Measuring the Relationship Between Employees' Health Risk Factors and Corporate Pharmaceutical Expenditures.

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This study demonstrates the relationship between self-reported health risk factors on a health risk appraisal and pharmaceutical expenditures for a large employer. A total of 3554 employees who were participants in a pharmacy benefit plan for the entire year of 2000 completed a health risk appraisal. As the number of self-reported health risk factors increased from zero to six or more, corporate pharmaceutical costs increased in a stepwise manner: US dollars 345, 443, 526, 567, 750, 754, and 1121 US dollars, respectively. After controlling for age, gender, and the number of self-reported diseases, each additional risk factor was associated with an average annual increase in pharmacy claims costs of 76 US dollars per employee. Specific health risks were associated with significantly higher expenditures. The results provide estimates of incremental expenditures associated with common, potentially modifiable risk factors. Pharmaceutical expenditures should be considered by corporations in their estimates of total health-related costs and in prioritizing disease management initiatives based on health risk appraisal data.