

Emerging Research: A View from One Research Center.

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The Health Management Research Center at the University of Michigan has assembled a database on health risks, medical care costs, and in some cases, productivity measures for over 2,000,000 individuals. For employees of its corporate consortium members, the database contains seven to eighteen years of data. Working with this data, the research team has observed a number of emerging trends. These trends have been stable in this data set for a number of years, but some of them are yet to be subjected to rigorous external peer review. The trends are summarized below.

- 1) Annual participation rates of 20% to 30% in Health Risk Appraisal are typical; over 10 years, 80% participate at least once, 60% at least twice and 40% at least three times.
- 2) Among the employers in the data base, excess risk factors account for 21% to 31% of medical care costs, with a mean of 25%.
- 3) Medical care costs increase as the number risk factors and age increase. As risk factors increase, medical costs increase; as risk factors decrease, medical care costs decrease. The mean cost increase per risk factor increased (\$350) may be more than double the mean cost decrease per risk factor decreased (\$150).
- 4) Cost savings greatest among those who participate in programs multiple times.
- 5) Absenteeism seems to be higher and other measures of productivity lower for those with health risk factors.
- 6) Programs designed to keep healthy people healthy in addition to reducing the risks of those with multiple risks will probably provide the greatest return to the employers.
- 7) Best results may be achieved by focusing efforts on employees who have clusters of risk factors associated with low perceived health status.
- 8) A corporate wellness score which combines risk factor levels and participation rates may provide a "corporate wellness score" which can be used to compare health status across employer.
- 9) Increased use of longitudinal data sets, fuzzy cut points for data categories and data mining techniques may allow breakthroughs in future analysis efforts.