



Presentation Abstract: American Public Health Association (2006)

APHA Topic: Health Administration

Title: Financial impact of modifiable health risk factors in a state health plan population

Submitter's e-mail: rkjaster@uams.edu

Author(s): Rhonda K. Jaster, MPH
Joseph W. Thompson, MD, MPH
Jennifer L. Shaw, MAP, MPH
Sathiska D. Pinidiya, MS, MEd

Learning objectives:

At the conclusion of the session, the participants will be able to:

1. Describe the use of a self-reported health risk assessment (HRA) within a health plan to assess costs related to modifiable risk factors.
2. Assess the use of HRAs as a tool to evaluate costs associated with modifiable behaviors, which can be used to inform decisions on coverage of preventive treatments within health plans.
3. Discuss the usefulness of the HRA tool in increasing the awareness of health risk behaviors among plan members as a strategy for improving health and decreasing medical claims costs.

Target Audience: Public health professionals, policy makers, health care providers, and business leaders interested in tools to assess medical costs related to modifiable behaviors and inform cost:benefit analysis of use of preventive services

Background: Previous data links high medical costs to tobacco use. In contrast, there is less evidence connecting high medical claims costs with overweight/obesity or lack of recommended amounts of physical activity (3+ days/week). **Objective:** Determine the medical costs related to tobacco use, obesity, and physical inactivity among Arkansas state employees using self-reported Health Risk Assessment (HRA) responses indicating individual risk factors. **Methods:** De-identified medical claim costs for employees and spouses in the State of Arkansas Health Plan were used. Those who self-identified as having one or more risk factor (e.g., tobacco use, body mass index (BMI) ≥ 30 , and < 3 days/week of physical activity) were compared with covered employees and spouses in the same plan who self-identified as not having any of the above-mentioned risk factors. Total medical claims costs to the plan (September 2004-October 2005) were analyzed. **Results:** HRA respondents with self-identified BMIs ≥ 30 , < 3 days/week of physical activity, or tobacco use incurred higher medical claims costs than respondents with no risk factors. Notably, the average total annual cost for individuals with none of the three risk factors was \$1,840, while total annual cost for respondents with combined BMI ≥ 30 and < 3 days/week of physical activity was \$2,534. **Conclusion:** Improving individual health behaviors may help decrease medical claim costs. Similar to tobacco control program support over the past decade, physical activity, weight management and nutrition programs need as much attention in order to change personal behavior. Education, support, and incentives should be emphasized within the population studied.