## The Association Between Health Risk Status and Healthcare Costs Among the Membership of an Australian Health Plan.

Shirley Musich, Dan Hook, Tracey Barnett, Dee W. Edington. Health Promotion International. 18(1):57-65, 2003.

Health promotion in Australia has developed into an accepted strategy for solving public health problems and promoting the health of its citizens. However, there are few evidence-based research studies in Australia that measure health risk status or track health changes over time with defined cost outcome measures. Those individuals with more high-risk lifestyle behaviors have been associated with higher costs compared with those with low-risk behaviors. Although intuitively it was believed that the health promotion programs had a positive impact on health behaviors and consequently on health care costs, the relationship between health risk status and health care costs had yet to be tested in the Australian population. Consequently, a verification study was initiated by the Australian Health Management Group (AHMG) to confirm that those relationships between health risks and medical costs that had been published would also hold in the Australian population using Australian private health care costs as the outcome measure. Eight health risks were defined using a Health Risk Appraisal (HRA) to determine the health risk status of participants. Consistent with previous studies, low-risk participants were associated with the lowest health care costs (377 Australian dollars) compared with medium- (484 Australian dollars) or high-risk (661 Australian dollars) participants and nonparticipants (438 Australian dollars). If the health care costs of those at low risk were considered as the baseline costs, excess health care costs associated with excess health risks in this population were calculated at 13.5% of total expenditures. Health risk reduction and low-risk maintenance can provide important strategies for improving/maintaining the health and well-being of the membership and for potential savings in health care costs.