

CARDIOVASCULAR

THE RIGHT THING



Understanding the problem:

Cardiovascular diseases, such as coronary artery disease, stroke, hypertension, and

heart failure, are the leading causes of death in the United States, accounting for approximately 40% of all deaths. Additionally, studies have shown that people with diabetes have an increased risk of heart attack and stroke. People who have diabetes and who also have coronary artery disease (CAD) have an even higher risk of heart attack and stroke.

While the cost of caring for a KP member with coronary artery disease is 3.1 times as much as caring for a similar member without coronary artery disease, pursuit of augmented care management in recent years has significantly improved overall quality. At the same time, this additional cost has remained steady or gone down slightly.

Within Kaiser Permanente in 2004, approximately 3.8% of the adult members (203,100) had CAD. In 2003, approximately 1.7% (97,000 members) within KP had heart failure. About 1.0% of KP's members with diabetes also have coronary artery disease, and 0.4% of KP members have diabetes and heart failure.



Our goal is to help members with heightened risk of cardiovascular problems reduce that risk as much as possible, and hopefully avoid the physically debilitating and sometimes fatal occurrence of heart attack, stroke, or heart failure.



KAISER PERMANENTE®

care management institute

Defining a strategy:

Because many key risk factors in cardiovascular disease can be modified or reduced with lifestyle changes or drug therapy, KP CMI's approach to cardiovascular disease includes tools for physicians and members, including:

- evidenced-based guidelines that enable physicians to provide proven-effective care at the right time
- medication management protocols, including aspirin, beta-blockers, and statin medications



While the cost of caring for a KP member with heart failure is 3.9 times as much as caring for a similar member without heart failure, pursuit of augmented care management in recent years has significantly improved overall quality. At the same time, this additional cost has remained steady or gone down slightly.

- participation in interdisciplinary groups that examine ways to manage cardiovascular disease

Several large-scale heart disease studies have shown that aspirin, statins, beta-blockers, and ACE inhibitors can dramatically reduce the risk of cardiovascular events in patients with CAD and/or diabetes. KP CMI projected the implications of these findings using Archimedes, a KP computer simulation model, and found that appropriate pharmacotherapy could reduce the risk of heart attack and death by at least 71% for 500,000 Kaiser Permanente members. Through its ALL (aspirin-lovastatin-lisinopril) Initiative, KP CMI is actively promoting these effective medications for all KP members at-risk. Medication usage rates are up.

Tracking results:

1

Unlike the rest of the United States, heart disease is no longer the number-one cause of death in Kaiser Permanente's Northern California Region. Focused efforts in managing heart disease have decreased mortality to such an extent that it is the second-leading cause of death, following cancer.

2

KP members have experienced significant improvement in lipid (LDL-C) screening and control. In 2004, 86% of KP members with coronary artery disease had at least one lipid screening. Overall, lipid screening has increased 30% (from 66%) since 1998. Control of lipid levels has increased dramatically as well: In 2004, 77% achieved control at the LDL-C less than 130 mg/dl level, an increase of 58% since 1998. Control at the LDL-C less than 100 mg/dl level was 55.6% in 2004 — an increase of 62% from 2000.

3

ACE inhibitor use has increased among members with CAD. Among known CAD patients in 2004, 62% filled at least one prescription for an ACE inhibitor, a 48% increase from 2000.

4

There were almost 11,000 hospital discharges with a principal diagnosis of heart failure in 2003. The rate of heart failure hospitalization decreased by 32% from 2.8 per 1000 KP members in 1998 to 1.9 per 1000 KP members in 2003

5

Through its ALL Initiative, KP CMI is actively promoting these effective medications for all KP members at-risk. Medication usage rates are up. In the KP "ALL" population (KP members with CAD and/or diabetes

age 55+), just under 62% of the KP "ALL" population were taking statins in 2004, up from 49% in 2002. Nearly 60% of the KP "ALL" population were taking angiotension-converting enzyme (ACE inhibitor) in 2004, up from 55% in 2002.

6

How does Kaiser Permanente's performance compare to other health plans nationally? According to the National Committee for Quality Assurance (NCQA) Commercial HEDIS results for 2004 (2003 performance):

- When it comes to controlling the LDL or "bad" cholesterol (LDL-C less than 130) after a heart attack or stroke, six of eight KP Regions meet or exceed the 75th national percentile. Three KP Regions rank in the 90th national percentile.
- Two of eight KP Regions meet or exceed the 75th national percentile for beta blocker use at discharge post myocardial infarction. One region ranks in the 90th national percentile.

7

On some measures of effective cardiovascular care, the average performance of all Kaiser Permanente Regions now equals or exceeds that of the best-performing region a few years earlier (see figure at left.) This illustrates how rapidly Kaiser Permanente's integrated care delivery system identifies and disseminates successful practices, resulting in better care and health outcomes for members throughout the Program.

