Dynamic Chiropractic

CHIROPRACTIC (GENERAL)

Chiropractic Costs: A National Perspective

FIRST NATIONAL STUDY OF CAM / CHIROPRACTIC EXPENDITURES FOR SPINE CONDITIONS FINDS NEITHER ADDS TO OVERALL MEDICAL SPENDING.

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While health care conversations increasingly mention chiropractic care as a viable option for back and neck pain – and research increasingly supports its utility from a clinical standpoint – a recent U.S. study of complementary and alternative medicine (CAM)-related health care expenditures by 12,000-plus adults (ages 17 and older) with spinal conditions lends support to the suggestion that CAM in general, and chiropractic specifically, is also a cost-effective alternative to traditional medical care. Although CAM users had "significantly better self-reported health, education and comorbidity compared with non-CAM users" – variables critics have relied on in previous studies to explain why CAM users have lower health care expenditures" – the current study revealed that even when controlling for these variables, CAM users had lower annual medical costs ($424 lower) for spine-related conditions and lower total health care costs ($796 lower) than non-CAM users.

According to Martin, et al., whose findings appear in the December 2012 issue of *Medical Care*, these cost savings were "primarily due to lower inpatient expenditures among CAM users." However, after controlling for inpatient costs, CAM / chiropractic utilization did not increase spine-specific or overall medical costs above those by non-CAM / chiropractic users. Christine Goertz, DC, PhD, vice chancellor of research and health policy at the Palmer Center for Chiropractic Research and study co-investigator, further illuminated the importance of their findings:

"The extent to which CAM / chiropractic care may or may not increase costs within a health care delivery system is a hotly debated topic. Doctors of chiropractic argue that chiropractic is a substitution for more expensive medical care and thus results in cost savings. Others argue that it adds substantial cost to the system. The small collection of studies that exist to date generally support the argument that chiropractic, at a minimum, does not add cost.

"However, there are significant weaknesses associated with those studies. For example, many used claims data that was not intended for research purposes and others were restricted to a single delivery system that may not be widely generalizable. Perhaps most importantly is the concern of 'selection bias' (i.e., chiropractic patients tend to be younger, healthier, and have a higher socioeconomic status) setting the groundwork for a legitimate 'chicken or egg' debate. Are chiropractic patients healthier because they went to a DC, or do they go to a DC because they are healthier?

"The Martin, et al., study is important because 1) it is the first study that evaluates data from a nationally representative sample of over 12,000 patients with spine-related conditions; 2) investigators were able to control for important socioeconomic and health-related variables; and 3) additional analysis were conducted using a sophisticated statistical technique called propensity scoring, which further addresses the selection bias issue. Thus, I would consider this paper to be the most definitive work to date on expenditures for patients who seek chiropractic care for back and next problems."

The study examined data from the Medical Expenditure Panel Survey (MEPS), 2002-2008, relying on *ICD-9-CM* codes to identify patients with back and neck problems. Included were patients with codes for scoliosis, spondylolisthesis, stenosis, herniated disk (with or without myelopathy), degeneration and spinal strains / sprains. Excluded from consideration were patients with nondegenerative spinal pathologies including spinal fracture, vertebral dislocation, spinal-cord injury, inflammatory spondylopathy, myelopathy, osteoporosis, neurological impairment, osteomylitis or postoperative spinal care. Other exclusionary conditions / scenarios included cancer, trauma, fractures, drug abuse, HIV or immune deficiencies, or pregnancy. All inpatient, outpatient, emergency and prescription events relative to their condition were then identified.

Visits to chiropractic / CAM providers were determined by reviewing the MEPS, which "introduced a new variable to describe 16 types of medical providers" as of 2002. CAM users were patients who had made at least one visit to a doctor of chiropractic, massage therapist, homeopathic practitioner, acupuncturist or "other CAM provider." Non-CAM users were patients who had made at least one visit to a conventional medical practitioner during the same time period. Comprehensive expenditures by patient type (CAM user / non-CAM user) were calculated by reviewing all payment sources for each visit, including private insurance, Medicare / Medicaid, patient out-of-pocket costs and any other recorded payment sources. All cost-generating services performed during outpatient visits, inpatient hospital stays, and ER visits, as well as medication prescriptions, were included in the expenditure total. (OTC medications, services provided by free-standing radiology clinics, medical supplies / equipment, and dental services were not included.)

Of note, the study authors evaluated not only expenditure differences between CAM and non-CAM users, but also between CAM and non-CAM users of chiropractic care exclusively, "excluding those who used other types of CAM (whether it was in addition to chiropractic care or not), because chiropractic care constituted approximately 75% of all CAM use." Similar utilization and expenditure patterns emerged when patients who did / did not use chiropractic care were considered in isolation from use of other CAM types.

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