

Supplemental File

Table 1: Inclusion codes for both cohorts for patients with lumbar disc herniation and/or lumbosacral radiculopathy

Diagnosis Codes*	Definition
G54.4	Lumbosacral root disorders, not elsewhere classified
M51.26	Other intervertebral disc displacement, lumbar region
M51.27	Other intervertebral disc displacement, lumbosacral region
M54.16	Radiculopathy, lumbar region
M54.17	Radiculopathy, lumbosacral region
M54.18	Radiculopathy, sacral and sacrococcygeal region
M54.3	Sciatica
M54.4	Lumbago with sciatica

* International Classification of Diseases (ICD-10)

Table 2: Exclusions for both cohorts

Diagnosis codes*	Definition (excluded days -365 to 0)
C00-C96	Malignant neoplasm
G83.4	Cauda equina syndrome
M41	Scoliosis
M43.16	Spondylolisthesis, lumbar region
M43.17	Spondylolisthesis, lumbosacral region
M48.0	Spinal stenosis
M48.46	Fatigue fracture of vertebra, lumbar region
M48.56	Collapsed vertebra, not elsewhere classified, lumbar region
M48.57	Collapsed vertebra, not elsewhere classified, lumbosacral region
M84.40	Pathological fracture, unspecified site
M84.48	Pathological fracture, other site
M84.58	Pathological fracture in neoplastic disease, other specified site
M84.60	Pathological fracture in other disease, unspecified site
M96.1	Postlaminectomy syndrome, not elsewhere classified
N31	Neuromuscular dysfunction of bladder, not elsewhere classified
R15	Fecal incontinence
R32	Unspecified urinary incontinence
S22.08	Fracture of T11-T12 vertebra
S30-S39	Injuries to the abdomen, lower back, lumbar spine, pelvis and external genitals
S32.0	Fracture of lumbar vertebra
Z98.1	Arthrodesis status
Lumbar discectomy codes	Definition (excluded any time to day 0)
Multiple	See Supplemental File Table 4

* International Classification of Diseases (ICD-10)

Table 3: Additional selection criteria according to receipt of chiropractic spinal manipulative therapy

CPT code	Description	CSMT recipients	CSMT non-recipients
98940	CSMT; 1-2 regions	Included	Excluded
98941	CSMT; 3-4 regions	Included	Excluded
98942	CSMT; 5 regions	Included	Excluded

Abbreviations: Chiropractic spinal manipulative therapy (CSMT)

Table 4: Lumbar discectomy outcome definition codes

Procedure code	Definition
Current Procedural Terminology (CPT)	
62287	Decompression procedure, percutaneous, of nucleus pulposus of intervertebral disc, any method utilizing needle-based technique to remove disc material under fluoroscopic imaging or other form of indirect visualization, with the use of an endoscope, with discography and/or epidural injection(s) at the treated level(s), when performed, single or multiple levels, lumbar
63030	Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or excision of herniated intervertebral disc
63035	Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and/or excision of herniated intervertebral disc
63056	Transpedicular approach with decompression of spinal cord, equina and/or nerve root(s) (eg, herniated intervertebral disc), single segment; lumbar (including transfacet, or lateral extraforaminal approach) (eg, far lateral herniated intervertebral disc)
Healthcare Common Procedure Coding System (HCPCS)	
C9757	Laminotomy (hemilaminectomy), with decompression of nerve root(s), including partial facetectomy, foraminotomy and excision of herniated intervertebral disc, and repair of annular defect with implantation of bone anchored annular closure device, including annular defect measurement, alignment and sizing assessment, and image guidance; 1 interspace, lumbar
ICD-10 Procedural Classification System (PCS)	
0SB4*	Lumbosacral Disc (includes open, percutaneous, and percutaneous endoscopic surgical excision of lumbosacral disc)

Table 5: Variables to be controlled for in propensity score matching

Variable	Description
Demographics	Patient age, sex, race, and ethnicity
Logical Observation Identifiers Names and Codes	
39156-5	BMI – Body mass index
Lumbosacral radiculopathy diagnoses (ICD-10)	
G54.4	Lumbosacral root disorders, not elsewhere classified
M54.16	Radiculopathy, lumbar region
M54.17	Radiculopathy, lumbosacral region
M54.18	Radiculopathy, sacral and sacrococcygeal region
M54.3	Sciatica
M54.4	Lumbago with sciatica
Comorbidities (ICD-10)	
F01-F99	Mental, Behavioral and Neurodevelopmental disorders
Z72.0	Tobacco use
Medications (VANDF Classes)	
CN101	Opioid analgesics
CN000	Central nervous system medications
Procedures (ICD-10-PCS)	
3E0R3BZ	Introduction of anesthetic agent into spinal canal, percutaneous approach

Abbreviations: Body mass index (BMI) calculated as kg/m², International Classification of Diseases 10 Procedural Classification System (ICD-10-PCS); Veterans Health Administration National Drug File (VANDF)

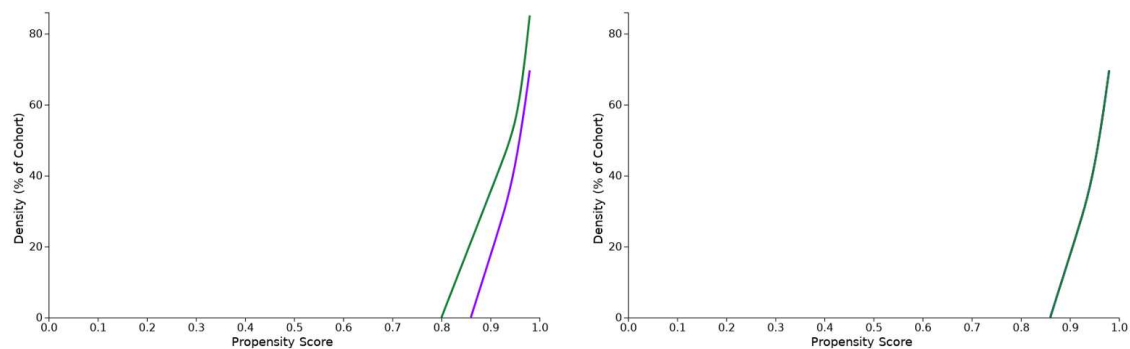


Figure 1: Propensity scores before (A) and after (B) matching. The purple line represents the cohort receiving chiropractic spinal manipulative therapy (CSMT) while the green line represents the cohort receiving other care. In image B, the propensity score densities overlap and only a single line is visible, suggesting that the cohorts are well matched.