APPENDIX

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eTable 1. ICD9-10CM codes used to identify common chronic pain problems

Type of pain problem groupings		Mapping ICD9-CM to ICD10-CM			
		ICD9-CM		ICD10-CM	
Pain groups	Detailed subgroups	ICD9-CM	Description	ICD10-CM	Description
Back, neck & lumbar pain	Back pain	7210	Cervical spondylosis without myelopathy	M47812	Spondylosis w/o myelopathy or radiculopathy, cervical regio
		7211	Cervical spondylosis with myelopathy	M4712	Other spondylosis with myelopathy, cervical region
		7212	Thoracic spondylosis without myelopathy	M47814	Spondylosis w/o myelopathy or radiculopathy, thoracic regio
		7213	Lumbosacral spondylosis without myelopathy	M47817	Spondyls w/o myelopathy or radiculopathy, lumbosacr region
		72141	Spondylosis with myelopathy, thoracic region	M4714	Other spondylosis with myelopathy, thoracic region
		72142	Spondylosis with myelopathy, lumbar region	M4716	Other spondylosis with myelopathy, lumbar region
		7215	Kissing spine	M4820	Kissing spine, site unspecified
		7216	Ankylosing vertebral hyperostosis	M4810	Ankylosing hyperostosis [Forestier], site unspecified
		7217	Traumatic spondylopathy	M4830	Traumatic spondylopathy, site unspecified
		7218	Other allied disorders of spine	M489	Spondylopathy, unspecified
		72190	Spondylosis of unspecified site, without mention of myelopathy	M47819	Spondylosis without myelopathy or radiculopathy, site unsp
		72191	Spondylosis of unspecified site, with myelopathy	M4710	Other spondylosis with myelopathy, site unspecified
		7220	Displacement of cervical intervertebral disc without myelopathy	M5020	Other cervical disc displacement, unsp cervical region
		72210	Displacement of lumbar intervertebral disc without myelopathy	M5127	Other intervertebral disc displacement, lumbosacral region
			Displacement of lumbar intervertebral disc without myelopathy	M5126	Other intervertebral disc displacement, lumbar region
		72211	Displacement of thoracic intervertebral disc without myelopathy	M5124	Other intervertebral disc displacement, thoracic region
			Displacement of thoracic intervertebral disc without myelopathy	M5125	Other intervertebral disc displacement, thoracolumbar regio
		7222	Displacement of intervertebral disc, site unspecified, without myelopathy	M519	Unsp thoracic, thoracolum and lumbosacr intvrt disc disorde
		72230	Schmorl's nodes, unspecified region	M519	Unsp thoracic, thoracolum and lumbosacr intvrt disc disorde
		72231	Schmorl's nodes, thoracic region	M5144	Schmorl's nodes, thoracic region
			Schmorl's nodes, thoracic region	M5145	Schmorl's nodes, thoracolumbar region
		72232	Schmorl's nodes, lumbar region	M5146	Schmorl's nodes, lumbar region
			Schmorl's nodes, lumbar region	M5147	Schmorl's nodes, lumbosacral region
		72239	Schmorl's nodes, other region	M519	Unsp thoracic, thoracolum and lumbosacr intvrt disc disorde
		7224	Degeneration of cervical intervertebral disc	M5030	Other cervical disc degeneration, unsp cervical region
		72251	Degeneration of thoracic or thoracolumbar intervertebral disc	M5134	Other intervertebral disc degeneration, thoracic region
			Degeneration of thoracic or thoracolumbar intervertebral disc	M5135	Other intervertebral disc degeneration, thoracolumbar regio

Type of pain problem groupings		Mapping ICD9-CM to ICD10-CM			
		ICD9-CM		ICD10-CM	
Pain groups	Detailed subgroups	ICD9-CM	Description	ICD10-CM	Description
		72252	Degeneration of lumbar or lumbosacral intervertebral disc	M5136	Other intervertebral disc degeneration, lumbar region
			Degeneration of lumbar or lumbosacral intervertebral disc	M5137	Other intervertebral disc degeneration, lumbosacral region
		7226	Degeneration of intervertebral disc, site unspecified	M5135	Other intervertebral disc degeneration, thoracolumbar regio
			Degeneration of intervertebral disc, site unspecified	M5136	Other intervertebral disc degeneration, lumbar region
			Degeneration of intervertebral disc, site unspecified	M5137	Other intervertebral disc degeneration, lumbosacral region
			Degeneration of intervertebral disc, site unspecified	M5134	Other intervertebral disc degeneration, thoracic region
		72270	Intervertebral disc disorder with myelopathy, unspecified region	M519	Unsp thoracic, thoracolum and lumbosacr intvrt disc disorde
		72271	Intervertebral disc disorder with myelopathy, cervical region	M5000	Cervical disc disorder with myelopathy, unsp cervical regio
		72272	Intervertebral disc disorder with myelopathy, thoracic region	M5104	Intervertebral disc disorders w myelopathy, thoracic region
			Intervertebral disc disorder with myelopathy, thoracic region	M5105	Intvrt disc disorders w myelopathy, thoracolumbar region
		72273	Intervertebral disc disorder with myelopathy, lumbar region	M5106	Intervertebral disc disorders with myelopathy, lumbar regio
		72280	Postlaminectomy syndrome, unspecified region	M961	Postlaminectomy syndrome, not elsewhere classified
		72281	Postlaminectomy syndrome, cervical region	M961	Postlaminectomy syndrome, not elsewhere classified
		72282	Postlaminectomy syndrome, thoracic region	M961	Postlaminectomy syndrome, not elsewhere classified
		72283	Postlaminectomy syndrome, lumbar region	M961	Postlaminectomy syndrome, not elsewhere classified
		72290	Other and unspecified disc disorder, unspecified region	M4640	Discitis, unspecified, site unspecified
			Other and unspecified disc disorder, unspecified region	M519	Unsp thoracic, thoracolum and lumbosacr intvrt disc disorde
		72291	Other and unspecified disc disorder, cervical region	M5080	Other cervical disc disorders, unspecified cervical region
			Other and unspecified disc disorder, cervical region	M5090	Cervical disc disorder, unsp, unspecified cervical region
		72292	Other and unspecified disc disorder, thoracic region	M4645	Discitis, unspecified, thoracolumbar region
			Other and unspecified disc disorder, thoracic region	M5184	Other intervertebral disc disorders, thoracic region
			Other and unspecified disc disorder, thoracic region	M5185	Other intervertebral disc disorders, thoracolumbar region
		72293	Other and unspecified disc disorder, lumbar region	M4647	Discitis, unspecified, lumbosacral region
			Other and unspecified disc disorder, lumbar region	M5187	Other intervertebral disc disorders, lumbosacral region
			Other and unspecified disc disorder, lumbar region	M5186	Other intervertebral disc disorders, lumbar region
		7230	Spinal stenosis in cervical region	M4802	Spinal stenosis, cervical region

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| Type of pain problem groupings | | Mapping ICD9-CM to ICD10-CM | | | |
| | | ICD9-CM | | ICD10-CM | |
Pain groups	Detailed subgroups	ICD9-CM	Description	ICD10-CM	Description
		7231	Cervicalgia	M542	Cervicalgia
		7232	Cervicocranial syndrome	M530	Cervicocranial syndrome
		7233	Cervicobrachial syndrome (diffuse)	M531	Cervicobrachial syndrome
		7234	Brachial neuritis or radiculitis NOS	M5413	Radiculopathy, cervicothoracic region
			Brachial neuritis or radiculitis NOS	M5412	Radiculopathy, cervical region
		7235	Torticollis, unspecified	M436	Torticollis
		7236	Panniculitis specified as affecting neck	M5402	Panniculitis affecting regions of neck/bk, cervical region
		7237	Ossification of posterior longitudinal ligament in cervical region	M6788	Other specified disorders of synovium and tendon, other sit
		7238	Other syndromes affecting cervical region	M5382	Other specified dorsopathies, cervical region
		7239	Unspecified musculoskeletal disorders and symptoms referable to neck	M5382	Other specified dorsopathies, cervical region
		72400	Spinal stenosis, unspecified region	M4800	Spinal stenosis, site unspecified
		72401	Spinal stenosis, thoracic region	M4804	Spinal stenosis, thoracic region
		72402	Spinal stenosis, lumbar region, without neurogenic claudication	M4806	Spinal stenosis, lumbar region
		72403	Spinal stenosis, lumbar region, with neurogenic claudication	M4806	Spinal stenosis, lumbar region
		72409	Spinal stenosis, other region	M4808	Spinal stenosis, sacral and sacrococcygeal region
		7241	Pain in thoracic spine	M546	Pain in thoracic spine
		7242	Lumbago	M545	Low back pain
		7243	Sciatica	M5430	Sciatica, unspecified side
		7244	Thoracic or lumbosacral neuritis or radiculitis, unspecified	M5416	Radiculopathy, lumbar region
			Thoracic or lumbosacral neuritis or radiculitis, unspecified	M5417	Radiculopathy, lumbosacral region
			Thoracic or lumbosacral neuritis or radiculitis, unspecified	M5415	Radiculopathy, thoracolumbar region
			Thoracic or lumbosacral neuritis or radiculitis, unspecified	M5414	Radiculopathy, thoracic region
		7245	Backache, unspecified	M549	Dorsalgia, unspecified
			Backache, unspecified	M5489	Other dorsalgia
		7246	Disorders of sacrum	M4328	Fusion of spine, sacral and sacrococcygeal region
			Disorders of sacrum	M4327	Fusion of spine, lumbosacral region
			Disorders of sacrum	M532X7	Spinal instabilities, lumbosacral region
			Disorders of sacrum	M533	Sacrococcygeal disorders, not elsewhere classified
		72470	Unspecified disorder of coccyx	M533	Sacrococcygeal disorders, not elsewhere classified
		72471	Hypermobility of coccyx	M532X8	Spinal instabilities, sacral and sacrococcygeal region
		72479	Other disorders of coccyx	M533	Sacrococcygeal disorders, not elsewhere classified
		7248	Other symptoms referable to back	M5408	Panniculitis aff regions of neck/bk, sacr/sacrocygl region
		7249	Other unspecified back disorders	M438X9	Other specified deforming dorsopathies, site unspecified
			Other unspecified back disorders	M539	Dorsopathy, unspecified
		7370	Adolescent postural kyphosis	M4000	Postural kyphosis, site unspecified
		73710	Kyphosis (acquired) (postural)	M4000	Postural kyphosis, site unspecified
			Kyphosis (acquired) (postural)	M40209	Unspecified kyphosis, site unspecified

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		ICD9-CM		ICD10-CM	
Pain groups	Detailed subgroups	ICD9-CM	Description	ICD10-CM	Description
		73711	Kyphosis due to radiation	M962	Postradiation kyphosis
		73712	Kyphosis, postlaminectomy	M963	Postlaminectomy kyphosis
		73719	Other kyphosis (acquired)	M40299	Other kyphosis, site unspecified
		73720	Lordosis (acquired) (postural)	M4040	Postural lordosis, site unspecified
		73721	Lordosis, postlaminectomy	M964	Postsurgical lordosis
		73722	Other postsurgical lordosis	M964	Postsurgical lordosis
		73729	Other lordosis (acquired)	M4050	Lordosis, unspecified, site unspecified
		73730	Scoliosis [and kyphoscoliosis], idiopathic	M4120	Other idiopathic scoliosis, site unspecified
		73731	Resolving infantile idiopathic scoliosis	M4100	Infantile idiopathic scoliosis, site unspecified
		73732	Progressive infantile idiopathic scoliosis	M4100	Infantile idiopathic scoliosis, site unspecified
		73733	Scoliosis due to radiation	M965	Postradiation scoliosis
		73734	Thoracogenic scoliosis	M4130	Thoracogenic scoliosis, site unspecified
		73739	Other kyphoscoliosis and scoliosis	M419	Scoliosis, unspecified
			Other kyphoscoliosis and scoliosis	M4180	Other forms of scoliosis, site unspecified
		73740	Curvature of spine, unspecified, associated with other conditions	M438X9	Other specified deforming dorsopathies, site unspecified
		73741	Kyphosis associated with other conditions	M4010	Other secondary kyphosis, site unspecified
		73742	Lordosis associated with other conditions	M4050	Lordosis, unspecified, site unspecified
		73743	Scoliosis associated with other conditions	M4140	Neuromuscular scoliosis, site unspecified
			Scoliosis associated with other conditions	M4150	Other secondary scoliosis, site unspecified
		7378	Other curvatures of spine	M438X9	Other specified deforming dorsopathies, site unspecified
		7379	Unspecified curvature of spine	M438X9	Other specified deforming dorsopathies, site unspecified
	Lumbar pain	72400	Spinal stenosis, unspecified region	M4800	Spinal stenosis, site unspecified
		72401	Spinal stenosis, thoracic region	M4804	Spinal stenosis, thoracic region
		72402	Spinal stenosis, lumbar region, without neurogenic claudication	M4806	Spinal stenosis, lumbar region
		72403	Spinal stenosis, lumbar region, with neurogenic claudication	M4806	Spinal stenosis, lumbar region
		72409	Spinal stenosis, other region	M4808	Spinal stenosis, sacral and sacrococcygeal region
		7241	Pain in thoracic spine	M546	Pain in thoracic spine
		7242	Lumbago	M545	Low back pain
		7243	Sciatica	M5430	Sciatica, unspecified side
		7244	Thoracic or lumbosacral neuritis or radiculitis, unspecified	M5414	Radiculopathy, thoracic region
			Thoracic or lumbosacral neuritis or radiculitis, unspecified	M5415	Radiculopathy, thoracolumbar region
			Thoracic or lumbosacral neuritis or radiculitis, unspecified	M5417	Radiculopathy, lumbosacral region
			Thoracic or lumbosacral neuritis or radiculitis, unspecified	M5416	Radiculopathy, lumbar region
		7245	Backache, unspecified	M5489	Other dorsalgia
			Backache, unspecified	M549	Dorsalgia, unspecified
		7246	Disorders of sacrum	M532X7	Spinal instabilities, lumbosacral region
			Disorders of sacrum	M4327	Fusion of spine, lumbosacral region
			Disorders of sacrum	M4328	Fusion of spine, sacral and sacrococcygeal region
			Disorders of sacrum	M533	Sacrococcygeal disorders, not elsewhere classified
		72470	Unspecified disorder of coccyx	M533	Sacrococcygeal disorders, not elsewhere classified

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Type of pain problem groupings		Mapping ICD9-CM to ICD10-CM			
		ICD9-CM		ICD10-CM	
Pain groups	Detailed subgroups	ICD9-CM	Description	ICD10-CM	Description
		72471	Hypermobility of coccyx	M532X8	Spinal instabilities, sacral and sacrococcygeal region
		72479	Other disorders of coccyx	M533	Sacrococcygeal disorders, not elsewhere classified
		7248	Other symptoms referable to back	M5408	Panniculitis aff regions of neck/bk, sacr/sacrocygl region
		7249	Other unspecified back disorders	M539	Dorsopathy, unspecified
			Other unspecified back disorders	M438X9	Other specified deforming dorsopathies, site unspecified
	Neck back pain	7211	Cervical spondolosis with myelopathy	M4712	Other spondylosis with myelopathy, cervical region
		7212	Thoracic spondylosis without myelopathy	M47814	Spondylosis w/o myelopathy or radiculopathy, thoracic regio
		7213	Lumbosacral spondylosis without myelopathy	M47817	Spondyls w/o myelopathy or radiculopathy, lumbosacr region
		72141	Spondylosis with myelopathy, thoracic region	M4714	Other spondylosis with myelopathy, thoracic region
		72142	Spondylosis with myelopathy, lumbar region	M4716	Other spondylosis with myelopathy, lumbar region
		7215	Kissing spine	M4820	Kissing spine, site unspecified
		7216	Ankylosing vertebral hyperostosis	M4810	Ankylosing hyperostosis [Forestier], site unspecified
		7217	Traumatic spondylopathy	M4830	Traumatic spondylopathy, site unspecified
		7218	Other allied disorders of spine	M489	Spondylopathy, unspecified
		72190	Spondylosis of unspecified site, without mention of myelopathy	M47819	Spondylosis without myelopathy or radiculopathy, site unsp
		72191	Spondylosis of unspecified site, with myelopathy	M4710	Other spondylosis with myelopathy, site unspecified
		72210	Displacement of lumbar intervertebral disc without myelopathy	M5127	Other intervertebral disc displacement, lumbosacral region
			Displacement of lumbar intervertebral disc without myelopathy	M5126	Other intervertebral disc displacement, lumbar region
		72211	Displacement of thoracic intervertebral disc without myelopathy	M5125	Other intervertebral disc displacement, thoracolumbar regio
			Displacement of thoracic intervertebral disc without myelopathy	M5124	Other intervertebral disc displacement, thoracic region
		7222	Displacement of intervertebral disc, site unspecified, without myelopathy	M519	Unsp thoracic, thoracolum and lumbosacr intvrt disc disorde
		72230	Schmorl's nodes, unspecified region	M519	Unsp thoracic, thoracolum and lumbosacr intvrt disc disorde
		72231	Schmorl's nodes, thoracic region	M5144	Schmorl's nodes, thoracic region
			Schmorl's nodes, thoracic region	M5145	Schmorl's nodes, thoracolumbar region
		72232	Schmorl's nodes, lumbar region	M5146	Schmorl's nodes, lumbar region
			Schmorl's nodes, lumbar region	M5147	Schmorl's nodes, lumbosacral region
		72239	Schmorl's nodes, other region	M519	Unsp thoracic, thoracolum and lumbosacr intvrt disc disorde
		7224	Degeneration of cervical intervertebral disc	M5030	Other cervical disc degeneration, unsp cervical region

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| Type of pain problem groupings | | Mapping ICD9-CM to ICD10-CM | | | |
| | | ICD9-CM | | ICD10-CM | |
Pain groups	Detailed subgroups	ICD9-CM	Description	ICD10-CM	Description
		72251	Degeneration of thoracic or thoracolumbar intervertebral disc	M5134	Other intervertebral disc degeneration, thoracic region
			Degeneration of thoracic or thoracolumbar intervertebral disc	M5135	Other intervertebral disc degeneration, thoracolumbar regio
		72252	Degeneration of lumbar or lumbosacral intervertebral disc	M5136	Other intervertebral disc degeneration, lumbar region
			Degeneration of lumbar or lumbosacral intervertebral disc	M5137	Other intervertebral disc degeneration, lumbosacral region
		7226	Degeneration of intervertebral disc, site unspecified	M5135	Other intervertebral disc degeneration, thoracolumbar regio
			Degeneration of intervertebral disc, site unspecified	M5136	Other intervertebral disc degeneration, lumbar region
			Degeneration of intervertebral disc, site unspecified	M5137	Other intervertebral disc degeneration, lumbosacral region
			Degeneration of intervertebral disc, site unspecified	M5134	Other intervertebral disc degeneration, thoracic region
		72270	Intervertebral disc disorder with myelopathy, unspecified region	M519	Unsp thoracic, thoracolum and lumbosacr intvrt disc disorde
		72271	Intervertebral disc disorder with myelopathy, cervical region	M5000	Cervical disc disorder with myelopathy, unsp cervical regio
		72272	Intervertebral disc disorder with myelopathy, thoracic region	M5104	Intervertebral disc disorders w myelopathy, thoracic region
			Intervertebral disc disorder with myelopathy, thoracic region	M5105	Intvrt disc disorders w myelopathy, thoracolumbar region
		72273	Intervertebral disc disorder with myelopathy, lumbar region	M5106	Intervertebral disc disorders with myelopathy, lumbar regio
		72280	Postlaminectomy syndrome, unspecified region	M961	Postlaminectomy syndrome, not elsewhere classified
		72281	Postlaminectomy syndrome, cervical region	M961	Postlaminectomy syndrome, not elsewhere classified
		72282	Postlaminectomy syndrome, thoracic region	M961	Postlaminectomy syndrome, not elsewhere classified
		72283	Postlaminectomy syndrome, lumbar region	M961	Postlaminectomy syndrome, not elsewhere classified
		72290	Other and unspecified disc disorder, unspecified region	M4640	Discitis, unspecified, site unspecified
			Other and unspecified disc disorder, unspecified region	M519	Unsp thoracic, thoracolum and lumbosacr intvrt disc disorde
		72291	Other and unspecified disc disorder, cervical region	M5080	Other cervical disc disorders, unspecified cervical region
			Other and unspecified disc disorder, cervical region	M5090	Cervical disc disorder, unsp, unspecified cervical region
		72292	Other and unspecified disc disorder, thoracic region	M4645	Discitis, unspecified, thoracolumbar region
			Other and unspecified disc disorder, thoracic region	M5185	Other intervertebral disc disorders, thoracolumbar region
			Other and unspecified disc disorder, thoracic region	M5184	Other intervertebral disc disorders, thoracic region
		72293	Other and unspecified disc disorder, lumbar region	M4647	Discitis, unspecified, lumbosacral region

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Type of pain problem groupings		Mapping ICD9-CM to ICD10-CM			
		ICD9-CM		ICD10-CM	
Pain groups	Detailed subgroups	ICD9-CM	Description	ICD10-CM	Description
			Other and unspecified disc disorder, lumbar region	M5187	Other intervertebral disc disorders, lumbosacral region
			Other and unspecified disc disorder, lumbar region	M5186	Other intervertebral disc disorders, lumbar region
		7231	Cervicalgia	M542	Cervicalgia
		7232	Cervicocranial syndrome	M530	Cervicocranial syndrome
		7233	Cervicobrachial syndrome (diffuse)	M531	Cervicobrachial syndrome
		7234	Brachial neuritis or radiculitis NOS	M5412	Radiculopathy, cervical region
			Brachial neuritis or radiculitis NOS	M5413	Radiculopathy, cervicothoracic region
		7235	Torticollis, unspecified	M436	Torticollis
		7237	Ossification of posterior longitudinal ligament in cervical region	M6788	Other specified disorders of synovium and tendon, other sit
		7238	Other syndromes affecting cervical region	M5382	Other specified dorsopathies, cervical region
		7239	Unspecified musculoskeletal disorders and symptoms referable to neck	M5382	Other specified dorsopathies, cervical region
		7241	Pain in thoracic spine	M546	Pain in thoracic spine
		7242	Lumbago	M545	Low back pain
		7243	Sciatica	M5430	Sciatica, unspecified side
		7244	Thoracic or lumbosacral neuritis or radiculitis, unspecified	M5415	Radiculopathy, thoracolumbar region
			Thoracic or lumbosacral neuritis or radiculitis, unspecified	M5417	Radiculopathy, lumbosacral region
			Thoracic or lumbosacral neuritis or radiculitis, unspecified	M5416	Radiculopathy, lumbar region
			Thoracic or lumbosacral neuritis or radiculitis, unspecified	M5414	Radiculopathy, thoracic region
		7245	Backache, unspecified	M549	Dorsalgia, unspecified
			Backache, unspecified	M5489	Other dorsalgia
		7246	Disorders of sacrum	M4327	Fusion of spine, lumbosacral region
			Disorders of sacrum	M4328	Fusion of spine, sacral and sacrococcygeal region
			Disorders of sacrum	M532X7	Spinal instabilities, lumbosacral region
			Disorders of sacrum	M533	Sacrococcygeal disorders, not elsewhere classified
		7248	Other symptoms referable to back	M5408	Panniculitis aff regions of neck/bk, sacr/sacrocygl region
		7249	Other unspecified back disorders	M539	Dorsopathy, unspecified
			Other unspecified back disorders	M438X9	Other specified deforming dorsopathies, site unspecified
		73710	Kyphosis (acquired) (postural)	M4000	Postural kyphosis, site unspecified
			Kyphosis (acquired) (postural)	M40209	Unspecified kyphosis, site unspecified
		73711	Kyphosis due to radiation	M962	Postradiation kyphosis
		73712	Kyphosis, postlaminectomy	M963	Postlaminectomy kyphosis
		73719	Other kyphosis (acquired)	M40299	Other kyphosis, site unspecified
		73720	Lordosis (acquired) (postural)	M4040	Postural lordosis, site unspecified
		73721	Lordosis, postlaminectomy	M964	Postsurgical lordosis
		73722	Other postsurgical lordosis	M964	Postsurgical lordosis
		73729	Other lordosis (acquired)	M4050	Lordosis, unspecified, site unspecified
		7382	Acquired deformity of neck	M953	Acquired deformity of neck
		7384	Acquired spondylolisthesis	M4300	Spondylolysis, site unspecified
			Acquired spondylolisthesis	M4310	Spondylolisthesis, site unspecified

Type of pain problem groupings		Mapping ICD9-CM to ICD10-CM			
		ICD9-CM		ICD10-CM	
Pain groups	Detailed subgroups	ICD9-CM	Description	ICD10-CM	Description
		7385	Other acquired deformity of back or spine	M9984	Other biomechanical lesions of sacral region
			Other acquired deformity of back or spine	M9983	Other biomechanical lesions of lumbar region
		7391	Nonallopathic lesions, cervical region	M9901	Segmental and somatic dysfunction of cervical region
		7392	Nonallopathic lesions, thoracic region	M9902	Segmental and somatic dysfunction of thoracic region
		7393	Nonallopathic lesions, lumbar region	M9903	Segmental and somatic dysfunction of lumbar region
		7394	Nonallopathic lesions, sacral region	M9904	Segmental and somatic dysfunction of sacral region
		75610	Anomaly of spine, unspecified	Q7649	Oth congenital malform of spine, not associated w scoliosis
		75611	Spondylolysis, lumbosacral region	Q762	Congenital spondylolisthesis
		75612	Spondylolisthesis	Q762	Congenital spondylolisthesis
		75613	Absence of vertebra, congenital	Q7649	Oth congenital malform of spine, not associated w scoliosis
		75614	Hemivertebra	Q7649	Oth congenital malform of spine, not associated w scoliosis
		75615	Fusion of spine (vertebra), congenital	Q7649	Oth congenital malform of spine, not associated w scoliosis
		75616	Klippel-Feil syndrome	Q761	Klippel-Feil syndrome
		75617	Spina bifida occulta	Q760	Spina bifida occulta
		75619	Other anomalies of spine	Q7649	Oth congenital malform of spine, not associated w scoliosis
			Other anomalies of spine	Q76419	Congenital kyphosis, unspecified region
Osteo/rhumatoid pain	Osteo pain	7140	Rheumatoid arthritis	M069	Rheumatoid arthritis, unspecified
		7141	Felty's syndrome	M0500	Felty's syndrome, unspecified site
		7142	Other rheumatoid arthritis with visceral or systemic involvement	M0560	Rheu arthritis of unsp site w involv of organs and systems
			Other rheumatoid arthritis with visceral or systemic involvement	M0530	Rheumatoid heart disease w rheumatoid arthritis of unsp sit
			Other rheumatoid arthritis with visceral or systemic involvement	M061	Adult-onset Still's disease
		71430	Polyarticular juvenile rheumatoid arthritis, chronic or unspecified	M0800	Unsp juvenile rheumatoid arthritis of unspecified site
		71431	Polyarticular juvenile rheumatoid arthritis, acute	M083	Juvenile rheumatoid polyarthritis (seronegative)
		71432	Polyarticular juvenile rheumatoid arthritis	M0840	Polyarticular juvenile rheumatoid arthritis, unsp site
		71433	Monoarticular juvenile rheumatoid arthritis	M0840	Polyarticular juvenile rheumatoid arthritis, unsp site
		7144	Chronic postrheumatic arthropathy	M1200	Chronic postrheumatic arthropathy, unspecified site
		71481	Rheumatoid lung	M0510	Rheumatoid lung disease w rheumatoid arthritis of unsp site
		71489	Other specified inflammatory polyarthropathies	M064	Inflammatory polyarthropathy
		7149	Unspecified inflammatory polyarthropathy	M064	Inflammatory polyarthropathy
		71500	Osteoarthrosis, generalized, site unspecified	M150	Primary generalized (osteo)arthritis

Type of pain problem groupings		Mapping ICD9-CM to ICD10-CM			
		ICD9-CM		ICD10-CM	
Pain groups	Detailed subgroups	ICD9-CM	Description	ICD10-CM	Description
			Osteoarthrosis, generalized, site unspecified	M159	Polyosteoarthritis, unspecified
		71504	Osteoarthrosis, generalized, hand	M152	Bouchard's nodes (with arthropathy)
			Osteoarthrosis, generalized, hand	M151	Heberden's nodes (with arthropathy)
		71509	Osteoarthrosis, generalized, multiple sites	M150	Primary generalized (osteo)arthritis
		71510	Osteoarthrosis, localized, primary, site unspecified	M1991	Primary osteoarthritis, unspecified site
		71511	Osteoarthrosis, localized, primary, shoulder region	M19019	Primary osteoarthritis, unspecified shoulder
		71512	Osteoarthrosis, localized, primary, upper arm	M19029	Primary osteoarthritis, unspecified elbow
		71513	Osteoarthrosis, localized, primary, forearm	M19039	Primary osteoarthritis, unspecified wrist
		71514	Osteoarthrosis, localized, primary, hand	M19049	Primary osteoarthritis, unspecified hand
		71515	Osteoarthrosis, localized, primary, pelvic region and thigh	M1610	Unilateral primary osteoarthritis, unspecified hip
		71516	Osteoarthrosis, localized, primary, lower leg	M1710	Unilateral primary osteoarthritis, unspecified knee
		71517	Osteoarthrosis, localized, primary, ankle and foot	M19079	Primary osteoarthritis, unspecified ankle and foot
		71518	Osteoarthrosis, localized, primary, other specified sites	M1991	Primary osteoarthritis, unspecified site
		71520	Osteoarthrosis, localized, secondary, site unspecified	M1993	Secondary osteoarthritis, unspecified site
		71521	Osteoarthrosis, localized, secondary, shoulder region	M19219	Secondary osteoarthritis, unspecified shoulder
		71522	Osteoarthrosis, localized, secondary, upper arm	M19229	Secondary osteoarthritis, unspecified elbow
		71523	Osteoarthrosis, localized, secondary, forearm	M19239	Secondary osteoarthritis, unspecified wrist
		71524	Osteoarthrosis, localized, secondary, hand	M19249	Secondary osteoarthritis, unspecified hand
		71525	Osteoarthrosis, localized, secondary, pelvic region and thigh	M167	Other unilateral secondary osteoarthritis of hip
		71526	Osteoarthrosis, localized, secondary, lower leg	M175	Other unilateral secondary osteoarthritis of knee
		71527	Osteoarthrosis, localized, secondary, ankle and foot	M19279	Secondary osteoarthritis, unspecified ankle and foot
		71528	Osteoarthrosis, localized, secondary, other specified sites	M1993	Secondary osteoarthritis, unspecified site
		71530	Osteoarthrosis, localized, not specified whether primary or secondary, site unspecified	M1990	Unspecified osteoarthritis, unspecified site
		71531	Osteoarthrosis, localized, not specified whether primary or secondary, shoulder region	M1990	Unspecified osteoarthritis, unspecified site
		71532	Osteoarthrosis, localized, not specified whether primary or secondary, upper arm	M1990	Unspecified osteoarthritis, unspecified site
		71533	Osteoarthrosis, localized, not specified whether primary or secondary, forearm	M1990	Unspecified osteoarthritis, unspecified site
		71534	Osteoarthrosis, localized, not specified whether primary or secondary, hand	M189	Osteoarthritis of first carpometacarpal joint, unspecified
		71535	Osteoarthrosis, localized, not specified whether primary or secondary, pelvic region and thigh	M169	Osteoarthritis of hip, unspecified
		71536	Osteoarthrosis, localized, not specified whether primary or secondary, lower leg	M179	Osteoarthritis of knee, unspecified
		71537	Osteoarthrosis, localized, not specified whether primary or secondary, ankle and foot	M1990	Unspecified osteoarthritis, unspecified site

| Type of pain problem groupings | | Mapping ICD9-CM to ICD10-CM | | | |
| | | ICD9-CM | | ICD10-CM | |
Pain groups	Detailed subgroups	ICD9-CM	Description	ICD10-CM	Description
		71538	Osteoarthrosis, localized, not specified whether primary or secondary, other specified sites	M1990	Unspecified osteoarthritis, unspecified site
		71580	Osteoarthrosis involving, or with mention of more than one site, but not specified as generalized, site unspecified	M158	Other polyosteoarthritis
		71589	Osteoarthrosis involving, or with mention of more than one site, but not specified as generalized, multiple sites	M153	Secondary multiple arthritis
			Osteoarthrosis involving, or with mention of more than one site, but not specified as generalized, multiple sites	M158	Other polyosteoarthritis
		71590	Osteoarthrosis, unspecified whether generalized or localized, site unspecified	M1990	Unspecified osteoarthritis, unspecified site
			Osteoarthrosis, unspecified whether generalized or localized, site unspecified	M159	Polyosteoarthritis, unspecified
		71591	Osteoarthrosis, unspecified whether generalized or localized, shoulder region	M1990	Unspecified osteoarthritis, unspecified site
		71592	Osteoarthrosis, unspecified whether generalized or localized, upper arm	M1990	Unspecified osteoarthritis, unspecified site
		71593	Osteoarthrosis, unspecified whether generalized or localized, forearm	M1990	Unspecified osteoarthritis, unspecified site
		71594	Osteoarthrosis, unspecified whether generalized or localized, hand	M189	Osteoarthritis of first carpometacarpal joint, unspecified
		71595	Osteoarthrosis, unspecified whether generalized or localized, pelvic region and thigh	M169	Osteoarthritis of hip, unspecified
		71596	Osteoarthrosis, unspecified whether generalized or localized, lower leg	M179	Osteoarthritis of knee, unspecified
		71597	Osteoarthrosis, unspecified whether generalized or localized, ankle and foot	M1990	Unspecified osteoarthritis, unspecified site
		71598	Osteoarthrosis, unspecified whether generalized or localized, other specified sites	M1990	Unspecified osteoarthritis, unspecified site
Migraine/headache	Migraine pain	33900	Cluster headache syndrome, unspecified	G44009	Cluster headache syndrome, unspecified, not intractable
		33901	Episodic cluster headache	G44019	Episodic cluster headache, not intractable
		33902	Chronic cluster headache	G44029	Chronic cluster headache, not intractable
		33903	Episodic paroxysmal hemicrania	G44039	Episodic paroxysmal hemicrania, not intractable
		33904	Chronic paroxysmal hemicrania	G44049	Chronic paroxysmal hemicrania, not intractable
		33905	Short lasting unilateral neuralgiform headache with conjunctival injection and tearing	G44059	Shrt lst unil nerlgif hdache w cnjnct inject/tear, not ntrc
		33909	Other trigeminal autonomic cephalgia	G44099	Other trigeminal autonomic cephalgias (TAC), not intractabl
		33910	Tension type headache, unspecified	G44209	Tension-type headache, unspecified, not intractable
		33911	Episodic tension type headache	G44219	Episodic tension-type headache, not intractable
		33912	Chronic tension type headache	G44221	Chronic tension-type headache, intractable
			Chronic tension type headache	G44229	Chronic tension-type headache, not intractable
		33920	Post-traumatic headache, unspecified	G44309	Post-traumatic headache, unspecified, not intractable

Supplemental material

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Type of pain problem groupings		Mapping ICD9-CM to ICD10-CM			
		ICD9-CM		ICD10-CM	
Pain groups	Detailed subgroups	ICD9-CM	Description	ICD10-CM	Description
		33921	Acute post-traumatic headache	G44319	Acute post-traumatic headache, not intractable
		33922	Chronic post-traumatic headache	G44329	Chronic post-traumatic headache, not intractable
		3393	Drug induced headache, not elsewhere classified	G4441	Drug-induced headache, not elsewhere classified, intractabl
		33941	Hemicrania continua	G4451	Hemicrania continua
		33942	New daily persistent headache	G4452	New daily persistent headache (NDPH)
		33943	Primary thunderclap headache	G4453	Primary thunderclap headache
		33944	Other complicated headache syndrome	G4459	Other complicated headache syndrome
		33981	Hypnic headache	G4481	Hypnic headache
		33982	Headache associated with sexual activity	G4482	Headache associated with sexual activity
		33983	Primary cough headache	G4483	Primary cough headache
		33984	Primary exertional headache	G4484	Primary exertional headache
		33985	Primary stabbing headache	G4485	Primary stabbing headache
		33989	Other headache syndromes	G4489	Other headache syndrome
		34600	Migraine with aura, without mention of intractable migraine without mention of status migrainosus	G43109	Migraine with aura, not intractable, w/o status migrainosus
		34601	Migraine with aura, with intractable migraine, so stated, without mention of status migrainosus	G43119	Migraine with aura, intractable, without status migrainosus
		34602	Migraine with aura, without mention of intractable migraine with status migrainosus	G43101	Migraine with aura, not intractable, with status migrainosu
		34603	Migraine with aura, with intractable migraine, so stated, with status migrainosus	G43111	Migraine with aura, intractable, with status migrainosus
		34610	Migraine without aura, without mention of intractable migraine without mention of status migrainosus	G43009	Migraine w/o aura, not intractable, w/o status migrainosus
		34611	Migraine without aura, with intractable migraine, so stated, without mention of status migrainosus	G43019	Migraine w/o aura, intractable, without status migrainosus
		34612	Migraine without aura, without mention of intractable migraine with status migrainosus	G43001	Migraine w/o aura, not intractable, with status migrainosus
		34613	Migraine without aura, with intractable migraine, so stated, with status migrainosus	G43011	Migraine without aura, intractable, with status migrainosus
		34620	Variants of migraine, not elsewhere classified, without mention of intractable migraine without mention of status migrainosus	G43D0	Abdominal migraine, not intractable
			Variants of migraine, not elsewhere classified, without mention of intractable migraine without mention of status migrainosus	G43B0	Ophthalmoplegic migraine, not intractable
			Variants of migraine, not elsewhere classified, without mention of intractable migraine without mention of status migrainosus	G43C0	Periodic headache syndromes in chld/adlt, not intractable
			Variants of migraine, not elsewhere classified, without mention of intractable migraine without mention of status migrainosus	G43809	Other migraine, not intractable, without status migrainosus
			Variants of migraine, not elsewhere classified, without mention of intractable migraine without mention of status migrainosus	G43A0	Cyclical vomiting, not intractable
		34621	Variants of migraine, not elsewhere classified, with intractable migraine, so stated, without mention of status migrainosus	G43B1	Ophthalmoplegic migraine, intractable
			Variants of migraine, not elsewhere classified, with intractable migraine, so stated, without mention of status migrainosus	G43D1	Abdominal migraine, intractable
			Variants of migraine, not elsewhere classified, with intractable migraine, so stated, without mention of status migrainosus	G43A1	Cyclical vomiting, intractable

| Type of pain problem groupings | | Mapping ICD9-CM to ICD10-CM | | | |
| | | ICD9-CM | | ICD10-CM | |
Pain groups	Detailed subgroups	ICD9-CM	Description	ICD10-CM	Description
			Variants of migraine, not elsewhere classified, with intractable migraine, so stated, without mention of status migrainosus	G43C1	Periodic headache syndromes in child or adult, intractable
			Variants of migraine, not elsewhere classified, with intractable migraine, so stated, without mention of status migrainosus	G43819	Other migraine, intractable, without status migrainosus
		34622	Variants of migraine, not elsewhere classified, without mention of intractable migraine with status migrainosus	G43801	Other migraine, not intractable, with status migrainosus
		34623	Variants of migraine, not elsewhere classified, with intractable migraine, so stated, with status migrainosus	G43811	Other migraine, intractable, with status migrainosus
		34630	Hemiplegic migraine, without mention of intractable migraine without mention of status migrainosus	G43409	Hemiplegic migraine, not intractable, w/o status migrainosu
		34631	Hemiplegic migraine, with intractable migraine, so stated, without mention of status migrainosus	G43419	Hemiplegic migraine, intractable, without status migrainosu
		34632	Hemiplegic migraine, without mention of intractable migraine with status migrainosus	G43401	Hemiplegic migraine, not intractable, w status migrainosus
		34633	Hemiplegic migraine, with intractable migraine, so stated, with status migrainosus	G43411	Hemiplegic migraine, intractable, with status migrainosus
		34640	Menstrual migraine, without mention of intractable migraine without mention of status migrainosus	G43829	Menstrual migraine, not intractable, w/o status migrainosus
		34641	Menstrual migraine, with intractable migraine, so stated, without mention of status migrainosus	G43839	Menstrual migraine, intractable, without status migrainosus
		34642	Menstrual migraine, without mention of intractable migraine with status migrainosus	G43821	Menstrual migraine, not intractable, with status migrainosu
		34643	Menstrual migraine, with intractable migraine, so stated, with status migrainosus	G43831	Menstrual migraine, intractable, with status migrainosus
		34650	Persistent migraine aura without cerebral infarction, without mention of intractable migraine without mention of status migrainosus	G43509	Perst migrn aura w/o cereb infrc, not ntrct, w/o stat migr
		34651	Persistent migraine aura without cerebral infarction, with intractable migraine, so stated, without mention of status migrainosus	G43519	Perst migraine aura w/o cerebral infrc, ntrct, w/o stat mig
		34652	Persistent migraine aura without cerebral infarction, without mention of intractable migraine with status migrainosus	G43501	Perst migraine aura w/o cereb infrc, not ntrct, w stat migr
		34653	Persistent migraine aura without cerebral infarction, with intractable migraine, so stated, with status migrainosus	G43511	Perst migraine aura w/o cerebral infrc, ntrct, w stat migr
		34660	Persistent migraine aura with cerebral infarction, without mention of intractable migraine without mention of status migrainosus	G43609	Perst migraine aura w cereb infrc, not ntrct, w/o stat migr
		34661	Persistent migraine aura with cerebral infarction, with intractable migraine, so stated, without mention of status migrainosus	G43619	Perst migraine aura w cerebral infrc, ntrct, w/o stat migr
		34662	Persistent migraine aura with cerebral infarction, without mention of intractable migraine with status migrainosus	G43601	Perst migraine aura w cerebral infrc, not ntrct, w stat mig
		34663	Persistent migraine aura with cerebral infarction, with intractable migraine, so stated, with status migrainosus	G43611	Perst migraine aura w cerebral infrc, ntrct, w stat migr
		34670	Chronic migraine without aura, without mention of intractable migraine without mention of status migrainosus	G43709	Chronic migraine w/o aura, not intractable, w/o stat migr
		34671	Chronic migraine without aura, with intractable migraine, so stated, without mention of status migrainosus	G43719	Chronic migraine w/o aura, intractable, w/o stat migr
		34672	Chronic migraine without aura, without mention of intractable migraine with status migrainosus	G43701	Chronic migraine w/o aura, not intractable, w stat migr
		34673	Chronic migraine without aura, with intractable migraine, so stated, with status migrainosus	G43711	Chronic migraine w/o aura, intractable, w status migrainosu

Type of pain problem groupings		Mapping ICD9-CM to ICD10-CM			
		ICD9-CM		ICD10-CM	
Pain groups	Detailed subgroups	ICD9-CM	Description	ICD10-CM	Description
		34680	Other forms of migraine, without mention of intractable migraine without mention of status migrainosus	G43809	Other migraine, not intractable, without status migrainosus
		34681	Other forms of migraine, with intractable migraine, so stated, without mention of status migrainosus	G43819	Other migraine, intractable, without status migrainosus
		34682	Other forms of migraine, without mention of intractable migraine with status migrainosus	G43801	Other migraine, not intractable, with status migrainosus
		34683	Other forms of migraine, with intractable migraine, so stated, with status migrainosus	G43811	Other migraine, intractable, with status migrainosus
		34690	Migraine, unspecified, without mention of intractable migraine without mention of status migrainosus	G43909	Migraine, unsp, not intractable, without status migrainosus
		34691	Migraine, unspecified, with intractable migraine, so stated, without mention of status migrainosus	G43919	Migraine, unsp, intractable, without status migrainosus
		34692	Migraine, unspecified, without mention of intractable migraine with status migrainosus	G43901	Migraine, unsp, not intractable, with status migrainosus
		34693	Migraine, unspecified, with intractable migraine, so stated, with status migrainosus	G43911	Migraine, unspecified, intractable, with status migrainosus
		7840	Headache	R51	Headache
			Headache	G441	Vascular headache, not elsewhere classified

eTable 2. Classification of Physician Specialty by the Centre for Medicare and Medicaid

Specialty	Description
Emergency Medicine	Emergency Medicine
Hospital based specialty	Anesthesiology
	Critical Care (Intensivists)
	Diagnostic Radiology
	Hospitalist (self designated)
	Interventional Pain Management
	Interventional Radiology
	Nuclear Medicine
	Pain Management
	Pathology
	Physical Medicine And Rehabilitation
	Radiation Oncology
Internal Medicine	Internal Medicine
Medical specialty	Addiction Medicine
	Advanced Heart Failure and Transplant Cardiology
	Allergy/Immunology
	Cardiac Electrophysiology
	Cardiovascular Disease (Cardiology)
	Dermatology
	Endocrinology
	Gastroenterology
	Hematology
	Hematology/Oncology
	Hematopoietic Cell Transplantation and Cellular Therapy
	Infectious Disease
	Interventional Cardiology
	Medical Genetics and Genomics
	Medical Oncology
	Medical Toxicology
	Nephrology
	Neurology
	Pulmonary Disease
	Rheumatology
	Sleep Medicine
Other	Obstetrics/Gynecology
	Psychiatry
	Geriatric Psychiatry
	Neuropsychiatry
	Other (as such in PECOS)
Primary care	Family Practice
	General Practice
	Geriatric Medicine
	Hospice And Palliative Care
	Osteopathic Manipulative Medicine
	Pediatric Medicine
	Preventative Medicine
Surgical specialty	Cardiac Surgery
	Colorectal Surgery
	General Surgery
	Hand Surgery
	Neurosurgery
	Ophthalmology
	Orthopedic Surgery
	Otolaryngology
	Peripheral Vascular Disease
	Plastic And Reconstructive Surgery
	Sports Medicine
	Surgical Oncology
	Thoracic Surgery
	Urology
	Vascular Surgery

eTable 3. Choice of Opioid Prescribed by Physicians who Prescribed to Patients with Chronic Non-Cancer Pain Problems

Molecule	Asia (N=1,284)	Europe (N=940)	India & Pakistan (N=2,520)	Middle East (N=2,520)	Other (N=1,371)	United States &Canada (N=2,902)
Hydrocodone	482 (37.5)	346 (36.8)	958 (38.0)	319 (37.4)	432 (31.5)	1,113 (38.4)
Tramadol	447 (34.8)	314 (33.4)	881 (35.0)	267 (31.3)	526 (38.4)	930 (32.0)
Codeine	152 (11.8)	86 (9.1)	189 (7.5)	105 (12.3)	130 (9.5)	192 (6.6)
Oxycodone	139 (10.8)	143 (15.2)	357 (14.2)	117 (13.7)	199 (14.5)	472 (16.3)
Multiple Opioids	30 (2.3)	29 (3.1)	71 (2.8)	20 (2.3)	35 (2.6)	95 (3.3)
Morphine	13 (1.0)	4 (0.4)	17 (0.7)	4 (0.5)	13 (0.9)	20 (0.7)
Hydromorphone	7 (0.5)	8 (0.9)	10 (0.4)	4 (0.5)	11 (0.8)	28 (1.0)
Fentanyl	6 (0.5)	3 (0.3)	20 (0.8)	9 (1.1)	7 (0.5)	22 (0.8)
Buprenorphine	4 (0.3)	3 (0.3)	4 (0.2)	3 (0.4)	11 (0.8)	16 (0.6)
Other	4 (0.4)	4 (0.4)	13 (0.5)	5 (0.6)	7 (0.5)	14 (0.4)

eTable 4. Association Between Patient Comorbidities and the Odds of Being Prescribed an Opioid and the Morphine Milligram Equivalent (MME) Dose of Opioid Prescribed

Characteristic	Odds of Prescribing an Opioid for the 65,012 Patients				MME Opioid Dose Prescribed for the 9,870 Patients who Received an Opioid Prescription			
	N Patients (%)	N Patients with Opioid (%)	OR (95% CI)	P-Value	N Patients (%)	Mean (std)	Estimated Difference (95% CI)	P-Value
Co-Morbidities								
Congestive Heart Failure	6,105 (9.4)	939 (15.4)	1.1 (0.97 ; 1.13)	0.217	939 (9.5)	23.4 (24.9)	-0.2 (-2.3 ; 1.9)	0.835
Cardiac Arrhythmia	12,010 (18.5)	1,764 (14.7)	1.0 (0.92 ; 1.04)	0.531	1,764 (17.9)	23.4 (24.5)	-0.5 (-1.9 ; 0.9)	0.478
Valvular Disease	7,852 (12.1)	1,147 (14.6)	1.0 (0.93 ; 1.07)	0.899	1,147 (11.6)	22.2 (23.8)	-0.9 (-2.7 ; 0.8)	0.288
Pulmonary Circulation Disorders	1,846 (2.8)	291 (15.8)	1.1 (0.93 ; 1.20)	0.369	291 (2.9)	24.1 (25.9)	1.8 (-1.2 ; 4.9)	0.237
Peripheral Vascular Disorders	10,395 (16.0)	1,399 (13.5)	0.9 (0.88 ; 1.00)	0.039	1,399 (14.2)	23.3 (27.1)	-0.5 (-2.2 ; 1.2)	0.566
Hypertension without complications	40,560 (62.4)	6,013 (14.8)	1.0 (0.94 ; 1.04)	0.624	6,013 (60.9)	24.1 (28.0)	-2.6 (-4.3 ; -1.0)	**0.001**
Hypertension with complications	6,042 (9.3)	909 (15.0)	1.1 (0.98 ; 1.14)	0.180	909 (9.2)	23.6 (28.1)	1.5 (-0.5 ; 3.6)	0.148
Paralysis	827 (1.3)	98 (11.9)	0.8 (0.66 ; 0.99)	**0.036**	98 (1.0)	25.8 (23.4)	-6.0 (-11.3 ; -0.8)	**0.024**
Other Neurological Disorders	4,968 (7.6)	597 (12.0)	0.8 (0.75 ; 0.89)	**<.001**	597 (6.0)	26.4 (33.1)	-1.5 (-4.0 ; 1.0)	0.236
Chronic Pulmonary Disease	13,257 (20.4)	2,095 (15.8)	1.1 (1.03 ; 1.15)	**0.001**	2,095 (21.2)	24.0 (27.0)	-3.5 (-5.7 ; -1.4)	**0.001**
Diabetes without complications	18,217 (28.0)	2,766 (15.2)	1.1 (1.00 ; 1.12)	**0.033**	2,766 (28.0)	24.9 (29.5)	0.6 (-1.1 ; 2.2)	0.514
Diabetes with complications	6,849 (10.5)	1,060 (15.5)	1.0 (0.96 ; 1.12)	0.340	1,060 (10.7)	23.8 (21.9)	-0.6 (-2.6 ; 1.4)	0.546
Hypothyroidism	14,775 (22.7)	2,044 (13.8)	0.9 (0.87 ; 0.97)	**0.003**	2,044 (20.7)	23.2 (27.1)	-1.1 (-2.6 ; 0.5)	0.166
Renal Failure	6,254 (9.6)	1,001 (16.0)	1.1 (1.02 ; 1.19)	**0.018**	1,001 (10.1)	23.3 (24.4)	-1.4 (-3.0 ; 0.3)	0.100
Liver Disease	3,304 (5.1)	501 (15.2)	1.1 (0.99 ; 1.19)	0.086	501 (5.1)	25.0 (31.3)	-2.1 (-4.6 ; 0.4)	0.095
Peptic Ulcer Disease excluding	822 (1.3)	139 (16.9)	1.2 (1.03 ; 1.46)	**0.020**	139 (1.4)	26.7 (26.4)	0.9 (-3.5 ; 5.4)	0.682
HIV/AIDS	223 (0.3)	36 (16.1)	1.0 (0.69 ; 1.35)	0.844	36 (0.4)	26.4 (17.0)	-7.3 (-13.6 ; -1.0)	**0.024**
Rheumatoid Arthritis/Collagen	10,263 (15.8)	971 (9.5)	0.9 (0.80 ; 0.94)	**<.001**	971 (9.8)	24.9 (30.9)	1.2 (-1.2 ; 3.6)	0.330
Coagulopathy	1,865 (2.9)	280 (15.0)	1.0 (0.88 ; 1.14)	0.936	280 (2.8)	23.9 (27.9)	-1.9 (-5.2 ; 1.4)	0.251
Obesity	7,268 (11.2)	1,134 (15.6)	1.0 (0.93 ; 1.06)	0.841	1,134 (11.5)	25.7 (28.2)	-1.7 (-3.7 ; 0.3)	0.095
Weight Loss	2,371 (3.6)	315 (13.3)	0.9 (0.82 ; 1.04)	0.184	315 (3.2)	25.0 (35.5)	1.0 (-2.4 ; 4.3)	0.566
Fluid and Electrolyte Disorders	6,895 (10.6)	1,003 (14.5)	0.9 (0.88 ; 1.02)	0.139	1,003 (10.2)	25.3 (26.1)	0.7 (-1.5 ; 2.8)	0.545
Blood Loss Anemia	684 (1.1)	94 (13.7)	0.9 (0.76 ; 1.16)	0.576	94 (1.0)	27.3 (38.7)	2.1 (-4.5 ; 8.7)	0.525
Deficiency Anemia	5,494 (8.5)	723 (13.2)	0.9 (0.86 ; 1.01)	0.076	723 (7.3)	24.8 (27.4)	0.4 (-2.2 ; 3.1)	0.762
Drug Abuse	1,405 (2.2)	248 (17.7)	1.0 (0.88 ; 1.17)	0.837	248 (2.5)	41.7 (56.4)	5.8 (-0.8 ; 12.5)	0.086
Psychoses	3,081 (4.7)	361 (11.7)	0.7 (0.61 ; 0.77)	**<.001**	361 (3.7)	25.9 (39.4)	-3.1 (-7.4 ; 1.2)	0.162
Depression	12,034 (18.5)	1,754 (14.6)	1.0 (0.94 ; 1.05)	0.905	1,754 (17.8)	28.3 (38.9)	-0.5 (-2.4 ; 1.5)	0.644