

Table 2A.3.4: Healthcare Visits with Diagnoses of Cervical Disorders [1] by Geographic Region, United States 2013

	Total Discharges/ Visits (in 1,000s)	% of Total by Type [6]	Discharges/Visits (in 1,000s)				% of Total			
			Northeast	Midwest	South	West	Northeast	Midwest	South	West
Hospital Discharges [2]										
Cervical Disorders	401.7	65%	64.0	97.0	157.2	83.5	16%	24%	39%	21%
Cervical Disc Disorders	196.0	32%	32.6	41.4	82.0	40.0	17%	21%	42%	20%
Neck Injury	76.7	12%	13.2	17.9	29.6	16.1	17%	23%	39%	21%
All Cervical/Neck Pain [6]	614.2	110%	102.1	143.2	241.3	127.6	17%	23%	39%	21%
Rate Per 100 Patient Visits	1.7		1.5	1.8	1.7	1.8				
Diagnoses Per 100 U.S. Population [7]	0.2		0.2	0.2	0.2	0.2				
Emergency Department Visits [3]										
Cervical Disorders	2,011.3	56%	341.5	444.5	939.9	285.4	17%	22%	47%	14%
Cervical Disc Disorders	228.8	6%	28.8	50.3	109.5	40.2	13%	22%	48%	18%
Neck Injury	1,663.6	46%	290.6	342.1	760.0	270.8	17%	21%	46%	16%
All Cervical/Neck Pain [6]	3,605.2	108%	619.2	779.5	1,632.1	574.5	17%	22%	45%	16%
Rate Per 100 Patient Visits	2.7		2.4	2.5	3.0	2.3				
Diagnoses Per 100 U.S. Population [7]	1.1		1.1	1.2	1.4	0.8				
Hospital Outpatient Visits [4]										
Cervical Disorders	1,065.2	71%	173.8	277.2	201.2	413.0	16%	26%	19%	39%
Cervical Disc Disorders	281.6	19%	36.9	86.2	49.6	108.8	13%	31%	18%	39%
Neck Injury	255.9	17%	59.0	85.4	55.6	55.9	23%	33%	22%	22%
All Cervical/Neck Pain [6]	1,493.6	107%	259.6	406.7	296.4	531.0	17%	27%	20%	36%
Rate Per 100 Patient Visits	1.2		0.7	1.2	0.8	2.7				
Diagnoses Per 100 U.S. Population [7]	0.5		0.5	0.6	0.3	0.7				
Physician Office Visits [5]										
Cervical Disorders	11,997.6	76%	2,468.1	1,597.4	4,532.6	3,399.5	21%	13%	38%	28%
Cervical Disc Disorders	2,824.4	18%	947.0	233.7	1,096.7	547.0	34%	8%	39%	19%
Neck Injury	2,786.3	18%	560.1	237.1	485.7	1,503.4	20%	9%	17%	54%
All Cervical/Neck Pain [6]	15,726.1	112%	3,421.0	1,941.5	5,520.8	4,842.8	22%	12%	35%	31%
Rate Per 100 Patient Visits	1.7		1.7	1.1	1.7	2.3				
Diagnoses Per 100 U.S. Population [7]	5.0		6.1	2.9	4.7	6.5				

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			Northeast	Midwest	South	West	Northeast	Midwest	South	West
Total Health Care Visits for Cervical Pain, 2013										
Cervical Disorders	15,475.8	72%	2,705.9	1,971.6	4,891.0	3,896.0	17%	13%	32%	25%
Cervical Disc Disorders	3,530.8	16%	1,016.5	361.3	1,228.3	695.8	29%	10%	35%	20%
Neck Injury	4,782.5	22%	632.3	340.4	570.9	1,575.4	13%	7%	12%	33%
All Cervical/Neck Pain [6]	21,439.1	111%	3,782.7	2,491.4	6,058.5	5,501.4	18%	12%	28%	26%
Rate Per 100 Patient Visits	60.2		1.4	1.0	1.4	2.1				
Diagnoses Per 100 U.S. Population [7]	6.8		6.8	3.7	5.1	7.4				

[1] In presenting health care resource utilization for cervical pain, three categories of cervical pain are addressed. One is labeled cervical disc disorders, and includes disc displacement, herniation, and disc degeneration (ICD-9-CM code 722). A second group is cervical injuries, and includes sprains, strains, and fractures (ICD-9-CM codes 805, 806, 839, and 847). A third group, referred to as cervical disorders, includes pain caused by other disease entities, including cervical spondylosis and stenosis (ICD-9-CM codes 721 and 723). This division, while useful in analyzing the databases, may not always accurately reflect the primary diagnosis. Further, there is some overlap.

[2] Source: HCUP National Inpatient Sample (NIS). Healthcare Cost and Utilization Project (HCUP). 2013. Agency for Healthcare Research and Quality, Rockville, MD. www.hcup-us.ahrq.gov/nisoverview.jsp

[3] Source: HCUP Nationwide Emergency Department Sample (NEDS). Healthcare Cost and Utilization Project (HCUP). 2013. Agency for Healthcare Research and Quality, Rockville, MD. www.hcup-us.ahrq.gov/nedsoverview.jsp

[4] Source: National Ambulatory Medical Care Survey (NAMCS), 2013. www.cdc.gov/nchs/ahcd/ahcd_questionnaires.htm January 14, 2016.

[5] Source: National Hospital Ambulatory Medical Care Survey_Outpatient Department (NHAMCS_OP), 2011. www.cdc.gov/nchs/ahcd/ahcd_questionnaires.htm May 23, 2016.

[6] Total visits may be lower than sum of diagnoses due to multiple diagnoses per patient. Visits also do not include those made to other types of medical care providers, such as chiropractic or physical therapy.

[7] Adjusted to 2013 U.S. Census Population Estimates. There is the potential for multiple diagnoses per person which is not accounted for. Source: United States Census Bureau, Population Division. Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2015. American Fact Finder. <http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkm> Accessed July 24, 2016.