

LOW BACK PROBLEMS; MECHANICAL

Includes Low Back Pain

Background

This case definition was developed by the Armed Forces Health Surveillance Branch (AFHSB) for epidemiological surveillance of *mechanical* low back problems. The purpose of this case definition is to capture mechanical low back problems, including diagnoses of symptoms of back pain and diagnosis of conditions originating in the lumbar spine and sacrum that *could be* associated with pain. Low back problems associated with major trauma, neoplasms, pregnancy, infections, or inflammatory causes are excluded.¹ In the U.S. Armed Forces, low back pain is among the most frequent causes of medical visits and lost-duty time. Back problems have also been the leading causes of medical evacuations from Iraq and Afghanistan.²

Clinical Description

Low back pain is a common musculoskeletal condition affecting up to two-thirds of the population at some time in their lives.³ The condition can be acute or chronic with pain localized to the spine and paraspinal regions or radiating into the leg suggesting nerve root compression. Low back pain accompanied by spinal nerve root damage is usually associated with neurological signs and symptoms.⁴ Risk factors for developing back pain include smoking, obesity, older age, being female, physically strenuous work, sedentary lifestyle, anxiety, and depression. The diagnosis is generally made by clinical history and, if needed, radiographic imaging. Treatment includes pain relievers, muscle relaxants, physical therapy, cortisone injections, and, rarely, surgery. The vast majority of low back pain episodes resolve within two to four weeks of onset. However, 25% of patients have recurrent episodes within one year.^{5,6}

Case Definition and Incidence Rules

For surveillance purposes, a case of a low back problem is defined as:

- *One hospitalization or outpatient medical encounter* with any of the defining diagnoses of a low back problem (see ICD9 and ICD10 code lists below) in *any* diagnostic position.

(continued on next page)

¹ Cherkin D, Deyo R, Volinn E, et al. Use of the International Classification of Diseases (ICD-9-CM) to identify hospitalizations for mechanical low back problems in administrative databases. *Spine*. 1992; 17(17):817-25.

² Armed Forces Health Surveillance Center. Low Back Pain, Active Component, U.S. Armed Forces, 2000-2009. *Medical Surveillance Monthly Report (MSMR)*. 2010 July; Vol 17(7): pp. 2-7.

³ Andersson GBJ. Epidemiologic features of chronic low-back pain. *Lancet*. 354: 1999; 581.

⁴ Last A, et al. Chronic low back pain: Evaluation and management. *American Family Physician*. 2009;79:1067.

⁵ Devereaux M. Low back pain. *Medical Clinics of North America*. 2009;93:477.

⁶ Stanton TR, Henschke N, Maher CG, et al. After an episode of acute low back pain, recurrence is unpredictable and not as common as previously thought. *Spine*. 2008;33:2923-8.



Case Definition and Incidence Rules *(continued)*

Incidence rules:

For individuals who meet the case definition:

- The incidence date is considered the date of the first hospitalization or outpatient medical encounter that includes a diagnosis of a low back problem.
- An individual can be considered an incident case *once per surveillance period*.
- For individuals with more than one low back problem diagnosis reported during a single medical encounter, the diagnosis reported in the highest (primary > secondary, etc.) diagnostic position is used.
- *If analysis requires recurrent case counts*, an individual is considered a recurrent case if *at least 30 days* have passed since the last medical encounter with a case defining diagnosis of a mechanical low back problem (see explanation of “gap” rule below).

Exclusions:

- Cases of mechanical low back problem that include any of the complicating diagnoses (see ICD9 and ICD10 code lists below) in any diagnostic position.

Codes

The following ICD9 and ICD10 codes are included in the case definition:

Condition	ICD-10-CM Codes	ICD-9-CM Codes²
Kyphosis	<i>M40.0 (postural kyphosis...)</i>	<i>737.1 (kyphosis, acquired)</i>
	- M40.05 (thoracolumbar region)	- 737.10 (kyphosis, acquired, postural)
	M40.2 (other and unspecified kyphosis)	
	- M40.20 (unspecified kyphosis...)	
	- M40.205 (thoracolumbar region)	- 737.19 (kyphosis, other)
	- M40.29 (other kyphosis)	
	- M40.295 (thoracolumbar region)	
- M40.299 (other kyphosis, site unspecified)		
Lordosis	<i>M40.4 (postural lordosis...)</i>	<i>737.2 (lordosis, acquired)</i>
	- M40.45 (thoracolumbar region)	737.20 (lordosis, acquired, postural)



	- M40.46 (lumbar region)	
	- M40.47 (lumbosacral region)	
	<i>M40.5 (lordosis, unspecified)</i>	- 737.29 (lordosis, other)
	- M40.55 (thoracolumbar region)	
	- M40.56 (lumbar region)	
	- M40.57 (lumbosacral region)	
Scoliosis	<i>M41 (scoliosis)</i>	<i>737.3 (kyphoscoliosis and scoliosis)</i>
	<i>M41.0 (infantile idiopathic scoliosis...)</i>	- 737.31 (resolving infantile idiopathic scoliosis)
	- M41.05 (thoracolumbar region)	- 737.32 (progressive infantile idiopathic scoliosis)
	- M41.06 (lumbar)	
	- M41.07 (lumbosacral)	
	- M41.08 (sacral and sacrococcygeal region)	
	<i>M41.1 (juvenile and adolescent idiopathic scoliosis)</i>	- 737.30 (scoliosis [and kyphoscoliosis], idiopathic)
	- <i>M41.11 (juvenile idiopathic scoliosis...)</i>	
	- M41.115 (thoracolumbar region)	
	- M41.116 (lumbar)	
	- M41.117 (lumbosacral)	
	- <i>M41.12 (adolescent scoliosis...)</i>	
	- M41.125 (thoracolumbar region)	
	- M41.126 (lumbar)	
	- M41.127 (lumbosacral)	
	<i>M41.2 (other idiopathic scoliosis...)</i>	
	- M41.26 (lumbar)	
	- M41.27 (lumbosacral)	
	<i>M41.3 (thoracogenic scoliosis...)</i>	- 737.34 (thoracogenic scoliosis)
	- M41.34 (thoracic region)	
	- M41.35 (thoracolumbar region)	
	<i>M41.4 (neuromuscular scoliosis...)</i>	- 737.43 (scoliosis associated with other conditions)
	- M41.45 (thoracolumbar region)	
- M41.46 (lumbar region)		

	<ul style="list-style-type: none"> - M41.47 (lumbosacral region) 	
	<i>M41.5 (other secondary scoliosis...)</i>	
	<ul style="list-style-type: none"> - M41.55 (thoracolumbar region) 	
	<ul style="list-style-type: none"> - M41.56 (lumbar region) 	
	<ul style="list-style-type: none"> - M41.57 (lumbosacral region) 	
	<i>M41.8 (other forms of scoliosis...)</i>	
	<ul style="list-style-type: none"> - M41.85 (thoracolumbar region) 	- 737.39 (other kyphoscoliosis and scoliosis)
	<ul style="list-style-type: none"> - M41.86 (lumbar) 	
	<ul style="list-style-type: none"> - M41.87 (lumbosacral) 	
Spondylosis	<i>M43.0 (spondylosis...)</i>	738.4 (acquired spondylolisthesis)
	<ul style="list-style-type: none"> - M43.05 (thoracolumbar region) 	
	<ul style="list-style-type: none"> - M43.06 (lumbar region) 	
	<ul style="list-style-type: none"> - M43.07 (lumbosacral region) 	
	<ul style="list-style-type: none"> - M43.08 (sacral and sacrococcygeal region) 	
	<ul style="list-style-type: none"> - M43.09 (multiple sites in spine) 	
Spondylolisthesis	<i>M43.1 (spondylolisthesis...)</i>	
	<ul style="list-style-type: none"> - M43.15 (thoracolumbar region) 	
	<ul style="list-style-type: none"> - M43.16 (lumbar region) 	
	<ul style="list-style-type: none"> - M43.17 (lumbosacral region) 	
	<ul style="list-style-type: none"> - M43.18 (sacral and sacrococcygeal region) 	
	<ul style="list-style-type: none"> - M43.19 (multiple sites in spine) 	
Fusion of Spine	<i>M43.2 (fusion of spine...)</i>	724.6 (other and unspecified disorders of back, sacrum)
	<ul style="list-style-type: none"> - M43.25 (thoracolumbar region) 	
	<ul style="list-style-type: none"> - M43.27 (lumbosacral region) 	
	<ul style="list-style-type: none"> - M43.28 (sacral and sacrococcygeal region) 	
Vertebral dislocation (nontraumatic)	<i>M43.5 (other recurrent vertebral dislocation)</i>	718.38 (recurrent dislocation of joint, other specified site)
	<i>M43.5X (other recurrent vertebral dislocation...)</i>	
	<ul style="list-style-type: none"> - M43.5X5 (thoracolumbar region) 	
	<ul style="list-style-type: none"> - M43.5X6 (thoracolumbar region) 	

	- M43.5X7 (lumbosacral region)	
	- M43.58X (sacral and sacrococcygeal region)	
Deforming dorsopathies	<i>M43.8 (other specified deforming dorsopathies...)</i>	724.9 (other unspecified back disorders)
	- M43.8X5 (thoracolumbar region)	
	- M43.8X6 (lumbar region)	
	- M43.8X7 (lumbosacral region)	
	- M43.8X8 (sacral and sacrococcygeal region)	
Discitis	<i>M46.4 (discitis, unspecified)</i>	- 722.90 (other and unspecified disc disorder, unspecified region) - 722.93 (other and unspecified disc disorder, lumbar region)
	- M46.45 (thoracolumbar region)	
	- M46.46 (lumbar region)	
	- M46.47 (lumbosacral region)	
	- M46.48 (sacral and sacrococcygeal region)	
	- M46.49 (multiple sites in spine)	
Spondylosis	<i>M47.1 (other spondylosis with myelopathy...)</i>	- 721.91 (spondylosis of unspecified site, with myelopathy) - 721.42 (spondylosis with myelopathy, lumbar region)
	- M47.15 (thoracolumbar region)	
	- M47.16 (lumbar region)	
	<i>M47.2 (other spondylosis with radiculopathy...)</i>	- 721.90 (spondylosis of unspecified site, without mention of myelopathy) - 721.3 (lumbosacral spondylosis without myelopathy)
	- M47.25 (thoracolumbar region)	
	- M47.26 (lumbar region)	
	- M47.27 (lumbosacral region)	
	- M47.28 (sacral and sacrococcygeal region)	
	<i>M47.8 (other spondylosis)</i>	
	<i>M47.81 (spondylosis without myelopathy or radiculopathy...)</i>	
	- M47.815 (thoracolumbar region)	
	- M47.816 (lumbar region)	
	- M47.817 (lumbosacral region)	
	- M47.818 (sacral and sacrococcygeal region)	

	<p><i>M47.89 (other spondylosis...)</i></p> <ul style="list-style-type: none"> - M47.895 (thoracolumbar region) - M47.896 (lumbar region) - M47.897 (lumbosacral region) - M47.898 (sacral and sacrococcygeal region) 	721.8 (spondylosis, other allied disorders of spine)
Spinal stenosis	<p><i>M48.0 (spinal stenosis...)</i></p> <ul style="list-style-type: none"> - M48.05 (thoracolumbar region) - M48.06 (lumbar region) - M48.07 (lumbosacral region) - M48.08 (sacral and sacrococcygeal region) 	<ul style="list-style-type: none"> - 724.00 (spinal stenosis, other than cervical, unspecified region) - 724.02 (spinal stenosis, other than cervical, lumbar region, without neurogenic claudication) - 724.09 (spinal stenosis, other than cervical, other)
Ankylosing hyperostosis	<p><i>M48.1 (ankylosing hyperostosis [Forestier]...)</i></p> <ul style="list-style-type: none"> - M48.15 (thoracolumbar region) - M48.16 (lumbar region) - M48.17 (lumbosacral region) - M48.18 (sacral and sacrococcygeal region) - M48.19 (multiple sites in spine) 	721.6 (spondylosis, ankylosing vertebral hyperostosis)
Kissing spine	<p><i>M48.2 (kissing spine...)</i></p> <ul style="list-style-type: none"> - M48.25 (thoracolumbar region) - M48.26 (lumbar region) - M48.27 (lumbosacral region) 	721.5 (spondylosis, kissing spine)
Fatigue fracture of vertebra	<p><i>M48.4 (fatigue fracture of vertebra)</i></p> <p>M48.45 (fatigue fracture of vertebra, thoracolumbar region...)</p> <ul style="list-style-type: none"> - M48.45A (initial encounter) <p>M48.46 (fatigue fracture of vertebra, lumbar region...)</p> <ul style="list-style-type: none"> - M48.46A (initial encounter) <p>M48.47 (fatigue fracture of vertebra, lumbosacral region...)</p> <ul style="list-style-type: none"> - M48.47A (initial encounter) <p>M48.48 (fatigue fracture of vertebra, sacral</p>	<i>Translated code too broad for inclusion</i>

	<i>and sacrococcygeal region...</i>	
	- M48.48A (initial encounter)	
Disc disorders	<i>M51 (thoracolumbar, and lumbosacral intervertebral disc disorders)</i>	- 722.73 (intervertebral disc disorder with myelopathy, lumbar region)
	<i>M51.0 (thoracolumbar, and lumbosacral intervertebral disc disorders with myelopathy...)</i>	
	- M51.05 (thoracolumbar region)	
	- M51.06 (lumbar region)	
	<i>M51.1 (thoracolumbar, and lumbosacral intervertebral disc disorders with radiculopathy...)</i>	- 722.93 (other and unspecified disc disorder, lumbar region)
	- M51.15 (thoracolumbar region)	
	- M51.16 (lumbar region)	
	<i>M51.2 (other thoracolumbar, and lumbosacral intervertebral disc displacement...)</i>	722.1 (displacement of thoracic or lumbar intervertebral disc without myelopathy)
	- M51.25 (thoracolumbar region)	- 722.10 (displacement of lumbar intervertebral disc without myelopathy)
	- M51.26 (lumbar region)	
	- M51.27 (lumbosacral region)	
	<i>M51.3 (other thoracolumbar, and lumbosacral intervertebral disc degeneration...)</i>	722.6 (degeneration of intervertebral disc, site unspecified)
	- M51.35 (thoracolumbar region)	- 722.52 (degeneration of lumbar or lumbosacral intervertebral disc)
	- M51.36 (lumbar region)	
	- M51.37 (lumbosacral region)	
	M51.4 (Schmorl's nodes)	- 722.30 (Schmorl's nodes, unspecified region)
	- M51.45 (thoracolumbar region)	- 722.32 (Schmorl's nodes, lumbar region)
	- M51.46 (lumbar region)	
	- M51.47 (lumbosacral region)	
	<i>M51.8 (other thoracic, thoracolumbar and lumbosacral intervertebral disc disorders)</i>	- 722.93 (above)
- M51.85 (thoracolumbar region)		
- M51.86 (lumbar region)		
- M51.87 (lumbosacral region)		
<i>M51.9 (unspecified thoracolumbar and lumbosacral intervertebral disc disorder)</i>	- 722.2 (displacement of intervertebral disc, site unspecified, without myelopathy)	

		- 722.70 (intervertebral disc disorder with myelopathy, unspecified region)
Spinal instabilities	<i>M53.2 (spinal instabilities)</i>	724.6 (above)
	<i>M53.2X (spinal instabilities...)</i>	
	- M53.2X5 (thoracolumbar region)	
	- M53.2X6 (lumbar region)	
	- M53.2X7 (lumbosacral region)	
	- M53.2X8 (sacral and sacrococcygeal region)	
	- M53.2X9 (site unspecified)	
Sacrococcygeal disorders	<i>M53.3 (sacrococcygeal disorders, not elsewhere classified)</i>	724.6 (above)
	<i>M53.8 (other specified dorsopathies...)</i>	724.9 (other unspecified back disorders)
	- M53.85 (thoracolumbar region)	
	- M53.86 (lumbar region)	
	- M53.87 (lumbosacral region)	
	- M53.88 (sacral and sacrococcygeal region)	
	<i>M53.9 (dorsopathies, unspecified)</i>	
Radiculopathy	<i>M54.1 (radiculopathy...)</i>	724.4 (thoracic or lumbosacral neuritis or radiculitis, unspecified)
	- M54.15 (thoracolumbar region)	
	- M54.16 (lumbar region)	
Sciatica	<i>M54.3 (sciatica...)</i>	724.3 (sciatica)
	- M54.30 (unspecified side)	
	- M54.31 (right side)	
	- M54.32 (left side)	
Lumbago	<i>M54.4 (lumbago with sciatica...)</i>	724.2 (lumbago)
	- M54.40 (unspecified side)	724.5 (backache, unspecified)
	- M54.41 (right side)	
	- M54.42 (left side)	
Low back pain	<i>M54.5 (low back pain)</i>	
	<i>M54.8 (other dorsalgia...)</i>	
	- M54.89 (other dorsalgia)	
	<i>M54.9 (dorsalgia, unspecified)</i>	

Sequela of previous back surgery	<i>M96 (intraoperative and postprocedural complications and disorders of musculoskeletal system, not elsewhere classified)</i>	722.8 (postlaminectomy syndrome)
	- M96.0 (pseudoarthrosis after fusion or arthrodesis)	- 722.80 (postlaminectomy syndrome, unspecified region)
	- M96.1 (postlaminectomy syndrome, not elsewhere classified)	- 722.83 (postlaminectomy syndrome, lumbar region)
	- M96.2 (postradiation kyphosis)	- 737.11 (kyphosis due to radiation)
	- M96.3 (postlaminectomy kyphosis)	- 737.12 (kyphosis, postlaminectomy)
	- M96.4 (postsurgical lordosis)	- 737.21 (lordosis, postlaminectomy) - 737.22 (other postsurgical lordosis)
	- M96.5 (postradiation scoliosis)	- 737.33 (scoliosis due to radiation)
Segmental and somatic dysfunction	<i>M99.0 (segmental and somatic dysfunction...)</i>	739.3 (nonallopathic lesions, not elsewhere classified, lumbar region)
	- M99.03 (of lumbar region)	739.4 (nonallopathic lesions, not elsewhere classified, sacral region)
	- M99.04 (of sacral region)	
Biomechanical lesions	<i>M99.8 (other biomechanical lesions...)</i>	738.5 (other acquired deformity of back or spine)
	- M99.83 (of lumbar region)	
	- M99.84 (of sacral region)	
Congenital malformations	<i>Q76 (congenital malformations of spine and bony thorax)</i>	--
	<i>Q76.0 (spina bifida occulta)</i>	756.17 (spina bifida occulta)
	<i>Q76.2 (congenital spondylolisthesis)</i>	- 756.11 (other congenital musculoskeletal anomalies; spondylolysis, lumbosacral region) - 756.12 (other congenital musculoskeletal anomalies; spondylolisthesis)
	<i>Q76.3 (congenital scoliosis due to congenital bony malformation)</i>	754.2 (congenital musculoskeletal deformities of spine)
	<i>Q76.4 (other congenital malformations of spine, not associated with scoliosis)</i>	- 756.10 (anomaly of spine, unspecified) - 756.13 (absence of vertebra, congenital)
	- Q76.41 (congenital kyphosis...)	- 756.14 (hemivertebra)
	- Q76.415 (thoracolumbar region)	- 756.15 (fusion of spine [vertebra], congenital)
	- Q76.42 (congenital lordosis...)	- 756.19 (anomalies of spine, other)
	- Q76.425 (thoracolumbar region)	
	- Q76.426 (lumbar region)	
- Q76.427 (lumbosacral region)		

	- Q76.428 (sacral and sacrococcygeal region)	
	- Q76.49 (other congenital malformations of spine, not associated with scoliosis)	
Sprain of ligaments of lumbar spine	<i>S33.5 (sprain of ligaments of lumbar spine...)</i>	<i>846 (sprains and strains of sacroiliac region)</i>
	- S33.5XXA (initial encounter)	- 846.0 (lumbosacral; joint, ligament)
	S33.6 (sprain of sacroiliac joint...)	- 846.1 (sacroiliac ligament)
	- S33.6XXA (initial encounter)	- 846.2 (sacrospinatus, ligament)
	S33.8 (sprain of other parts of the lumbar spine and pelvis...)	- 846.3 (sacroteruberous, ligament)
	- S33.8XXA (initial encounter)	- 846.8 (other specified sites of sacroiliac region)
	S33.9 (sprain of unspecified parts of the lumbar spine and pelvis...)	- 846.9 (unspecified site of sacroiliac region)
- S33.9XXA (initial encounter)	- 847.2 (sprains and strains, lumbar)	
		- 847.3 (sprain of sacrum)
		- 847.9 (sprains and strains, unspecified site of back)

Exclusions: Complicating Diagnoses

ICD-10-CM Codes (^ = all digits)

ICD-9-CM Codes (x = all digits)

C00.^- D49.^ (neoplasms)	140.x- 239.9x (neoplasms)
G06.1^ (intraspinal abscess and granuloma)	324.1x (intraspinal abscess)
O00.^ - O9A.^, Z37.^ (pregnancy, childbirth and the puerperium)	630.x- 676.x, V22.0*-V23.9x, V27.0x - V27.9x (pregnancy)
M45 (ankylosing spondylitis), M46 (other inflammatory spondylopathies)	720.0x -720.9x (ankylosing spondylitis and other inflammatory spondylopathies)
M86.^ (osteomyelitis), M46.26 (osteomyelitis of vertebra, lumbar region)	730.x (osteomyelitis, periostitis, and other infections involving the bone)
M48.5 (collapsed vertebra, not elsewhere classified) M80 (osteoporosis with current pathological fracture) M84 (disorder of continuity of bone) S32.0 (fracture of lumbar vertebra) S32.1 (fracture of sacrum)	733.13, 805.x - 806.x (vertebral fractures)
S33.1^ – S33.3^ (dislocations of lumbar vertebra and sacroiliac and sacrococcygeal joint)	839.x - 839.5x (vertebral dislocations)
V00.^ - V99.^ (transport accidents)	E800.x - .x (transport accidents) and STANAG codes 000-199)



Development and Revisions

- In April of 2017 the case definition was updated to include ICD10 codes
- This case definition was developed in July of 2011 by the *Medical Surveillance Monthly Report (MSMR)* staff for use in a *MSMR* article on incident and recurrent cases of mechanical low back pain.¹ The definition was developed based on reviews of the ICD9 codes, the scientific literature, and previous AFHSC analyses.

Case Definition and Incidence Rule Rationale

- While this case definition includes diagnoses of low back pain, it is not intended to capture only instances of symptoms of low back pain or to characterize the severity of disorders of the lower back. Investigators interested in studying low back pain and severity of low back disease may want to refer to a 2016 *MSMR* article on *clinically significant* back pain. While that study used the same code set as in this case definition, the methodology required that the case defining diagnosis be in diagnostic positions 1-3 only, versus *any* diagnostic position.⁷ Alternatively, using a case definition that requires two outpatient medical encounters within a specified time interval to define a case might improve the specificity for clinically significant disease, based on the assumption that individuals with only one encounter are more likely to have milder or briefer episodes of low back problem than individuals with two or more encounters.
- *Recurrent cases:* This case definition uses a 30-day “gap in care” incidence rule to define a recurrent case of a mechanical low back problem. Use of this methodology presumes that medical encounters for a low back problem that occur within 30 days of a previous such encounter constitute follow-up care of the previously diagnosed case. The goal of the “gap in care” rule is to lessen the frequency with which encounters for follow-up care are treated as new incident cases of the condition. The “gap in care” rule differs slightly from an absolute 30-day incidence rule in which an individual may be considered a new incident case once every 30 days.
- This case definition allows individuals to be considered an incident case once per surveillance period. Given the favorable natural history for acute and subacute low back pain, with up to 90% of patients regaining function within 6-12 weeks with or without physician intervention,^{8,9} use of an absolute 90-day incidence rule is an alternative methodology investigators may wish to consider.
- Low back problems associated with major trauma, pregnancy, neoplasms, infections, or other inflammatory causes (see complete, detailed list under *Exclusions: Complicating Diagnoses* [above]) are excluded from this definition.

⁷ Armed Forces Health Surveillance Branch. Duration of service until first and recurrent episodes of clinically significant back pain, active component military members: change among new accessions to service since calendar year 2000. *Medical Surveillance Monthly Report (MSMR)*. 2016 Jan; Vol 23(1): pp. 7-15.

⁸ Andersson GBJ. Epidemiologic features of chronic low-back pain. *Lancet*. 354: 1999; 581.

⁹ South-Paul, JE, Matheny, SC, Lewis EL. *Current Diagnosis and Treatment in Family Medicine*, 3e, Chapter 24 Low Back Pain in Primary Care: An Evidence-Based Approach. McGraw Hill Companies, Inc. 2011.

⁹ Carey TS, Garrett J, Jackman A, McLaughlin C, Fryer J, Smucker DR. The outcomes and costs of care for acute low back pain among patients seen by primary care practitioners, chiropractors, and orthopedic surgeons: the North Carolina Back Pain Project. *N Engl J Med*. 1995; 333(14):913-917.



Code Set Determination and Rationale

- The code set used in this case definition is based on a code set developed in 1992 by Cherkin et al¹ designed to identify patients with mechanical low back pain from administrative databases.

Reports

AFHSB reports on mechanical low back pain in the following reports:

- Periodic MSMR articles; most recent published in January 2016⁷

Review

Apr 2017	Case definition reviewed and updated by the AFHSB Surveillance Methods and Standards (SMS) working group.
May 2012	Case definition reviewed and adopted by the AFHSC Surveillance Methods and Standards (SMS) working group.
Jul 2010	Case definition developed by AFHSC <i>MSMR</i> staff.

Comments

None