Value of Chiropractic Services at an Onsite Health Center

Curt A. Krause, DC1; Lisa C. Kaspin, PhD2; Kathleen M. Gorman, MPH2; Ross M. Miller, MD, MPH3
1Cerner Healthe Clinic, Kansas City, MO; 2Cerner Research, Culver City, CA; 3Cerner Employer Services, Cerner Corporation, Culver City, CA

Background and Objectives
Musculoskeletal problems are a considerable economic and clinical burden on both employees and employers.1-4 Onsite chiropractic care, therefore, could have substantial value given the convenience and quality of care provided by onsite health centers. The objective of this study was to determine the influence of onsite chiropractic care on healthcare utilization and associate-reported outcomes.

Methods
A retrospective claims analysis of Cerner associates who received chiropractic care at an onsite health center (“onsite group”) or offsite community-based chiropractic offices (“offsite group”) at least once during 2010 was performed. Healthcare utilization differences between groups were evaluated by the likelihood of having at least 1 healthcare event (ie, healthcare visit, radiology procedure, musculoskeletal medication use) and the number of events per associate with an event. The effectiveness of care was evaluated for the onsite group through functional-assessment questionnaires appropriate to their care at each visit: the Headache Disability Index (HADI),5 the Neck Pain Disability Index (NPDI)6 and the Oswestry Low Back Pain Questionnaire (OLBQ).7

Results

Demographics
- 309 and 858 associates comprised the onsite and offsite groups, respectively.
- The onsite group was younger (P < 0.005) and had fewer females (P < 0.05).

Healthcare utilization trends
- The average total numbers of healthcare visits (Figure 1), radiology procedures (Figure 2) and musculoskeletal medication use (Figure 3) per associate with each event were significantly higher for the offsite group (all P < 0.0001).

- Associates in the offsite group were more likely to have an outpatient visit (P < 0.0001) but the average number of outpatient visits was similar between groups for those who had at least 1 visit.

- The average number of X-rays per associate with an X-ray was significantly higher among those in the offsite group (P < 0.001), but the likelihood of having an X-ray was similar between groups.

- Not only did associates in the onsite group have lower odds of having a physical therapy visit, but also the average number of visits was lower among those who had a visit.

Effectiveness of onsite chiropractic care
- Significant reductions in the HADI, NPDI, and OLBQ scores were observed (Table 1; all P < 0.001), suggesting the cohort experienced substantial improvements in functional status for headache, neck pain, and low back pain respectively.
Results (cont.)

Limitations (cont.)

- The study duration spanned the first year that chiropractic care was offered at the onsite health center; an extended follow-up duration may further distinguish utilization differences between the groups. Over time, it is expected that onsite chiropractic services will become more widely used and a greater pool of data will be available for more granular analyses.

Conclusions

- Onsite chiropractic services are associated with lower healthcare utilization and improved functional status of musculoskeletal conditions.

- Given the onsite health center’s focus on providing quality, effective and holistic care, these improved outcomes may be due to greater adherence to evidence-based practices and integration with other health services onsite than offsite.

- The improved functional status indicates potential for reduced indirect costs, (ie, absenteeism, presenteeism and productivity losses) with onsite chiropractic services.

- Direct cost savings may result through lower rates of healthcare utilization.

- In conclusion, the results of this study support the value of chiropractic services offered at onsite health centers.

References


