

Table 10.6: Total and Incremental Aggregate Direct Costs for Musculoskeletal Diseases in Current and 2011 Dollars, United States 1996-2011

Condition	Year	Persons with condition		Total				Incremental			
				Mean		Aggregate [1]		Mean		Aggregate [1]	
		Sample N (annual)	Total Population	Current \$s [2]	2011 \$s [2]	Current \$s (in billions)	2011 \$s (in billions)	Current \$s [2]	2011 \$s [2]	Current \$s (in billions)	2011 \$s (in billions)
		Column A	Column B	Column C	Column D	Column E	Column F	Column G	Column H	Column I	Column J
All Musculoskeletal Diseases	1996-1998	6,964	75,978,133	\$3,600	\$4,832	\$273.5	\$367.1	\$952	\$1,280	\$72.3	\$97.3
	1997-1999	7,004	75,173,840	\$3,808	\$5,037	\$286.3	\$378.7	\$998	\$1,319	\$75.0	\$99.2
	1998-2000	6,025	74,077,194	\$3,993	\$5,197	\$295.8	\$385.0	\$1,141	\$1,482	\$84.5	\$109.8
	1999-2001	6,814	75,600,394	\$4,323	\$5,518	\$326.8	\$417.2	\$1,263	\$1,614	\$95.5	\$122.0
	2000-2002	8,252	79,748,298	\$4,704	\$5,883	\$375.1	\$469.2	\$1,416	\$1,772	\$112.9	\$141.3
	2001-2003	9,166	84,297,419	\$5,142	\$6,306	\$433.5	\$531.6	\$1,593	\$1,950	\$134.3	\$164.4
	2002-2004	9,337	87,575,871	\$5,594	\$6,715	\$489.9	\$588.1	\$1,749	\$2,102	\$153.2	\$184.1
	2003-2005	8,874	88,946,833	\$5,925	\$6,924	\$527.0	\$615.9	\$1,696	\$1,989	\$150.9	\$176.9
	2004-2006	8,947	89,652,587	\$6,160	\$6,984	\$552.3	\$626.1	\$1,635	\$1,854	\$146.6	\$166.2
	2005-2007	8,791	91,320,095	\$6,529	\$7,169	\$596.2	\$654.7	\$1,828	\$2,002	\$166.9	\$182.8
	2006-2008	8,812	94,582,366	\$6,836	\$7,306	\$646.6	\$691.0	\$2,118	\$2,260	\$200.3	\$213.8
	2007-2009	9,181	98,605,506	\$7,230	\$7,581	\$712.9	\$747.5	\$2,191	\$2,299	\$216.0	\$226.7
	2008-2010	9,323	101,070,151	\$7,334	\$7,578	\$741.2	\$765.9	\$2,064	\$2,136	\$208.6	\$215.9
2009-2011	9,522	102,504,820	\$7,628	\$7,768	\$781.9	\$796.3	\$2,039	\$2,075	\$209.0	\$212.7	
Spine	1996-1998	2,510	27,376,436	\$3,600	\$4,835	\$98.6	\$132.4	\$692	\$934	\$18.9	\$25.6
	1997-1999	2,580	27,893,654	\$3,749	\$4,958	\$104.6	\$138.3	\$650	\$858	\$18.1	\$23.9
	1998-2000	2,199	27,203,474	\$4,030	\$5,243	\$109.6	\$142.6	\$845	\$1,095	\$23.0	\$29.8
	1999-2001	2,411	27,263,245	\$4,376	\$5,586	\$119.3	\$152.3	\$999	\$1,276	\$27.2	\$34.8
	2000-2002	2,927	28,825,976	\$4,623	\$5,785	\$133.3	\$166.8	\$884	\$1,111	\$25.5	\$32.0
	2001-2003	3,258	30,607,329	\$5,044	\$6,185	\$154.4	\$189.3	\$866	\$1,062	\$26.5	\$32.5
	2002-2004	3,408	32,740,018	\$5,700	\$6,834	\$186.6	\$223.7	\$1,114	\$1,328	\$36.5	\$43.5
	2003-2005	3,312	33,967,851	\$6,142	\$7,179	\$208.6	\$243.9	\$1,240	\$1,453	\$42.1	\$49.4
	2004-2006	3,415	34,946,321	\$6,475	\$7,343	\$226.3	\$256.6	\$1,303	\$1,483	\$45.5	\$51.8
	2005-2007	3,263	34,428,534	\$6,722	\$7,381	\$231.4	\$254.1	\$1,186	\$1,300	\$40.8	\$44.8
	2006-2008	2,964	32,206,033	\$7,015	\$7,501	\$225.9	\$241.6	\$1,179	\$1,264	\$38.0	\$40.7
	2007-2009	2,763	30,634,043	\$7,461	\$7,822	\$228.6	\$239.6	\$1,321	\$1,384	\$40.5	\$42.4
	2008-2010	2,654	30,115,457	\$7,609	\$7,862	\$229.1	\$236.8	\$1,301	\$1,344	\$39.2	\$40.5
2009-2011	2,727	31,043,437	\$8,002	\$8,150	\$248.4	\$253.0	\$1,468	\$1,496	\$45.6	\$46.4	
Arthritis and Joint Pain [2]	1996-1998	2,710	28,965,733	\$4,765	\$6,393	\$138.0	\$185.2	\$487	\$654	\$14.1	\$18.9
	1997-1999	2,759	29,066,656	\$5,101	\$6,749	\$148.3	\$196.2	\$586	\$776	\$17.0	\$22.6
	1998-2000	2,414	29,249,499	\$5,087	\$6,624	\$148.8	\$193.7	\$436	\$568	\$12.8	\$16.6
	1999-2001	2,837	31,113,119	\$5,465	\$6,975	\$170.0	\$217.0	\$616	\$786	\$19.2	\$24.5
	2000-2002	3,514	33,590,017	\$5,977	\$7,473	\$200.8	\$251.0	\$779	\$969	\$26.2	\$32.5
	2001-2003	3,931	35,899,908	\$6,658	\$8,165	\$239.0	\$293.1	\$1,054	\$1,292	\$37.8	\$46.4
	2002-2004	3,979	36,624,629	\$7,283	\$8,743	\$266.7	\$320.2	\$1,229	\$1,476	\$45.0	\$54.1
	2003-2005	3,702	36,140,453	\$7,668	\$8,962	\$277.1	\$323.9	\$1,206	\$1,411	\$43.6	\$51.0
	2004-2006	3,683	35,762,636	\$7,846	\$8,901	\$280.6	\$318.3	\$1,045	\$1,194	\$37.4	\$42.7
	2005-2007	3,813	38,937,037	\$8,128	\$8,930	\$316.5	\$347.7	\$1,017	\$1,117	\$39.6	\$43.5
	2006-2008	4,379	46,949,584	\$8,351	\$8,926	\$392.1	\$419.1	\$1,243	\$1,320	\$58.4	\$62.0
	2007-2009	5,153	54,957,251	\$8,825	\$9,254	\$485.0	\$508.6	\$1,634	\$1,710	\$89.8	\$94.0
	2008-2010	5,539	59,605,953	\$9,010	\$9,310	\$537.0	\$554.9	\$1,761	\$1,821	\$105.0	\$108.5
2009-2011	5,725	60,792,116	\$9,383	\$9,556	\$570.4	\$580.9	\$1,876	\$1,909	\$114.0	\$116.1	

Condition	Year	Persons with condition		Total				Incremental			
		Sample N (annual)	Total Population	Mean		Aggregate [1]		Mean		Aggregate [1]	
				Current \$s [2]	2011 \$s [2]	Current \$s (in billions)	2011 \$s (in billions)	Current \$s [2]	2011 \$s [2]	Current \$s (in billions)	2011 \$s (in billions)
		Column A	Column B	Column C	Column D	Column E	Column F	Column G	Column H	Column I	Column J
Osteoporosis	1996-1998	299	3,158,916	\$6,391	\$8,572	\$20.2	\$27.1	[3]	[3]	[3]	[3]
	1997-1999	321	3,405,501	\$6,529	\$8,639	\$22.2	\$29.4	[3]	[3]	[3]	[3]
	1998-2000	308	3,787,044	\$6,587	\$8,586	\$24.9	\$32.5	[3]	[3]	[3]	[3]
	1999-2001	395	4,444,849	\$6,914	\$8,815	\$30.7	\$39.2	[3]	[3]	[3]	[3]
	2000-2002	537	5,264,938	\$7,605	\$9,508	\$40.0	\$50.1	[3]	[3]	[3]	[3]
	2001-2003	645	6,136,560	\$8,121	\$9,973	\$49.8	\$61.2	[3]	[3]	[3]	[3]
	2002-2004	705	6,819,738	\$8,212	\$9,868	\$56.0	\$67.3	[3]	[3]	[3]	[3]
	2003-2005	716	7,383,562	\$8,394	\$9,809	\$62.0	\$72.4	[3]	[3]	[3]	[3]
	2004-2006	773	7,874,086	\$9,213	\$10,426	\$72.5	\$82.1	[3]	[3]	[3]	[3]
	2005-2007	774	8,182,144	\$10,177	\$11,164	\$83.3	\$91.3	[3]	[3]	[3]	[3]
Osteoporosis	2006-2008	723	8,062,507	\$10,660	\$11,405	\$85.9	\$92.0	[3]	[3]	[3]	[3]
	2007-2009	654	7,607,212	\$10,491	\$11,011	\$79.8	\$83.8	[3]	[3]	[3]	[3]
	2008-2010	594	7,047,281	\$10,689	\$11,041	\$75.3	\$77.8	[3]	[3]	[3]	[3]
	2009-2011	552	6,422,543	\$10,778	\$10,978	\$69.2	\$70.5	[3]	[3]	[3]	[3]
Injuries	1996-1998	2,093	23,358,073	\$3,021	\$4,053	\$70.6	\$94.7	\$905	\$1,213	\$21.1	\$28.3
	1997-1999	2,047	22,495,891	\$3,329	\$4,403	\$74.9	\$99.0	\$1,099	\$1,452	\$24.7	\$32.7
	1998-2000	1,698	21,590,412	\$3,555	\$4,627	\$76.8	\$99.9	\$1,271	\$1,653	\$27.4	\$35.7
	1999-2001	1,869	21,442,353	\$3,912	\$4,992	\$83.9	\$107.0	\$1,295	\$1,656	\$27.8	\$35.5
	2000-2002	2,235	22,285,775	\$4,297	\$5,373	\$95.8	\$119.7	\$1,299	\$1,627	\$28.9	\$36.3
	2001-2003	2,492	23,570,429	\$4,763	\$5,841	\$112.3	\$137.7	\$1,363	\$1,670	\$32.1	\$39.4
	2002-2004	2,545	24,680,193	\$4,947	\$5,946	\$122.1	\$146.7	\$1,280	\$1,543	\$31.6	\$38.1
	2003-2005	2,442	25,219,257	\$5,283	\$6,172	\$133.2	\$155.7	\$1,423	\$1,662	\$35.9	\$41.9
	2004-2006	2,438	25,362,266	\$5,433	\$6,153	\$137.8	\$156.1	\$1,388	\$1,567	\$35.2	\$39.7
	2005-2007	2,369	25,524,062	\$6,234	\$6,841	\$159.1	\$174.6	\$1,915	\$2,098	\$48.9	\$53.5
	2006-2008	2,289	25,557,412	\$6,407	\$6,847	\$163.7	\$175.0	\$1,926	\$2,057	\$49.2	\$52.6
	2007-2009	2,269	25,567,588	\$6,774	\$7,108	\$173.2	\$181.7	\$2,080	\$2,185	\$53.2	\$55.9
	2008-2010	2,198	25,098,882	\$6,629	\$6,849	\$166.4	\$171.9	\$1,823	\$1,884	\$45.8	\$47.3
2009-2011	2,173	24,787,860	\$6,977	\$7,104	\$172.9	\$176.1	\$1,878	\$1,913	\$46.6	\$47.4	
Other Musculoskeletal Conditions	1996-1998	1,173	12,046,200	\$4,876	\$6,544	\$58.7	\$78.8	\$1,273	\$1,708	\$15.3	\$20.6
	1997-1999	1,174	11,809,322	\$5,362	\$7,090	\$63.3	\$83.7	\$1,626	\$2,145	\$19.2	\$25.3
	1998-2000	983	11,322,533	\$5,811	\$7,557	\$65.8	\$85.6	\$1,960	\$2,549	\$22.2	\$28.9
	1999-2001	1,098	11,524,129	\$6,217	\$7,942	\$71.6	\$91.5	\$1,906	\$2,444	\$22.0	\$28.2
	2000-2002	1,345	12,350,398	\$6,550	\$8,199	\$80.9	\$101.3	\$1,719	\$2,157	\$21.2	\$26.6
	2001-2003	1,546	13,643,094	\$6,853	\$8,404	\$93.5	\$114.7	\$1,615	\$1,979	\$22.0	\$27.0
	2002-2004	1,618	14,518,291	\$7,359	\$8,838	\$106.8	\$128.3	\$1,709	\$2,055	\$24.8	\$29.8
	2003-2005	1,559	14,809,681	\$8,073	\$9,423	\$119.6	\$139.6	\$2,027	\$2,361	\$30.0	\$35.0
	2004-2006	1,564	14,737,632	\$8,514	\$9,645	\$125.5	\$142.1	\$2,178	\$2,463	\$32.1	\$36.3
	2005-2007	1,465	14,250,915	\$9,113	\$10,019	\$129.9	\$142.8	\$2,445	\$2,693	\$34.8	\$38.4
	2006-2008	1,438	14,762,365	\$9,296	\$9,937	\$137.2	\$146.7	\$2,456	\$2,623	\$36.3	\$38.7
	2007-2009	1,514	15,768,331	\$9,826	\$10,301	\$154.9	\$162.4	\$2,734	\$2,864	\$43.1	\$45.2
	2008-2010	1,643	17,599,650	\$9,838	\$10,169	\$173.1	\$179.0	\$2,618	\$2,708	\$46.1	\$47.7
2009-2011	1,744	18,612,358	\$10,052	\$10,240	\$187.1	\$190.6	\$2,629	\$2,680	\$48.9	\$49.9	

[1] All aggregates (including total) are created by multiplying smoothed means by smoothed population in year.

[2] Methodological changes in MEPS in 2001 and 2007 improved the accuracy of capturing these conditions; therefore, the increased number of people with these conditions in 2001 and 2007 cannot be attributed solely to the increased size of the underlying population. Because misclassification for arthritis has been demonstrated in children, reported arthritis for individuals <18 is not included.

[3] Total all individuals with osteoporosis had expenditures and total increment that could not be calculated.

Source: Medical Expenditures Panel Survey (MEPS), Agency for Healthcare Research and Quality, U.S. Department of Health and Human Services, 1996-2011.

<http://meps.ahrq.gov/mepsweb/>