## Comparing Excess Costs across Multiple Corporate Populations.

Douglas Wright, Laura Adams, Marshall Beard, Wayne Burton, David Hirschland, Timothy McDonald, Deborah Napier, Salvatore Galante, T. Smith, Dee W. Edington

Journal of Occupational & Environmental Medicine. 46(9):937-45, 2004.

The purpose of this study was to examine the relationship of health risk level to charged medical costs and determine the excess cost of higher risk individuals compared to low risk. Two years of medical claims from six corporations were used to determine costs of health risk assessment (HRA) participants and nonparticipants. A total of 165,770 employees, 21,124 of which took an HRA, were used for the study. Costs increased as risk level increased. There were no significant differences within a risk level between companies for the cost ratio. Percent of medical costs due to excess risk ranged from 15.0-30.8% for HRA participants and 23.8-38.3% for the study population. Cost patterns were consistent across companies. Excess cost as the result of increased risk level accounted for a substantial portion of the cost at each company. These results can be used to justify the need for a health-promotion program and to estimate potential savings as the result of excess risk. Even without the use of an HRA, health practitioners should feel confident stating that excess risk accounts for at least 25% to 30% of medical costs per year across a wide variety of companies, regardless of industry or demographics. The numbers can be used as a realistic estimate for any health promotion program financial proposal.