

**Table 8.9: Total and Incremental Direct Costs (2014 \$'s) of Musculoskeletal Diseases by Age, United States 1996-2014**

| SAMPLE N AND POPULATION ESTIMATES               | Age   | Years Averaged |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |
|---|-------|----------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
|   |       | 1996-1998      | 1997-1999  | 1998-2000  | 1999-2001  | 2000-2002  | 2001-2003  | 2002-2004  | 2003-2005  | 2004-2006  | 2005-2007  | 2006-2008  | 2007-2009  | 2008-2010  | 2009-2011  | 2010-2012  | 2011-2013  | 2012-2014  |
| Persons with Condition<br>(Annual Sample N)     | < 18  | 858            | 849        | 715        | 762        | 893        | 989        | 1,002      | 958        | 947        | 911        | 868        | 879        | 873        | 859        | 818        | 863        | 857        |
|   | 18-44 | 2,481          | 2,419      | 2,020      | 2,252      | 2,715      | 3,012      | 3,030      | 2,800      | 2,715      | 2,595      | 2,599      | 2,734      | 2,751      | 2,781      | 2,793      | 2,947      | 2,995      |
|   | 45-64 | 2,118          | 2,171      | 1,922      | 2,243      | 2,765      | 3,102      | 3,179      | 3,065      | 3,171      | 3,194      | 3,282      | 3,463      | 3,562      | 3,640      | 3,659      | 3,782      | 3,823      |
|   | 65+   | 1,506          | 1,564      | 1,368      | 1,557      | 1,879      | 2,063      | 2,127      | 2,052      | 2,113      | 2,090      | 2,062      | 2,105      | 2,137      | 2,242      | 2,303      | 2,342      | 2,329      |
| Persons with Condition<br>(Total Population)    | < 18  | 8,837,738      | 8,587,926  | 8,270,671  | 7,909,778  | 7,812,654  | 8,015,131  | 8,339,766  | 8,660,807  | 8,712,617  | 8,571,488  | 8,281,302  | 8,311,175  | 8,346,675  | 8,342,648  | 8,272,606  | 8,475,551  | 8,298,364  |
|   | 18-44 | 28,857,105     | 27,582,172 | 26,465,903 | 26,434,506 | 27,764,847 | 28,914,760 | 29,523,069 | 29,073,120 | 28,551,875 | 28,431,065 | 28,793,445 | 29,560,747 | 29,647,979 | 29,823,226 | 29,769,431 | 30,188,417 | 30,719,519 |
|   | 45-64 | 21,794,220     | 22,136,282 | 22,574,221 | 23,930,631 | 25,951,528 | 28,209,432 | 29,802,135 | 30,758,440 | 31,635,009 | 33,060,743 | 35,355,491 | 37,248,669 | 38,648,633 | 39,218,752 | 39,708,511 | 40,120,157 | 40,717,181 |
|   | 65+   | 16,489,070     | 16,867,460 | 16,766,399 | 17,325,479 | 18,219,269 | 19,158,096 | 19,910,901 | 20,454,466 | 20,753,085 | 21,256,799 | 22,152,128 | 23,484,916 | 24,426,864 | 25,120,195 | 25,989,699 | 26,978,225 | 27,810,037 |
| <b>ALL-CAUSE COSTS</b>                          |       |                |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |
| Total Per Person (Mean)<br>in 2014 \$           | < 18  | \$ 1,986       | \$ 2,191   | \$ 2,496   | \$ 2,894   | \$ 2,900   | \$ 2,761   | \$ 2,684   | \$ 2,956   | \$ 3,070   | \$ 3,296   | \$ 3,332   | \$ 3,601   | \$ 3,596   | \$ 3,456   | \$ 3,790   | \$ 3,816   | \$ 4,504   |
|   | 18-44 | \$ 3,112       | \$ 3,247   | \$ 3,328   | \$ 3,468   | \$ 3,607   | \$ 3,779   | \$ 3,931   | \$ 3,996   | \$ 4,047   | \$ 4,065   | \$ 4,168   | \$ 4,370   | \$ 4,478   | \$ 4,897   | \$ 5,081   | \$ 5,235   | \$ 4,872   |
|   | 45-64 | \$ 5,276       | \$ 5,441   | \$ 5,746   | \$ 6,268   | \$ 6,798   | \$ 7,520   | \$ 8,019   | \$ 8,284   | \$ 8,138   | \$ 8,444   | \$ 8,648   | \$ 8,890   | \$ 8,753   | \$ 9,007   | \$ 9,046   | \$ 9,009   | \$ 9,057   |
|   | 65+   | \$ 9,648       | \$ 9,771   | \$ 9,636   | \$ 9,741   | \$ 10,330  | \$ 10,900  | \$ 11,761  | \$ 11,961  | \$ 12,190  | \$ 12,250  | \$ 12,202  | \$ 12,517  | \$ 12,417  | \$ 12,307  | \$ 11,866  | \$ 11,657  | \$ 11,760  |
| Total Aggregate<br>in 2014 \$ (in billions)     | < 18  | \$ 17.6        | \$ 18.8    | \$ 20.6    | \$ 22.9    | \$ 22.7    | \$ 22.1    | \$ 22.4    | \$ 25.6    | \$ 26.7    | \$ 28.3    | \$ 27.6    | \$ 29.9    | \$ 30.0    | \$ 28.8    | \$ 31.4    | \$ 32.3    | \$ 37.4    |
|   | 18-44 | \$ 89.8        | \$ 89.6    | \$ 88.1    | \$ 91.7    | \$ 100.1   | \$ 109.3   | \$ 116.1   | \$ 116.2   | \$ 115.5   | \$ 115.6   | \$ 120.0   | \$ 129.2   | \$ 132.8   | \$ 146.0   | \$ 151.3   | \$ 158.0   | \$ 149.7   |
|   | 45-64 | \$ 115.0       | \$ 120.4   | \$ 129.7   | \$ 150.0   | \$ 176.4   | \$ 212.1   | \$ 239.0   | \$ 254.8   | \$ 257.4   | \$ 279.2   | \$ 305.8   | \$ 331.1   | \$ 338.3   | \$ 353.2   | \$ 359.2   | \$ 361.4   | \$ 368.8   |
|   | 65+   | \$ 159.1       | \$ 164.8   | \$ 161.6   | \$ 168.8   | \$ 188.2   | \$ 208.8   | \$ 234.2   | \$ 244.7   | \$ 253.0   | \$ 260.4   | \$ 270.3   | \$ 294.0   | \$ 303.3   | \$ 309.2   | \$ 308.4   | \$ 314.5   | \$ 327.0   |
| <b>INCREMENTAL COST</b>                         |       |                |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |
| Increment Per Person<br>(Mean)<br>in 2014 \$    | < 18  | \$ 957         | \$ 1,167   | \$ 1,408   | \$ 1,665   | \$ 1,520   | \$ 1,344   | \$ 1,321   | \$ 1,528   | \$ 1,612   | \$ 1,791   | \$ 1,831   | \$ 1,900   | \$ 1,838   | \$ 1,678   | \$ 1,998   | \$ 1,832   | \$ 2,381   |
|   | 18-44 | \$ 1,046       | \$ 1,192   | \$ 1,243   | \$ 1,325   | \$ 1,370   | \$ 1,342   | \$ 1,247   | \$ 1,138   | \$ 1,169   | \$ 1,302   | \$ 1,418   | \$ 1,438   | \$ 1,309   | \$ 1,656   | \$ 1,915   | \$ 1,949   | \$ 1,445   |
|   | 45-64 | \$ 1,311       | \$ 1,510   | \$ 1,824   | \$ 2,130   | \$ 2,215   | \$ 2,783   | \$ 2,878   | \$ 2,877   | \$ 2,379   | \$ 2,767   | \$ 3,187   | \$ 3,222   | \$ 2,827   | \$ 2,669   | \$ 2,927   | \$ 2,527   | \$ 2,044   |
|   | 65+   | \$ 2,085       | \$ 1,577   | \$ 1,676   | \$ 1,592   | \$ 2,168   | \$ 2,216   | \$ 2,898   | \$ 2,426   | \$ 2,442   | \$ 2,204   | \$ 2,480   | \$ 2,524   | \$ 2,591   | \$ 2,217   | \$ 2,211   | \$ 1,157   | \$ 557     |
| Increment Aggregate<br>in 2014 \$ (in billions) | < 18  | \$ 8.5         | \$ 10.0    | \$ 11.6    | \$ 13.2    | \$ 11.9    | \$ 10.8    | \$ 11.0    | \$ 13.2    | \$ 14.0    | \$ 15.4    | \$ 15.2    | \$ 15.8    | \$ 15.3    | \$ 14.0    | \$ 16.5    | \$ 15.5    | \$ 19.8    |
|   | 18-44 | \$ 30.2        | \$ 32.9    | \$ 32.9    | \$ 35.0    | \$ 38.0    | \$ 38.8    | \$ 36.8    | \$ 33.1    | \$ 33.4    | \$ 37.0    | \$ 40.8    | \$ 42.5    | \$ 38.8    | \$ 49.4    | \$ 57.0    | \$ 58.8    | \$ 44.4    |
|   | 45-64 | \$ 28.6        | \$ 33.4    | \$ 41.2    | \$ 51.0    | \$ 57.5    | \$ 78.5    | \$ 85.8    | \$ 88.5    | \$ 75.3    | \$ 91.5    | \$ 112.7   | \$ 120.0   | \$ 109.3   | \$ 104.7   | \$ 116.2   | \$ 101.4   | \$ 83.2    |
|   | 65+   | \$ 34.4        | \$ 26.6    | \$ 28.1    | \$ 27.6    | \$ 39.5    | \$ 42.5    | \$ 57.7    | \$ 49.6    | \$ 50.7    | \$ 46.8    | \$ 54.9    | \$ 59.3    | \$ 63.3    | \$ 55.7    | \$ 57.5    | \$ 31.2    | \$ 15.5    |

[1] In 2014 \$.

Source: Medical Expenditures Panel Survey (MEPS), Agency for Healthcare Research and Quality, U.S. Department of Health and Human Services, 1996-2014. SAS Source: 016Table9\_allcause\_by\_age, 017Table9\_4stage\_Bonferroni.sas.