

Table S1 Procedural and diagnostic code definitions for lumbar fusion and postoperative outcomes

Outcome	ICD-10/CPT/RxNorm Codes
Anterior interbody technique	22558
Posterior or posterolateral technique	22612
Posterior interbody technique	22630
Combined posterior or posterolateral with posterior interbody technique	22633
Sepsis	A41.9, T81.44
Infection	ICD-10: T81.4; T81.43XA
Pulmonary embolism (PE)	I26
Deep vein thrombosis (DVT)	I82.40
Myocardial infarction (MI)	I21-I22
Mortality	R99
Renal failure	N17-N19
Pneumonia	J18.9
Emergency department (ED) visit	CPT: 99281, 99282, 99283, 99284, 99285, 1013723, 1013711
Foot drop	ICD-10: M21.371, M21.372
Opioid use	ICD-10: F11.10 OR RxNorm (class): Hydrocodone, Oxycodone, Morphine, Tramadol, Fentanyl
Wound complication	ICD-10: T81.31
Pseudoarthrosis	M96.1
Transfusion	CPT: 30233
Hospital readmission	CPT: 99221, 99222, 99223
Stroke	I63.9, I64
Anemia	ICD-10: D62
Complications of surgical care	ICD-10: T81.9, T81.4
Revision surgery	CPT: 22612, 22558, 22630, 22633, 22533
Adjacent segment disease	ICD-10: M51.36, M47.816
Compression fracture	ICD-10: S22, S32,
Long-term surgical site infection	ICD-10: T81.4, T84.5, T84.7

This table lists the CPT, ICD-10-CM/PCS, and RxNorm codes used to identify lumbar fusion techniques and associated 90-day and 5-year postoperative complications, healthcare utilization events, and revision surgeries in the TriNetX US Collaborative Network.