

Blue Cross 2006 Health Concern Report

Prevalence of strokes in women tops list

The 2006 Health Concern Report identifies a health issue in Minnesota that is growing significantly and deserves the attention of the health care community and the general public.



Introduction

What is the Blue Cross 2006 Health Concern Report?

As Minnesota's largest health insurer, we insure one out of four Minnesotans.

An analysis of this data allows us to identify changes in diseases and conditions over time. As a means of promoting health awareness and encouraging healthy behaviors, we are releasing the first of what we hope to be annual "Health Concerns" based on the health issues of our members. Each "Health Concerns" report will address one public health issue that we think needs particular attention.

Our selection of one health concern is not intended to diminish our commitment to addressing all disease — or lessen our concern for the health of all Minnesotans.

Part I: Details on the 2006 Health Concern

The 2006 Health Concern: Incidence of strokes in middle-aged women

The prevalence of strokes in female Blue Cross members aged 41-64 is one of the fastest growing diseases studied in the report in all of our Minnesota members under age 65. It tops the list in our 2006 Health Concern study.

According to our claim data, the prevalence has increased 24 percent between 2001 and 2005. This growth outpaces the growth of other major diseases studied between these two dates in the Blue Cross member population under age 65 (see chart, below).

The growth in prevalence of strokes in women ages 41-64 was identified after examining 273,000 medical claims from our adult members in 2001 and 342,000 adult claims in 2005. The study only reviewed claims from members residing in Minnesota. Blue Cross and Blue Shield of Minnesota has 2.7 million members, of which 1.2 million (representing commercial and public program populations) reside in Minnesota.

Cardiovascular disease is the leading cause of death in women

People often share the misconception that cancer is the leading cause of death among women. According to the American Heart Association, nearly twice as many women in the United States die of heart disease and stroke as from all forms of cancer, including breast cancer.

A stroke is an event that causes damage to the brain when a blood vessel supplying oxygen to the brain either is blocked or ruptures. The damage — and recovery — depends on the location of the stroke and the extent of damage.

A stroke can affect functioning of the body and of the mind. Possible consequences include impaired motor activity, speech and the ability to comprehend speech. It can also affect behavioral and thought patterns, memory and emotions. Paralysis or weakness on one side of the body is common.

Women who have suffered a stroke may have difficulty performing a job or essential activities of daily living. For these reasons, the increase in strokes among women ages 41-64 is of deep concern.

This concern is shared by the American Heart Association. According to their website, “Each year about 40,000 more women than men have strokes, and more than 60 percent of total stroke deaths occur in women.”

A problem that may continue to grow

This health issue of an increased prevalence of strokes in women ages 41 to 64 is of particular concern because:

The disease may strike without warning. In many cases, there are no observable changes in a person's health prior to the stroke event. For this reason, people susceptible to a stroke may not be aware of it. Without awareness, they are not motivated to take steps to prevent the stroke.

The problem is likely to get worse before it gets better. Risk factors for strokes include obesity and smoking, and hypertension. All three are prevalent in our culture and will continue to contribute to a growing incidence of strokes among women when they reach ages 41 to 64. The number of obesity surgical procedures in Minnesota women age 40 and under grew 112 percent between 2001 and 2005, according to the Blue Cross data.

Hypertension among men under 40 also growing at fast rate

The Blue Cross and Blue Shield of Minnesota data identified hypertension among men under age 40 as another rapidly growing major health event between 2001 and 2005. The incidence has increased 23.8 percent during that period.

Since hypertension is an underlying contributor to strokes, the growing prevalence of hypertension in young men is of significant concern.

Prevalence of major diseases among Blue Cross members

Disease/ Condition (by category male and female with highest increase)		2001 Patients/ 1000	2005 Patients/ 1000	2001- 2005 Increase
Stroke	Female, age 41-64	3.3	4.1	24.0%
Hypertension	Male, under age 40	11.1	13.7	23.8%
Diabetes	Female, age 41-64	45.6	55.0	20.5%
Hypertension	Male, age 41-64	139.1	168.2	20.9%
Diabetes	Male, age 41-64	62.1	73.2	17.9%
Hypertension	Female, under age 40	8.7	10.1	17.2%
Diabetes	Male, under 40	6.7	7.8	15.8%
Stroke	Male, age 41-64	4.1	4.7	15.7%
Hypertension	Female, age 41-64	137.2	156.4	14.0%
Diabetes	Female, under 40	7.0	7.8	12.1%
Colon cancer *	Female, age 41-64	1.8	2.0	9.1%
Colon cancer*	Male, age 41-64	2.2	2.4	8.1%

*Colon cancer was used as a representative indicator for all cancers.

Part II: Contributing factors are also increasing

Factors that contribute to strokes in women are increasing

The Blue Cross data showed an increase between 2001 and 2005 among women in the risk factors that contribute to strokes.

Diabetes is increasing among women 41-64

Compared to women without diabetes, women with diabetes have from **two to six times** the risk of heart disease and heart attack and are at much greater risk of having a stroke, according to the American Heart Association.

While the prevalence of diabetes is up for all age groups and both sexes, partly due to the increase in obesity among the general population, the prevalence of diabetes in women age 41-64 has increased more than men of that age group, up 20.5 percent between 2001 and 2005.

Increased prevalence of diabetes

Diabetes				
Age	Gender	2001 Patients/1000	2005 Patients/1000	01-05 Change
<40	Female	7.0	7.8	12.1%
	Male	6.7	7.8	15.8%
	Total	6.9	7.8	13.9%
41-64	Female	45.6	55.0	20.5%
	Male	62.1	73.2	17.9%
	Total	53.6	63.7	18.9%

Hypertension is increasing in women ages 41-64

High blood pressure is the most important risk factor for stroke. Women have an increased risk of developing high blood pressure if they are obese, have a family history of high blood pressure, are pregnant, take certain types of birth control pills or have reached menopause.

Between 2001 and 2005, the prevalence of high blood pressure has increased in all age groups and both sexes. The growing prevalence in women age 41-64, although lower than men, still has increased 14 percent between 2001 and 2005.

Increased incidence of hypertension

Hypertension				
		2001	2005	01-05
Age	Gender	Patients/1000	Patients/1000	Change
<40	Female	8.7	10.1	17.2%
	Male	11.1	13.7	23.8%
	Total	9.9	11.9	20.7%
41-64	Female	137.2	156.4	14.0%
	Male	139.1	168.2	20.9%
	Total	138.1	162.1	17.3%

Obesity surgical procedures are increasing in women ages 41-64

Between 2001 and 2005, the number of obesity surgical procedures in women ages 41-64 increased 121 percent, to nearly 242 patients per 100,000 Blue Cross members. Women in this age group are three and a half times more likely to seek obesity surgery than men in the same age group.

Obesity is related to high cholesterol, high blood pressure, lack of physical activity and high triglycerides — all contributors to strokes.

Increased rate of obesity surgical procedures

Obesity surgery				
		2001	2005	01-05
Age	Gender	Patients/100,000	Patients/100,000	Change
<40	Female	59.5	126.4	112%
	Male	7.4	17.6	138%
41-64	Female	109.5	241.6	121%
	Male	23.4	68.1	191%

Smoking

Smoking is a major cause of cardiovascular disease, including stroke. According to the Minnesota Department of Health, 19 percent of adult women are smokers. Smoking is the single most preventable cause of death in the United States.

Part III: How to avoid stroke

Remember, in many cases, strokes are preventable

Hypertension, smoking, diabetes and obesity — all leading causes of strokes — can be treated or the behavior changed, thus minimizing them as triggers to a stroke.

Signs of a stroke

Stroke is a medical emergency. Call 911 immediately. Know these warning signs, provided by the American Stroke Association, of stroke and teach them to others. Every second counts:

- Sudden numbness or weakness of the face, arm or leg, especially on one side of the body
- Sudden confusion, trouble speaking or understanding
- Sudden trouble seeing in one or both eyes
- Sudden trouble walking, dizziness, loss of balance or coordination
- Sudden, severe headache with no known cause

Part IV: Blue Cross recommendations

Get your blood pressure checked. High blood pressure (140/90 mm Hg or higher) is the most important risk factor for stroke. It usually has no specific symptoms and no early warning signs. That's why everybody should have their blood pressure checked regularly. To learn more, visit Prevention.Minnesota.com or StrokeAssociation.org.

Watch your weight. Eat healthy foods in moderate proportions so that you maintain your weight within guidelines set by your doctor. Blue Cross offers free health and wellness information on diet and other healthy living issues at bluecrossmn.com, as well as discounts on weight reduction programs.

Exercise. Blue Cross co-sponsors the “do” campaign with the American Heart Association, promoting physical activity through public events, advertising, and other initiatives. It is recommended that people should include at least 30 minutes of moderate physical activity every day. Blue Cross also offers fitness center discounts to members who exercise regularly (their employer must carry the program).

Don't smoke. Prevention Minnesota and Blue Cross support a comprehensive strategy to reduce tobacco use, sponsoring programs that discourage smoking, encourage quitting and protect people from secondhand smoke. For more information on smoking cessation programs, visit PreventionMinnesota.com.

Part V: Methodology

About this analysis

We examined 273,000 medical claims from Blue Cross and Blue Shield of Minnesota adult members in 2001 that dealt with such diseases as colon cancer, diabetes, hypertension and stroke.

We compared prevalence rates from 2001 with similar data in 2005, where we looked at 342,000 adult claims and 113,000 under age 18 claims.

Data was taken from among 1.1 million commercial and public program populations in 2001 and 1.2 million commercial and public program populations in 2005. The study only reviewed claims from members residing in Minnesota. Blue Cross and Blue Shield of Minnesota has 2.7 million members, of which 1.2 million (representing our commercial and public program populations) reside in Minnesota.