobacco use, n (%)	0 (0%)	NA
Fracture location, n (%)	0 (0%)	NA
Open fracture, n (%)	0 (0%)	NA

eTable 3. Sensitivity Analysis for Catastrophic Wage Loss After a Postoperative Infection

Level of Catastrophic Wage Loss	Years Post-Injury	Post-Operative Infection (n=160)	Unexposed Control (n=4597)	Adjusted Mean Difference (95% CI)	*P* Value
50%	**2 years**	**46 (28.8%)**	**833 (18.1%)**	**6.6% (4.9 to 8.3)**	**<0.001**
	5 years	53 (31.5%)	861 (18.1%)	6.8% (5.1 to 8.6)	<0.001
25%	2 years	68 (42.5%)	1384 (30.1%)	4.3% (2.3 to 6.2)	<0.001
	5 years	70 (41.7%)	1382 (29.1%)	4.4% (2.5 to 6.3)	<0.001
75%	2 years	23 (14.4%)	456 (9.9%)	7.5% (6.1 to 9.0)	<0.001
	5 years	27 (16.1%)	490 (10.3%)	6.4% (5.0 to 7.8)	<0.001

Note: Mean differences were adjusted using inverse probability of treatment weighting.