

Fitness discounts program may be linked to improved health and reduced sickness

It's too early to establish cause and effect, but frequent users of the fitness discounts program have 17.8 percent lower health claims costs than non-participants in the program

May 2007



Executive summary: The fitness discounts program may be linked to improved health

A discount on fitness center dues boosts workouts and appears to improve health.

These are the conclusions of a Blue Cross and Blue Shield of Minnesota study of 74,000 members over a recent 12-month period who signed up for up to \$20 a month off their health club membership if they met attendance goals. The discount was paid by Blue Cross or the employer, depending on the plan design.

The study found:

- **The discount fueled use of health clubs.** Part of the study involved an analysis of Blue Cross employees, and 43 percent of those working out joined health clubs because of the discount.
- **Those who did frequent workouts appear to have better health.** “Frequent” users, meaning those who used a fitness center at least eight times a month for at least nine months a year, had claim costs 17.8 percent lower than non-participants, after adjusting for health history. “Frequent” users had emergency room visit rates that were 38.7 percent lower than non-participants. “Frequent” users had hospital admission rates that were 41.4 percent lower than non-participants.
- **People were more likely to work out if the fitness center was easy to access.** About 63.3 percent of all studied members live within two miles of a participating fitness center. Non-participants were, on average, at least 3.5 miles or more from a fitness center. Among health plans, Blue Cross has the largest network of participating centers that track workouts.
- **The more workouts, the better.** Those who worked out more often a week and for more months of the year showed less need for health care. The study found that “frequent” users have claim costs 9.8 percent less than those of “low” users (low users were defined as those who used a fitness center fewer than eight times a month for fewer than six months a year); emergency room visit rates are 41.8 percent below those of “low” users; and hospital admission rates are 45.2 percent lower than “low” users.

Those who worked out more often a week and for more months of the year showed less need for health care.

After adjusting morbidity across those studied, “frequent” program users have claim costs 17.8 percent lower than non-participants, and their claim costs grew at a slower rate than non-participants. (We cannot say there is a cause and effect relationship at this point.)

No currently documented cause and effect relationship

The premise behind the program, called BluePrint for Health[®] fitness discounts, is that members who exercise regularly will become healthier and will use medical care less often.

However, the study was quick to note that there is not yet a verifiable cause and effect relationship between participation in the fitness discounts program and better health or claims experience. Instead, people in the program are experiencing some indicators of improved health. Further study will be needed over time to explain the nature of the relationship.

Detailed findings

For purposes of this analysis, participants in the fitness discounts program are grouped into three categories:

- “Frequent” users — those who use a fitness center at least eight times a month for at least nine months a year
- “Medium” users — those who use a fitness center at least eight times a month for six to eight months a year
- “Low” users — those who use a fitness center fewer than eight times a month or use it for fewer than six months a year

Here are the detailed findings:

1. While using the fitness discounts program, participants were healthier than they were before participating in the program (although we cannot say there is a cause and effect relationship)

Among the fully insured (non-Medicare Supplement) participants in the fitness discounts program:

- After adjusting morbidity across those studied, “frequent” users have claim costs 17.8 percent lower than non-participants, and their claim costs grew at a slower rate than non-participants. All participants have claim costs 11.7 percent lower than non-participants.
- “Frequent” users have emergency room visit rates that are 38.7 percent lower than non-participants and 12.3 percent lower than their own ER usage during the prior 12-month period.

Detailed findings

- “Frequent” users have hospital admission rates that are 41.4 percent lower than non-participants and 17.6 percent lower than their own usage during the prior 12-month period.

2. The more workouts, the better

Those who worked out more often a week and for more months of the year showed lower use of health care.

The study found that “frequent” users:

- have claim costs 9.8 percent below those of “low” users.
- have emergency room visit rates which are 41.8 percent below those of “low” users.
- have hospital admission rates which are 45.2 percent lower than “low” users.

3. The program is popular, with more than 1 in 10 eligible members participating

As of March 2007, 90,000 Blue Cross members have enrolled in the program. This represents about 10 percent of those eligible for participation. Not all Blue Cross members are eligible, since the program is optional for self-insured employers. Of fully insured members with access to the fitness discounts who were being studied, 12.9 percent participated in the program and 87.1 percent did not.

Other characteristics of participants:

- 43 percent live in the metro area (Anoka, Carver, Dakota, Hennepin, Ramsey, Scott or Washington County)
- 52.7 percent are female
- The average age is 52.5 years old
- 75.3 percent are the subscriber on their coverage
- 88.3 percent have high school diplomas (This is inferred from population studies that link the participants’ addresses to attained education)
- The median household income is \$52,224 (This is inferred from population studies that link the participants’ addresses to household income)
- 28.7 percent were “frequent” users; 15.5 percent were “medium” users; and 55.8 percent were “low” users

Among the participants in the fitness discounts program, 43 percent live in the metro area (Anoka, Carver, Dakota, Hennepin, Ramsey, Scott or Washington County), 53 percent are female and the average age is 52.5 years old.

Detailed findings

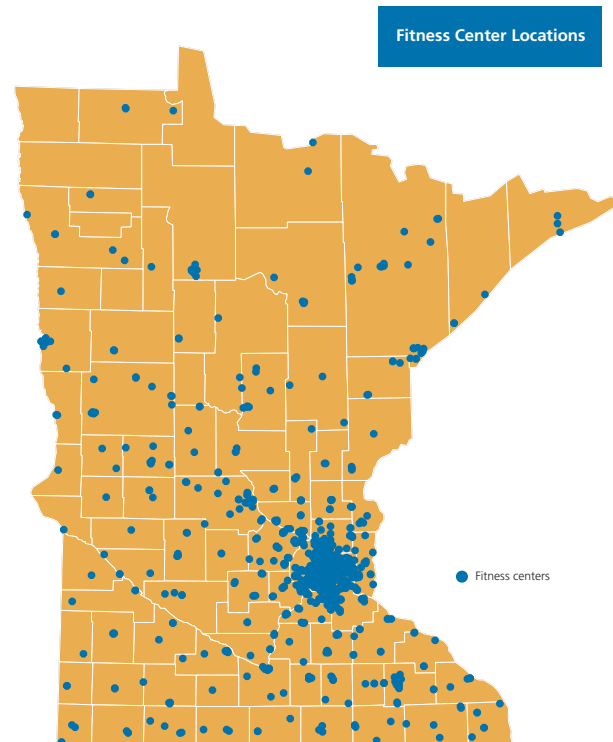
About 63.3 percent of all studied members live within two miles of a participating fitness center. Non-participants were, on average, at least 3.5 miles from a fitness center.

4. Accessibility of participating fitness centers encourages use

Participants on average live 3.1 miles from the nearest fitness center. About 63.3 percent of all studied members live within two miles of a participating fitness center. Non-participants were, on average, at least 3.5 miles from a fitness center.

The Blue Cross network of participating centers is the largest in Minnesota, with 715 participating fitness centers. Of the total, 313 (43.8 percent) of them are in the seven-county metro area. They include Curves, Life Time Fitness, YMCAs, YWCAs, Snap Fitness and other independent health clubs. The strength of this network makes participation convenient for most members.

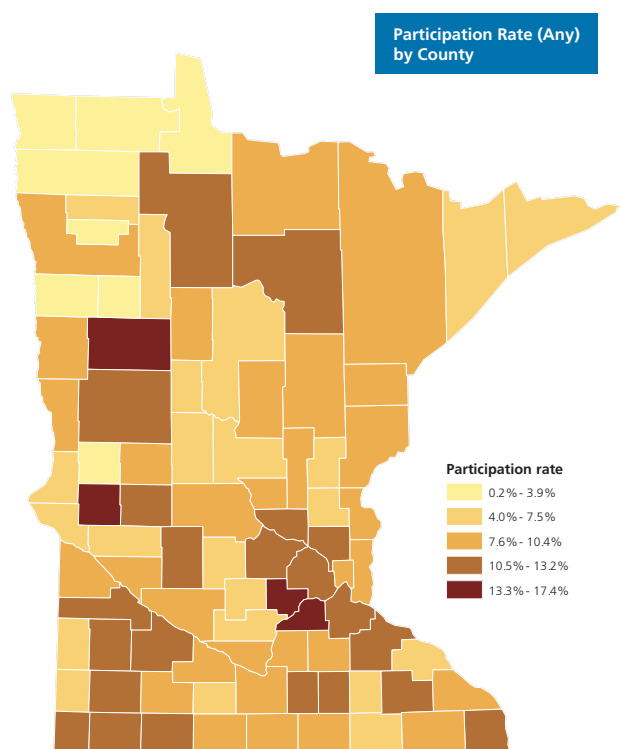
The map below shows the locations of participating fitness centers in the Blue Cross program.



Detailed findings

5. Participation rates are highest in the metro area and select outstate areas where fitness centers are most accessible

There is a direct correlation between participation in the program and access to eligible fitness centers. This list of counties with high participation and closer access to participating centers is somewhat similar.



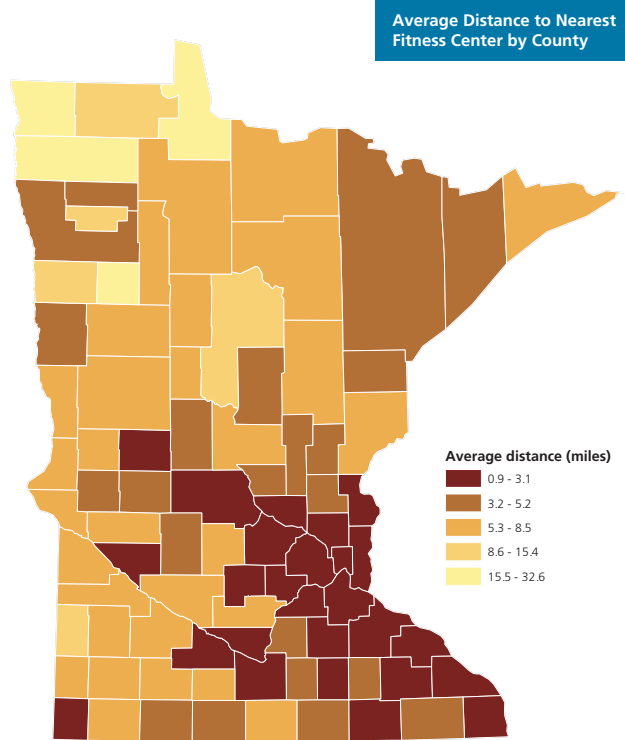
Participation rates were highest (13.3 to 17.4 percent of eligible members) in the following counties:

Becker
Carver
Scott
Stevens

Detailed findings

Participation rates were second highest (10.5 to 13.2 percent of eligible members) in the following counties:

Anoka	Itasca	Olmsted	Steele
Beltrami	Jackson	Otter Tail	Waseca
Dakota	Kandiyohi	Pope	Wright
Goodhue	Lyon	Redwood	Yellow Medicine
Hennepin	Murray	Rock	
Houston	Nobles	Sherburne	



Counties with the least distance between members and a fitness center in miles include:

Ramsey	.88 miles	Scott	1.40 miles
Hennepin	.90 miles	Carver	1.85 miles
Dakota	1.09 miles	Rock	1.92 miles
Anoka	1.39 miles	Wright	1.98 miles
Washington	1.40 miles		

Other studies show that exercise reduces disease

The following sampling of statistics and findings support the positive effect of exercise on health.

Heart Disease

A study involving 120,000 patients estimated that 80 to 90 percent of heart attacks could be traced to lifestyle factors, including smoking, eating too much, and exercising too little.

Source: JAMA, May 2, 2004.

Cancer

Increased physical activity has been associated with reduced risk of colon cancer. Among those studies, about a 50 percent reduction in incidence was observed among those with the highest level of activity.

Source: Pisani, Parkin et al. "Estimates of the worldwide mortality from 25 cancers in 1990." *International Journal of Cancer*. Vol. 83, issue 1, November 1999.

Research involving 74,000 women over the course of 25 years found that active women, even those with a family history of breast cancer, lowered their risk of the disease by 18 percent.

Source: JAMA, Sept. 16, 2003. "Recreational physical exercise and the risk of breast cancer."

Diabetes

In the Diabetes Prevention Program, a federally funded study of 3,234 people at high risk for diabetes, moderate diet and exercise resulting in a 5 to 7 percent weight loss was shown to delay and possibly prevent type 2 diabetes.

Source: National Institute of Diabetes and Digestive and Kidney Diseases, National Institutes of Health. "Am I at risk for type 2 diabetes?" National Diabetes Information Clearing House. 2003.

A 15-year study involving 2,200 diabetic men found that the death rate for the least fit men was seven times higher than the death rate for those most fit.

Source: *Diabetes Care*. January 2004.

Studies support the positive effect of exercise on reducing heart disease, cancer and diabetes.

About the fitness discounts program and study

Blue Cross analyzed the claims experience of 74,000 participants in the program between July 2005 and June 2006.

The Blue Cross study was a retrospective observational study of 74,000 Blue Cross and Blue Shield of Minnesota members who used the fitness discounts program between July 2005 and June 2006.

In 2005, Blue Cross launched the fitness discounts program for members. The program provides up to \$20-a-month discount on fitness center dues if the eligible Blue Cross member visits the center a number of times each month.

Blue Cross analyzed the claims experience of participants in the fitness discounts program between July 2005 and June 2006, compared to the claims experience of non-program participants who had Blue Cross plans. Blue Cross will continue to monitor the relationship between participation in the program and better health.

To participate in the program, Blue Cross members must be in a group that offers it and must be at least 18 years old. Two participants per household are eligible. The study findings include analysis of fitness discounts participants who have Medicare Supplemental plans, except where noted.

In 2007, the fitness discounts program was modified for fully insured groups to require 12 instead of 8 visits to a fitness center each month in order to qualify for a discount and reimbursement. This decision was made in line with a U.S. Surgeon General recommendation that people get 60 to 90 minutes of physical activity most days of the week. Similarly, the Centers for Disease Control supports at least 30 minutes of moderate intensity physical activity, above usual activity, most days of the week.



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