



Increased Utilization and Cost of Lumbar Spinal Fusion in the United States Medicare Population

Andrea F. Douglas MD; Jill Curran MS
Wallace Clinical Trials Center
Greenwich Hospital, Greenwich CT



Introduction

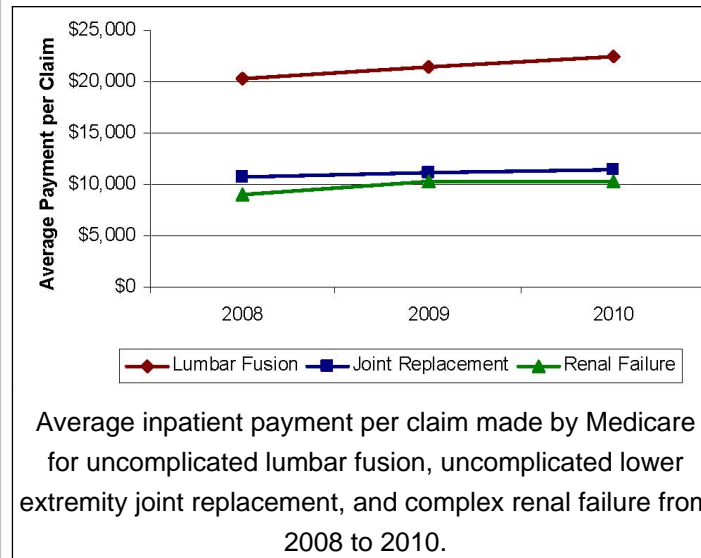
Lumbar spinal fusion rates in the Medicare population in the United States have increased dramatically in recent years. Our increasingly aging population raises concerns regarding the growing costs of these procedures.

Results

In 2008, uncomplicated lumbar fusion accounted for the 10th highest inpatient payment made by Medicare. In 2009, it represented the 9th highest and climbed in 2010 to the 8th highest payment. The total payment made by Medicare for simple lumbar fusion increased 28.7% from 2008 to 2010 (\$1.118 to \$1.438 billion). The total inpatient volume rose from 54,979 in 2008 to 64,284 in 2010 (16.9% increase) and the average payment per claim rose 10% from 2008 to 2010 (\$20,330 to \$22,369).

Methods

Analysis of the Centers for Medicare and Medicaid Services (CMS) Inpatient Hospital Dashboard was performed. Total payment and volume of uncomplicated lumbar fusions (MS-DRG 460) were reviewed for 2008-2010. All costs were adjusted to 2010 US dollars using published US city average Consumer Price Index values. Comparisons were made with inpatient Medicare payments for uncomplicated lower extremity joint replacement and complex renal failure.



In 2010, joint replacement surgery ranked first in total expenditures (\$4.788 billion) and had an average payment per claim of \$11,492 (up 6.8% from 2008). Complex renal failure ranked 14th (\$1.034 billion) and cost \$10,226 per claim (up 13.6% from 2008). Between 2008 and 2010, utilization of uncomplicated lumbar spinal fusion represented an increase in Medicare inpatient cost: inpatient volume increased 16.9%, total reimbursement increased 28.7% and average payment per claim increased 10%. The inpatient cost per claim for lumbar fusion is more than twice that of lower extremity joint replacements and complex renal failure.

Conclusions

With rising costs and utilization of lumbar fusion, provider generated outcomes data will be necessary (and soon mandatory) to justify continued reimbursement.

Learning Objectives

(1) Medicare reimbursement for inpatient costs associated with lumbar fusion surgery is steadily increasing; (2) Medicare cost per claim for inpatient lumbar fusion is twice that of joint replacement surgery and renal failure; (3) Spine surgeon directed outcomes data collection and presentation in peer-reviewed literature is necessary.

References

- Centers for Medicare & Medicaid Services Medicare Inpatient Hospital Dashboard. (<https://www.cms.gov/Dashboard/DBRD/itemdetail.asp?filterType=none&filterByDID=-99&sortByDID=1&sortOrder=ascending&itemID=CMS1238675&intNumPerPage=10>)