

## Health Plan Costs at Chevron Remain Flat

Chevron offers many health plans to our employees because one of the guiding principles for the Health and Welfare strategy is choice. 63% of employees are enrolled in 70 HMOs, 15% in three point of service plans, and 22% in an indemnity plan. Costs have essentially remained flat since 1991. The increase is less than 1%, which was not corrected for inflation.

Health and Medical Services (H&MS) is part of a team that supports Benefits Planning and Design in their efforts to manage costs and maximize participant satisfaction. Data are reported by Chevron's Comptroller's Department and are available for review.

Specific services that H&MS has provided include: 1) preventive care design in the indemnity and point of service plans, dialogue with HMOs, and development of performance standards focused on delivery of preventive care, 2) development of performance standards and audit of the mental health plan, 3) partnership with the health plans to develop programs that specifically address Chevron needs such as reduction of cardiovascular disease, and implementation of self-care.

Together, the health and welfare team has defined a strategy, which clearly articulates an emphasis on health and well-being of our plan participants:

- Total company and participant health and welfare costs on a per employee basis will be managed to a range of acceptability
- The Company will maximize participant satisfaction with its health and welfare programs consistent with the Company's interests
- The health and welfare programs will encourage and support plan participant accountability to become wise consumers and to manage personal health and well-being
- The Company will hold health and welfare plan partners accountable for contracted service delivery, operational excellence, and for providing overall value to Chevron and plan participants
- Through its health and welfare programs and in partnership with its service providers, the Company will promote a healthy and productive workforce

Benefits Planning and Design and H & MS are currently working together to develop a wellness supplement that would allow access to health assessment, demand and disease management services for all health plan members, who are enrolled in any Chevron health plan. This is being designed as an ERISA benefit and is expected to assist in the management of health care costs as well as improve delivery, quality, and evaluation of such services. Where possible, it will be integrated with existing services provided by our health plans.

## Chevron Occupational Incident Rates Reduced

The data above are kept by our Corporate Health Environment and Safety staff and are reported to the American Petroleum Institute (API). Data reported here are for domestic sites only, since work with our international sites has been very limited. Recordable occupational incident rates have dropped by 50%, from approximately 3 per 200,000 hours worked in 1993, to 1.5 in 1997. Lost workday rates have declined even further, by 60%.

“Protecting people and the environment” is one of three Company-wide strategies that define how Chevron operates their business. In the last few years, Chevron has set a goal of “being the industry leader in safety and health performance, and to be recognized worldwide for environmental excellence.” This goal, and the addition of success sharing (bonus dollars for each employee) tied to safety performance, has greatly increased the commitment to safety.

Because most of Chevron’s injuries are a result of human behavior, Health and Medical Services has played a critical role in assisting safety professionals in analyzing their safety data, and planning and implementing programs to improve safety performance. Programs have included back injury and cumulative trauma disorder prevention for on and off the job injuries, healthy shiftwork / fatigue prevention, interventions for health behaviors that may contribute to injuries (such as lack of physical strength and flexibility, poor nutrition, and obesity), and management coaching regarding their role as leaders in health and safety.

Although health is part of the goal, it is primarily viewed at this time as a means to improve safety performance. In the future, more emphasis will be placed on “health” as a significant contributor on its own. There is discussion about setting a health metric for the Company and expanding Chevron’s compliance policy and process for health, environment, and safety to include more specific goals for employee health and wellness.

## **Health Quest Fitness Center Study**

The Health Quest Fitness Center Study was designed to estimate the relationship between Fitness Center participation and health care expenditures. The purpose of this study was to indirectly measure the health of Chevron employees by evaluating the effect of Fitness Center participation on medical claims experience over a period of 2.5 years. To provide a fuller assessment of fitness center participation, a supplemental study on the same population was conducted by Ken Satin, a Chevron epidemiologist, to evaluate the relationship between fitness center use and lost work days as reported by Chevron’s payroll system. Descriptive and multivariate analyses were used to measure the relationship between Fitness Center utilization, healthcare costs and lost work days. The same study design and methodologies were used in both the medical and lost time analyses.

The MEDSTAT Group was selected to help design and conduct the analysis because of its experience in measuring the effectiveness of health promotion programs. The results of the analysis were written and accepted for publication in the peer-reviewed journal, *Journal of Occupational and Environmental Medicine*. The data used for this analysis are available for analysis by external reviewers or investigators.

A rigorous quasi-experimental study design was used to conduct the fitness center study, which was accomplished through a series of phases. An exploratory analysis was performed in Phase I to ensure that the study population was large enough. The second phase consisted of analyzing the distribution of Fitness Center visits in order to create levels of Fitness Center participation. Level 1 participants averaged zero to less than two visits per month, Level 2 participants averaged less than two visits per week, but at least two per month, and Level 3 averaged two or more visits per week. In the third phase, descriptive analyses were performed to show, over time, the demographic, health care expenditure, and lost work days characteristics of Fitness Center participants and non-participants. The final phase consisted of multivariate analyses to estimate the impact of Fitness Center program participation on health care expenditures and lost work days, adjusting for demographic and other control variables.

## **Results**

### **Medical Analysis**

For the descriptive analysis, comparisons of several expenditure and utilization measures were made between participation levels. Looking at inpatient and drug expenditures for Health Net, it was shown that participation had a beneficial effect on expenditures: the expenditures were reduced as participation level increased. Also, participants have fewer inpatient admissions and fewer hospital days.

For the multivariate analysis, among subjects with positive medical expenditures, Level 3 subjects were estimated to have significantly lower medical expenditures than non-participants. After adjusting for confounding variables, regular participants incurred mean inpatient and drug expenditures at \$827, compared to \$1,309 for non-participants ( $p = .03$ ). Among those with mental health expenditures, Level 3 participants had significantly lower mental health expenditures as compared to non-participants.

### **Lost Work Days Analysis**

The results of the study showed a small, but statistically significant decrement in lost-time with increasing use of the fitness centers. Narrowing the study focus to those employees who had any lost time during the study period revealed a larger statistically significant decrease in lost-time, ranging from 2 to 6 days depending on the frequency of fitness center use.

### **Smoking Cessation**

Smoking rates showed a steady decline from 1991 (28%smokers) to 1995 (16%smokers). In 1996, smoking began to climb slightly to its current level of 18%. 1997's smoking rate is above the Healthy People 2000 goal for adults (15%), but below the blue-collar adult goal of 20%. Data were collected through the Staywell health risk appraisal.

Chevron's smoking cessation programs were begun in 1987. A lifestyle cost analysis looking at health care utilization in 1993 and 1994 found that we spent more on smoking related illness than any other single risk factor, estimated at \$4 million per year. This finding further supported the need to continue to focus on smoking cessation as a primary target for risk reduction.

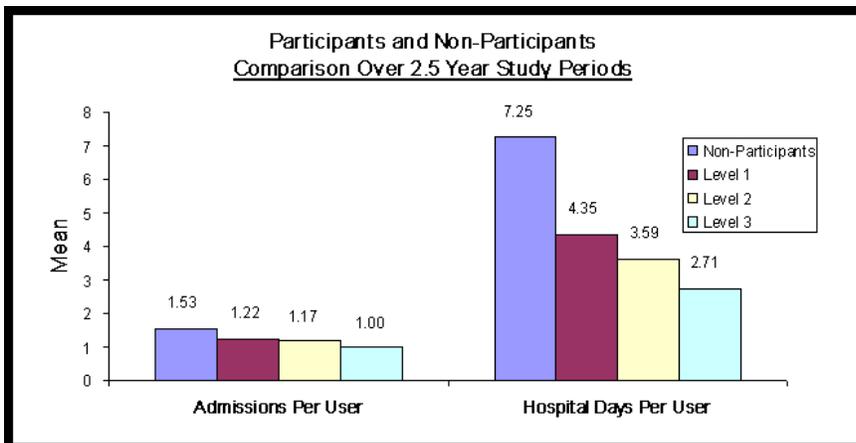
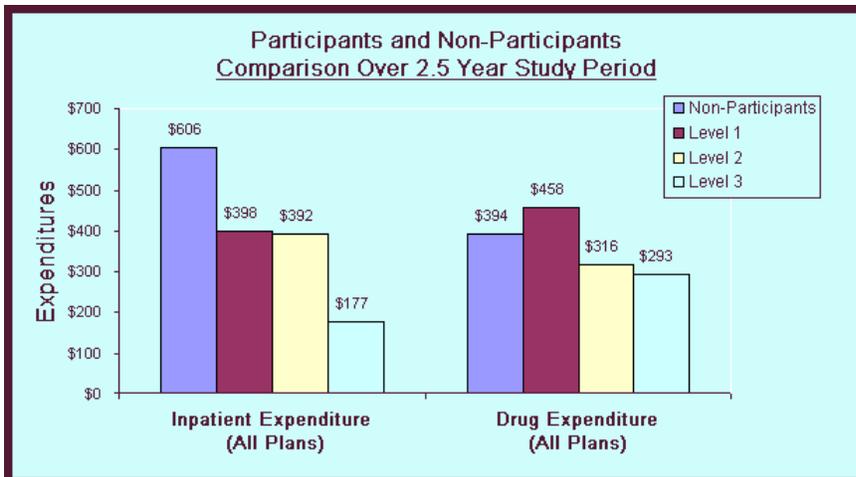
The approach to smoking cessation has been a comprehensive one that has included smoking policies and smoke-free workplaces, group and self-help smoking cessation programs, partnerships with our health plans around smoking cessation (including performance standards), active involvement with the Pacific Business Group on Health on development of a performance standard for smoking cessation counseling by physicians, and support of the AHCPH smoking cessation guideline with healthcare providers.

Chevron's work with smoking cessation is published: Whitehead, D'Ann, Employers' and purchasers' role in smoking cessation, Tobacco Control, Volume 6, Supplement 1, 1997. These were the proceedings from the AHCPH conference introducing their smoking cessation guideline.

## **Alcohol and Drug Risk Reduction**

Interventions for drug and alcohol risk reduction combine environmental and cultural interventions (drug and alcohol policy, random drug and alcohol testing for safety sensitive jobs) with support for individual change (EAP referral and treatment through the mental health & substance abuse plan). Results show risk reduction, particularly with high risk individuals.

Chevron remains the industry leader in successful rehabilitation for drug and alcohol abuse. Recovery rates (defined as those who remain employed without further problems two years after completion of treatment) for alcohol and drug use combined were 70% in 1997; 61% for drug cases and 85% for alcohol cases. Drug and alcohol use is verified by required screening during the two year recovery period.



Level of Participation	1994 Number of Participants	1995 Number of Participants
1	764	914
2	838	916
3	348	225
Total	1,950	2,055