

Table 10.7: Change in Annual Average and Aggregate Total Health Care Costs for Persons with Musculoskeletal Diseases, United States, 1996-2011

| <u>MEPS Data Years Averaged</u> | <u>Average Annual Increase</u> | | | |
|--------------------------------------|--------------------------------|----------------------|--------------------|----------------------|
| | <u>All-Cause</u> | | <u>Incremental</u> | |
| | <u>Mean</u> | <u>Aggregate [1]</u> | <u>Mean</u> | <u>Aggregate [1]</u> |
| 1996-1998 to 1997-1999 | 4.2% | 3.1% | 3.0% | 2.0% |
| 1997-1999 to 1998-2000 | 3.2% | 1.7% | 12.4% | 10.7% |
| 1998-2000 to 1999-2001 | 6.2% | 8.4% | 8.9% | 11.1% |
| 1999-2001 to 2000-2002 | 6.6% | 12.5% | 9.8% | 15.8% |
| 2000-2002 to 2001-2003 | 7.2% | 13.3% | 10.0% | 16.3% |
| 2001-2003 to 2002-2004 | 6.5% | 10.6% | 7.8% | 12.0% |
| 2002-2004 to 2003-2005 | 3.1% | 4.7% | -5.4% | -3.9% |
| 2003-2005 to 2004-2006 | 0.9% | 1.7% | -6.8% | -6.0% |
| 2004-2006 to 2005-2007 | 2.6% | 4.6% | 8.0% | 10.0% |
| 2005-2007 to 2006-2008 | 1.9% | 5.6% | 12.9% | 16.9% |
| 2006-2008 to 2007-2009 | 3.8% | 8.2% | 1.7% | 6.1% |
| 2007-2009 to 2008-2010 | 0.0% | 2.5% | -7.1% | -4.8% |
| 2008-2010 to 2009-2011 | 2.5% | 4.0% | -2.9% | -1.5% |
| 1996-1998 to 2009-2011 | 4.7% | 9.0% | 4.8% | 9.1% |
| Total Increase 1996-1998 to 2002-201 | 60.8% | 116.9% | 62.1% | 118.7% |

Change in Annual Average Total and Incremental Costs for Select Musculoskeletal Diseases, 1996-1998 to 2002-2011

| | | | | |
|----------------------------------|------|-------|------|-------|
| Spine | 5.3% | 7.0% | 4.6% | 6.3% |
| Osteoporosis | 2.2% | 12.3% | [2] | [2] |
| Musculoskeletal Injuries | 5.8% | 6.6% | 4.4% | 5.2% |
| Other Musculoskeletal Conditions | 4.3% | 10.9% | 4.4% | 11.0% |

Cumulative Increase in Total and Incremental Health Care Cost for Select Musculoskeletal Diseases, 1996-1998 to 2011

| | | | | |
|----------------------------------|-------|--------|-------|--------|
| Spine | 68.6% | 91.1% | 60.2% | 81.6% |
| Osteoporosis | 28.1% | 160.4% | [2] | [2] |
| Musculoskeletal Injuries | 75.3% | 86.0% | 57.7% | 67.4% |
| Other Musculoskeletal Conditions | 56.5% | 141.8% | 56.9% | 142.4% |

[1] All aggregates (including total) are created by multiplying smoothed means by smoothed population in year. Data smoothing involves the use of an algorithm to remove noise from a data set, allowing important patterns to stand out. Data smoothing can be done in a variety of different ways, and is used to help predict trends.

[2] All individuals with the conditions within the category including osteoporosis had all-cause and incremental expenditures 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/>

Percentages derived using data from Table 10.5 to calculate change.