

The Association Between Use of Chiropractic Care and Costs of Care Among Older Medicare Patients With Chronic Low Back Pain and Multiple Comorbidities

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Abstract

Purpose of this study was to determine whether use of chiropractic manipulative treatment (CMT) was associated with lower healthcare costs among multiply-comorbid Medicare beneficiaries with an episode of chronic low back pain (cLBP).

Methods

Observational, retrospective study of 2006 to 2012 Medicare fee-for-service reimbursements for 72326 multiply-comorbid patients aged 66 and older with cLBP episodes and 1 of 4 treatment exposures: chiropractic manipulative treatment (CMT) alone, CMT followed or preceded by conventional medical care, or conventional medical care alone. We used propensity score weighting to address selection bias.

Results

After propensity score weighting, total and per-episode day Part A, Part B, and Part D Medicare reimbursements during the cLBP treatment episode were lowest for patients who used CMT alone; these patients had higher rates of healthcare use for low back pain but lower rates of back surgery in the year following the treatment episode. Expenditures were greatest for patients receiving medical care alone; order was irrelevant when both CMT and medical treatment were provided. Patients who used only CMT had the lowest annual growth rates in almost all Medicare expenditure categories. While patients who used only CMT had the lowest Part A and Part B expenditures per episode day, we found no indication of lower psychiatric or pain medication expenditures associated with CMT.

Conclusions

This study found that older multiply-comorbid patients who used only CMT during their chronic LBP episodes had lower overall costs of care, shorter episodes, and lower cost of care per episode day than patients in the other treatment groups. Further, costs of care for the episode and per episode day were lower for patients who used a combination of CMT and conventional medical care than for patients who did not use any CMT. These findings support initial CMT use in the treatment of, and possibly broader chiropractic management of, older multiply-comorbid cLBP patients.