

Sleep Disorders: Screening, Diagnosis and Implications

10:30 AM - 12:00 PM

A CORPORATE-DRIVEN SLEEP APNEA DETECTION AND TREATMENT PROGRAM

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PURPOSE: Sleep apnea is very prevalent in commercial truck drivers, approaching 30%. Left untreated, sleep apnea is associated with a higher risk for cardiovascular and cerebrovascular events. With cardiovascular disease, hypertension, and diabetes representing three of the most costly health expenditures in this industry, the purpose of this study was to examine if employer health costs are reduced with CPAP treatment of their drivers with sleep apnea.

METHODS: This analysis identified 339 commercial drivers who received a CPAP machine as treatment for newly diagnosed sleep apnea between January 2003 and December 2005 (36 month period). The rates of hospital admissions, emergency room and office visits, other out-patient encounters, as well as prescription drug and total health care spending were analyzed in this cohort before and after receiving CPAP intervention. All medical and pharmacy claims filed on these drivers were used as the data source for analysis. To accommodate different lengths of enrollment for each driver, the number of months of enrollment before and after CPAP intervention were calculated and used as the denominator in per member per month (PMPM) measures of utilization and spending. Members were removed who did not have at least one full month enrollment before and after CPAP intervention. T-tests were run testing statistical significance between mean pre and post-intervention values (95% confidence interval).

RESULTS: The mean number of months analyzed, per driver, before and after CPAP intervention was 17 and 12, respectively. There was a 57.4% reduction in PMPM total health care costs after CPAP intervention ($p < .0001$), or an average of \$538 PMPM savings. In-patient admissions were reduced from 0.0254 to 0.0023 PMPM, or a 91% reduction after CPAP intervention ($p < .0001$). Office visits and prescription drug spending modestly increased after CPAP intervention.

CONCLUSION: Large reductions in corporate health care costs are gained by concerted efforts to identify and treat employees with sleep apnea.

CLINICAL IMPLICATIONS: Commercial carriers who address the high prevalence of sleep apnea in their driver populations will enjoy significant savings in health care expenditures.

DISCLOSURE: Mark Berger, None.