Dynamic Chiropractic

BACK PAIN

Ringing in a Fiscal New Year With a Recommitment to Cost-Effectiveness

Anthony Rosner, PhD, LLD [Hon.], LLC

Back when the Foundation for Chiropractic Education and Research (FCER) was in its heyday, I used to send out New Year's greetings and virtual noisemakers to some close friends on July 1 – the beginning of our new fiscal year – wishing for prosperity in the year ahead. For some, looking at the books like this can be a career, while for many of the rest of us, we've been arguing the cost-effectiveness of chiropractic care for years while continuing to do meaningful research along those lines.

For all the times I've argued this topic by comparing medical and chiropractic costs head-to-head, I'm finding there are four specialized areas in particular that haven't received the attention they should. I am motivated to bring them up here, as the U.S. government's new fiscal year (Oct. 1) begins, in a series of news flashes:

National Health Care Expenditures: Getting Our Money's Worth?

Overall ranking and costs: In a ranking of quality health care conducted by the World Health Organization, the United States ranked 37th on a list of 191. France, Italy, San Mariono, Andorra, Malta, Singapore, Spain, Oman, Austria and Japan were ranked among the top 10. In 2000, the United States was reported to spend an estimated $3,724 per person on health care, compared to $2,125 in France and $1,759 in Japan.[1-2]

Just nine years later, the per capita expenditure on health care in the U.S. virtually *doubled* to $7,290 and was twice as high compared to six other developed countries (Australia, New Zealand, Canada, The Netherlands, Germany, and the United Kingdom), against which the United States was ranked *last* in terms of quality care, access, efficiency, equity, and producing long, healthy, and productive lives.[3]

Spine and musculoskeletal burden: Expenditures for spine problems represented a staggering 666 percent increase from 1984[4] and a 327 percent jump from 1997.[5] Specifically for low back pain and neck pain, expenditures in the U.S. rose by 65 percent in inflation-adjusted dollars from 1997-2004; while measures of physical functioning, mental health and work, school and social activities among patients with spinal related disorders actually *declined*.

From 1994-2004, low back pain-related Medicare expenses increased by 629 percent for epidural steroid injections, 423 percent for opioid medications, 307 percent for MRIs and 220 percent for lumbar fusion surgeries; while chronicity and disability related to spinal-related disorders have steadily increased.[6]

The Major Cost Drivers in Our Health Care System

Medical errors overall: Conservative estimates reveal that at least 200,000 Americans die from preventable medical errors each year.[7-9] In 2008, medical errors cost the U.S. $19.5 billion, with $17 billion directly associated with additional medical costs (ancillary services, prescription drugs, inpatient and outpatient care), $1.4 billion attributed to increased mortality rates, and $1.1 billion due to 10 million days of lost productivity.[9]

Prescription medications: In 2007, the cost of prescription medications was $19.8 billion, constituting 23 percent of total direct expenditures and representing a 271 percent increase from 1995.[10] Particularly unsettling is the fact that, back in 1998, the costs of prescription drugs for treating back pain was just over 15 percent of the total expenditures for this condition; thus, this represents an increase *more rapid than any of the other health service expenditures (inpatient, outpatient, office-based, emergency room, and home health).*[11]

In terms of adverse events, for NSAID use, more than 100,000 hospitalizations, representing $2 billion in additional health care costs and 17,000 deaths, occur each year.[12]

Surgery: Increases in spinal surgery from 1996-2001 include a 77 percent rise in spinal fusions (costing $34,000 excluding professional fees) and an 13-plus percent increase in hip replacements and knee arthroplasties.[13]

Government data indicate that more than 465,000 spinal fusions were conducted in the U.S. in 2011. At an estimated average cost of $80,000 per procedure, this translates to an annual total cost of $37.2 billion.[14]

The rate of spinal fusions conducted in the U.S. is 150/100,000. In Australia, it is 50/100,000; in Sweden, 40/100,000; and less than that in Great Britain.[14]

Between 2000-2012, the number of spinal fusions in Florida increased from 2,014 to 9,887 – a 491 percent increase.[14]

Questioning Medical Necessity

A study by Douglas McCrory at Duke University commissioned by Medicare in 2006 found that in three of four randomized clinical trials, fusion was "less than reasonably likely" to offer a clear benefit to patients with degenerative disc disease.[14]

An analysis of 125,000 patient records by *The Washington Post* found that half of the large rise in spinal fusions in Florida involved patients whose diagnoses experts declare should not be routinely treated with spinal fusion.[14] Some experts have stated that as many as half of the 465,000 spinal fusions reported each year in the U.S. are performed without good reason.[14]

More than 20 years ago, the Congressional Committee on Interstate and Foreign Commerce found that 17.6 percent of all surgeries were unnecessary.[15] Ten years ago, the effectiveness of spinal fusion in treating pain was considered to have not been amply demonstrated.[16]

The first year after Blue Cross / Blue Shield stopped coverage for spinal fusions, the number of such procedures reported dropped 32 percent.[14]

Political Resistance

In 1978, the National Center for Health Care Technology recommended to Medicare what procedures it should cover in the effort to control health care costs. This was opposed by both the American Medical Association and Health Industry Manufacturers Association. By 1981, the budget for the agency was zeroed.[14]

In 1989, the Agency for Health Care Policy and Research was created in another attempt to control health care costs. It published guidelines for back pain that were critical and questioned the necessity of spinal surgery. The North American Spine Society said the guidelines were a waste of taxpayer money. The Center for Spine Advocacy almost succeeded in killing the entire agency,[14] which was forced out of publishing guidelines.

You can see where we're headed with this advocation of cost-effectiveness. This is the dark side;

the part that sticks in our collective craws and makes us realize how far off base national priorities in health care have gone and may yet go further if no actions are taken. And unlike those we have touted all these years, these particular interventions cannot be conservative.

References

1. Feacham RG. "Health Systems: More Evidence, More Debate." [editorial] *Bulletin World Health Org*, 2000;78(6):715.
2. Wendler-Hulse I. Frankenreich hat das beste gesundheitssystem. Vergleichende undersuchung der WHO [France has the best health system. Comparative study conducted by WHO]. *Pflege Aktuell,* 2000 Oct;54(10):560-2.
3. Survey of Primary Care Physicians: Commonwealth Fund Commission on a High Performance Health System National Scorecard and Organization for Economic Cooperation and Development, OECD Health Data. Paris: OECD, November 2009.
4. Grazier KL, Holbrook TL, Kelsey JL, Stauffer RN. *The Frequency of Occurrence, Impact, and Cost of Selected Musculoskeletal Conditions in the United States*. Chicago, IL: American Academy of Orthopedic Surgeons, 1984: pp. 72-80.
5. Luo X, Pietrobon R, Hey L. Estimates and patterns of direct health care expenditures among individuals with back pain in the United States. *Spine,* 2004;29(1):79-86.
6. Murphy DM, Justice BD, Pskowski IC, Perle SM, Schneider MJ. The establishment of a primary spine care practitioner and its benefits to health care reform in the United States. *Chiro & Manual Ther*, 2011;19:17.
7. Schuster M, McGlynn E, Brook R. How good is the quality of health care in the United States? *Milbank Quarterly,* 1996;76:517-63.
8. Starfield B. Is US health really the best in the world? *JAMA*, 2000;284(4):483-5.
9. Andel C, Davidow SL, Hollander M, Morena DA. The economics of health care quality and medical errors. *J Health Care Finance*, 2012;39(1):39-50.
10. Martin BI, Deyo RA, Mirza SK, Turner JA, Comstock BA, Hollingsworth W, Sullivan SD. Expenditures and health status among adults with back and neck problems. *JAMA*, 2008;299(6):656-664.
11. Smith M, Davis MA, Stano M, Whedon JM. Aging baby boomers and the rising cost of chronic back pain: secular trend analysis of longitudinal Medical Expenditures Survey data for years 2000 to 2007. *JMPT*, 2013;36(1):2-11.
12. Lanas A, Perez Asa MA, Feu F, Pona J, Saperas E, et al. A nationwide study of mortality associated with hospital admission due to severe gastrointestinal events and those associated with nonsteroidal anti-inflammatory drug use. *Amer J Gastroent*, 2005;100:1685-93.
13. Agency for Health Care Research and Quality: Health Cost and Utilization Project, HCUPnet.
14. Whoriskey P, Keating D. "Spinal Fusions Serve as Case Study for Debate Over When Certain Surgeries Are Necessary." *Washington Post*, Oct. 27, 2013.
15. Leape LL. Unnecessary surgery. *Ann Rev Public Health*, 1992;13:363-383.
16. Langreth R. Forbes.com, Oct. 27,2003. Sources: American Academy of Orthopedic Surgeons; American Society of Bariatric Surgery; Agency for Healthcare Research and Quality; Forbes research.

OCTOBER 2014

©2024 Dynanamic Chiropractic™ All Rights Reserved