

Prevention Pays: Primary Prevention Outcomes Show Promise

What's the bottom line?

Saint Elizabeth's Medical Center in Wabasha, Minnesota is taking the health of its communities to heart – quite literally! Saint Elizabeth's has long been a provider of medical services – offering a continuum of care that spans all life cycles.

Several years ago, our organization made a firm commitment to plan, develop, and implement programs and services that promote wellness, prevention, early intervention, and disease management.

By devoting our expertise, energy, and enthusiasm to primary prevention, we are taking steps toward health improvement and risk reduction.

Results and outcomes collected from patients, employees, and program participants are showing positive change:

- Risk factors are reduced.
- Indicators for disease (*blood pressure, total cholesterol, HDL, LDL, triglycerides, blood glucose, abdominal girth, body mass index, tobacco use, and inactivity*) are improved.
- Medications are reduced or eliminated.
- Chronic diseases are better managed.
- Quality of life is enhanced.

Call to action...

This report spotlights initiatives and specific outcomes that Saint Elizabeth's Medical Center has implemented and measured to reinforce the need for more funding and reimbursement for primary prevention services. While our study samples may be small, the results cannot be ignored. Findings reveal a profound opportunity to reduce the burden of a costly healthcare system. By allocating more financial resources at the front end – to prevent the onset of disease – we reduce, even eliminate, the need for costly treatments and interventions. The return on investment has been calculated at anywhere from 3:1 to as much as 6:1.

What is needed:

- Health insurers must begin to pay for proven primary prevention programs.
- Health insurers must improve reimbursement for certified diabetes management and cardiopulmonary rehabilitation programs.
- People must accept more personal responsibility for their health.
- Grant programs must fund prevention initiatives over a longer period of time.



"It's rare for smaller community hospitals to invest in programs like this because insurers typically do not cover preventive services. Grant funding supplements our costs, making it affordable for our patients. Ultimately, our goal is to prove that prevention is a good investment. By sharing our success stories and outcomes data, we hope we can be a catalyst for change."
Carla Theusch, exercise physiologist

Fit Facts:

- Wabasha was named the first "Fit City" of Minnesota by Governor Tim Pawlenty.
- Grant funding from the MN Office of Rural Health & Primary Care and the Southern Minnesota Initiative Foundation supported the development of a primary prevention study.
- A 2008 Legislative Appropriations Request of \$95,000, supported by Senator Norm Coleman, Congressman Tim Walz, and Senator Amy Klobuchar, will aid in expanding primary prevention services.
- Grant Funding from Blue Cross/Blue Shield's Prevention – Minnesota provided seed money for senior fitness programming.

To learn more about the impact Saint Elizabeth's is making on improving health and reducing healthcare costs, contact :

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SPOTLIGHT #1: PREVENTION & EARLY INTERVENTION

Metabolic Syndrome Study

Saint Elizabeth's embarked on an ambitious Metabolic Syndrome outcomes study in 2006. With grant funding, Saint Elizabeth's is conducting a study of individuals with risk factors for heart disease, stroke and/or diabetes. Enrollees participate in eight weeks of monitored exercise, seven weeks of education, and ongoing support. Lab tests and other assessments are conducted before admission, during enrollment, and after discharge to show the positive impact early intervention plays on risk reduction and disease prevention.

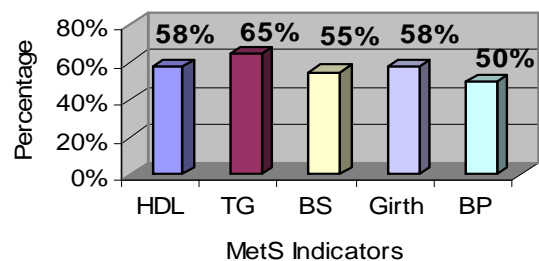
Program Components:

- **Seven weekly educational classes**
Facilitated by a multi-disciplinary team of clinicians.
- **Eight weeks of monitored exercise (24 sessions)**
Participants receive personalized exercise

prescriptions that include cardiovascular, strength, and flexibility training. Participants have access to 20+ pieces of cardio and strength equipment, the expertise of cardio-pulmonary staff, and ongoing monitoring of vital signs and key indicators.

- **Follow-up, support, and maintenance**
Participants have continued access to staff expertise, wellness center, education, and a monthly support group. Following initial screening, participants are re-screened every three – six months for up to three years to measure outcomes. During the maintenance phase, participants are strongly encouraged to continue their exercise regime in the wellness center, at home, or in another location.

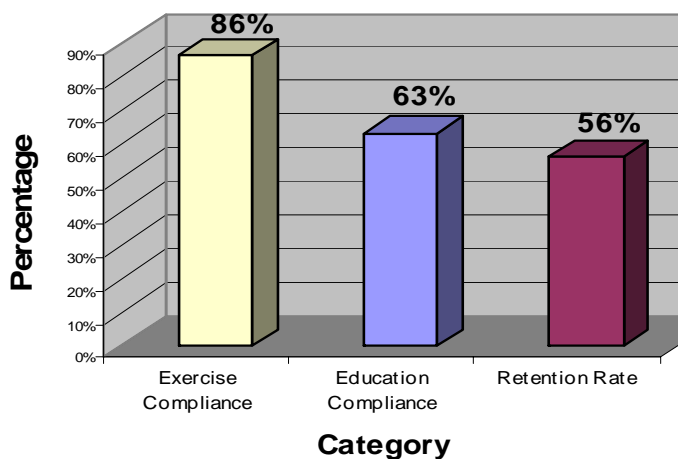
Improvements in MetS Indicators at 12 Months



What is Metabolic Syndrome (MetS)?

MetS is a group of abnormal indicators related to the body's metabolism. These indicators include: 1) excess body fat, particularly around the waist; 2) high triglycerides; 3) high blood pressure; 4) high blood glucose; and 5) low HDL cholesterol. Individuals with three or more of these indicators have metabolic syndrome and are at increased risk for developing heart disease, stroke, and/or diabetes.

Overall Participant Compliance



Case Study

A 61-year-old female with diagnosis of hypertension, hyperlipidemia, excessive abdominal girth & inactivity enrolled in study. She completed 24 sessions of exercise and attended all seven education classes.

	Initial Data:	Six Month Data:
Resting Blood pressure	144/94	108/68
Total Cholesterol	158	144
HDL (good cholesterol)	31	37
LDL (bad cholesterol)	84	83
Triglycerides	217	122
Blood sugar	95	85
Weight	234.5 (BMI 37)	190 (BMI 30)
Girth	52 inches	45 inches

Participant continues in the maintenance program three days/week. She has lost further weight (63 pounds total from enrollment). She has cut two blood pressure medications (taking ¼ of each) and is off Zocor completely after study.

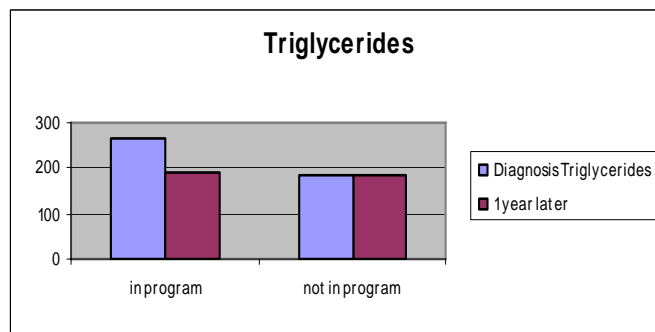
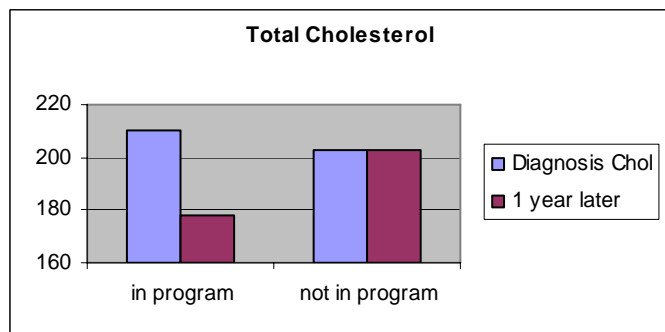
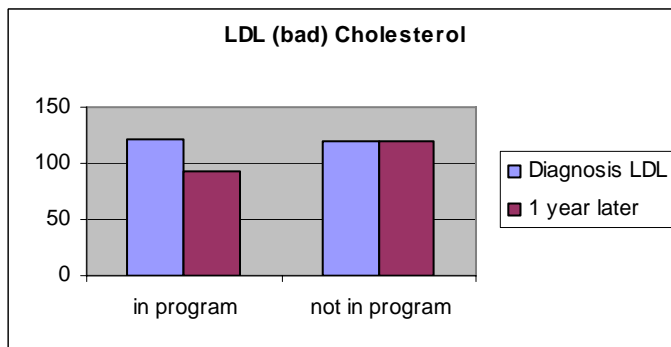
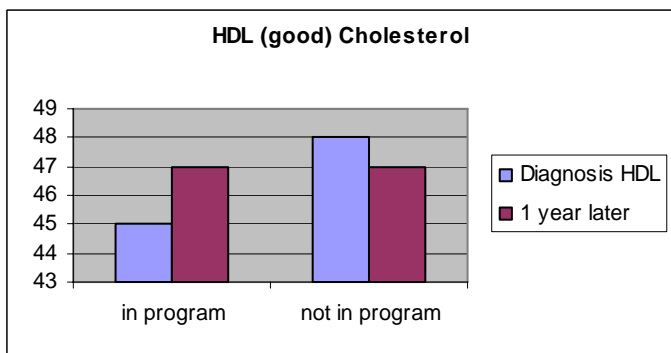
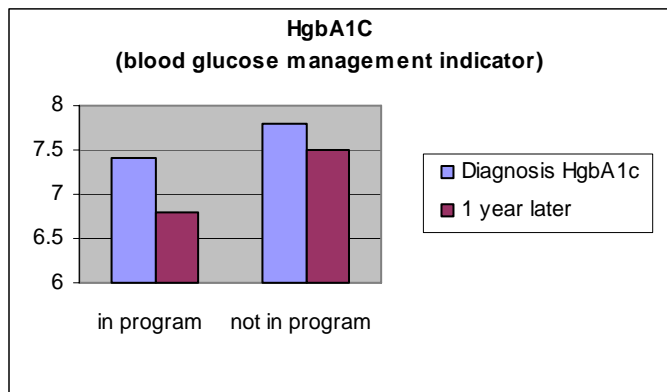
"The program has been life changing for my husband and me. It's never too late to make wellness a priority. We've got a lot of living to do. We plan to do everything we can to live better and longer." Jan Kuklinski

SPOTLIGHT #2: MANAGING CHRONIC DISEASES

Diabetes Self-Management

Saint Elizabeth's launched its Diabetes Self-Management program in 1997. Since that time, over 500 patients have received a blend of consultation, education, exercise, and support. The program features one-on-one sessions, group education, referral to monitored exercise, and monthly support programs.

Successful management is measured by monitoring HgbA1c (a measurement of controlled blood glucose), cholesterol, and triglycerides. **Patients completing the comprehensive diabetes management program experienced increased reduction in key risk factors when compared to patients who did not enroll in the program.**



Since taking her leap, she measures success in a number of ways... "I am exercising 200 minutes a week; I lowered my blood pressure, cholesterol and blood glucose; I lost pounds and inches; I have more energy; and I feel great!" Sharon Baker (right)

"The support group has shown me that, although we all have diabetes, it's not a one-size-fits-all disease. By sharing our own stories of what works and what doesn't, we are empowered to test and trial, and find the formula that works for each of us." Loulsa McHugh (left)



SPOTLIGHT #2: MANAGING CHRONIC DISEASES

Wellness Center: Primary and Secondary Prevention

The goal of Saint Elizabeth's Wellness Center is to improve and maintain cardiovascular fitness and reduce risk factors in order to help patients achieve optimal health. The programs available offer supervised exercise therapy, education, and support.

Cardiopulmonary Rehab

The primary components of these programs are monitored exercise therapy, close physician supervision and involvement, and education that focus on risk factor modification and healthy lifestyles. Patients attend two to three sessions per week for up to 36 visits, determined on an individual basis.

Fresh Start

This program was developed with strong administrative support in 2005. It is an eight-week prevention program that consists of 24 exercise sessions and seven weekly education classes. It is designed for individuals with one or more risk factors for cardiovascular or pulmonary disease but do not meet criteria for cardiopulmonary rehab program.

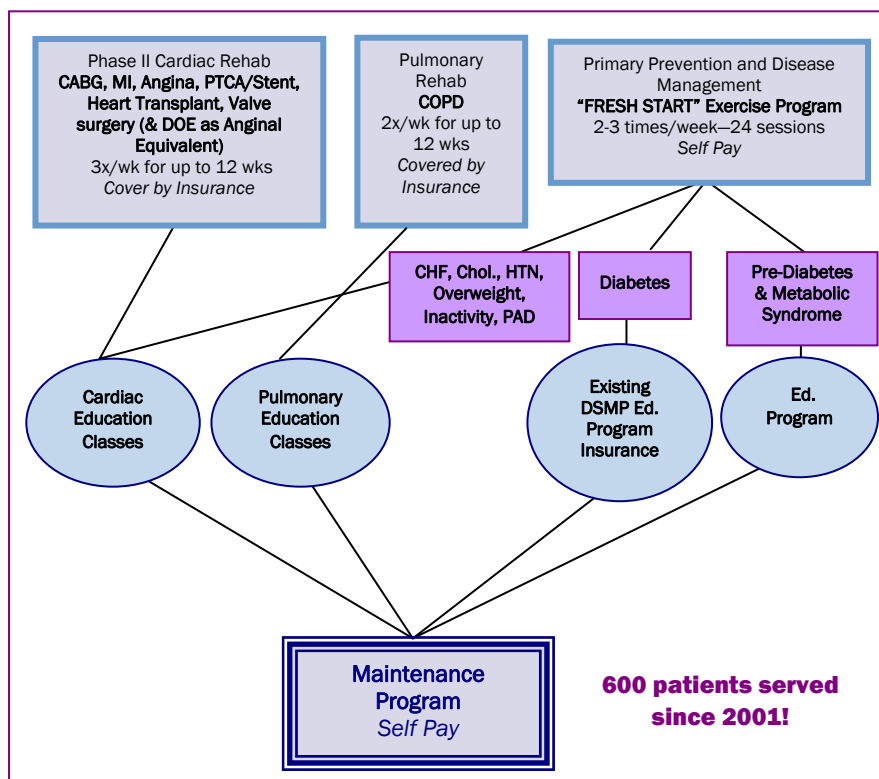
Maintenance Program

This program mainly serves as a transitional component after the completion of cardiopulmonary rehab or Fresh Start. It promotes independence and is designed for those graduates whose signs and symptoms have stabilized.

Measuring Success!

- **Over 280 cardiac rehab patients have been served since 2001.**
- **97% have increased their exercise duration.**
- **93% have met their goals.**
- **86% have increased their exercise intensity.**
- **63% have experienced improved quality of life.**
- **The maintenance program boasts a 41% retention rate among enrollees.**

Chronic Disease Management Model



The chronic disease management model illustrates the variety of patients served in the Wellness Center and the clinical pathways they follow. After a referral from the patient's primary care provider is obtained, the staff guides them through an individualized exercise and education program tailored to meet their specific needs. Upon successful completion, the maintenance program is available as staff encourages participants to make healthy eating and exercise lifelong commitments.



SPOTLIGHT #3: WELLNESSWORKS

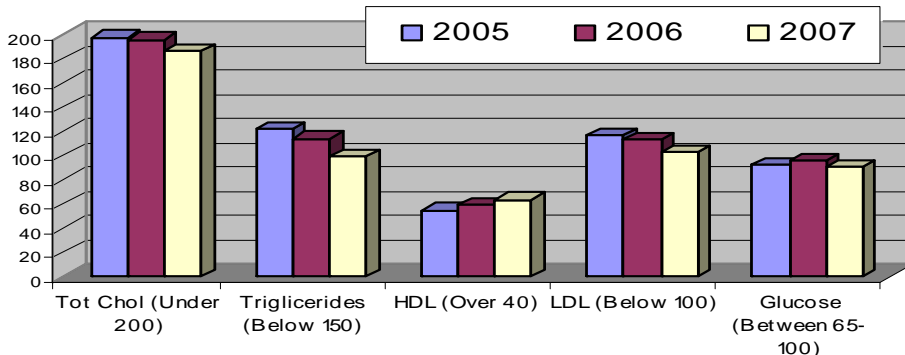
Saint Elizabeth's has long been committed to improving employee health through the sponsorship of many wellness initiatives. The formation of a Wellness Team in 2004 has led to a plethora of wellness initiatives that are proving to be wise investments.

One of the more significant activities is the sponsorship of an annual wellness screening. Free to employees and spouses, this screening collects and measures total cholesterol, HDL, LDL, triglycerides, blood glucose, blood pressure, body mass index, abdominal girth, physical activity and nutrition habits, and tobacco use. Every participant receives a personalized results spreadsheet, with annual comparisons, which is also given to their physician. An individualized consultation, reviews outcomes, identifies risks,

recommends health improvement opportunities, and refers for further assessment and/or treatment. Lab results are proof that these activities are indeed working and worth the investment (see below).

Most recently, the Wellness Team added more in-depth programs that focus on obesity and smoking. The introduction of LEARN (Lifestyle Exercise Attitudes Relationships Nutrition), which targets our workforce offered a comprehensive weight management program with proven results! Thirty-five participants completed a **12-week LEARN program, resulting in 373 pounds lost; 80.5 % body fat lost, and 317 inches lost.** A nicotine independence program, offered to staff, resulted in a **62.5% success rate.**

Saint Elizabeth's Medical Center Wellness Program Screening Improvements from 2005 - 2007



"I think the power of the group was an important factor for me. Watching everyone succeed and do well motivated me to do the same. We helped and encouraged one another. I've made many attempts in the past to do it on my own—but it never stuck! This time, it worked! It was the support of the group that kept me committed. I lost weight. I have more energy. I'm not as tired because I'm sleeping better. Running is even easier!"
John Hust, employee and LEARN participant.

Employee Wellness At A Glance

- Onsite Wellness Center, featuring over 20 pieces of cardiovascular equipment and a complete set of strength-training weight machines
- Indoor and Outdoor Marked Walking Routes
- Health Risk Assessments
- Annual Employee Screenings
- Tobacco Cessation Program and Resources
- Tobacco Free Campus
- LEARN Weight Management
- Wellness Activities
- Heart Healthy Cafeteria Selections
- Lunch & Learns
- Spouse/Family Involvement
- Family Fun Events

WellnessWorks Activities:

- Wellness Kick Offs
- Olympics 2006
- March Madness
- Fill Up on Fiber
- Wage the Weight
- VFW for Health
- Buddy Up
- HeartSmart
- Step by Step
- Spring into 10,000 steps
- 12 Days of Wellness
- Holy Yoga

Incentives:

- Cash Prizes
- Drawings
- Wellness Rewards
- Give-Aways

SPOTLIGHT #4: COMMUNITY OUTREACH

We are helping our residents – elementary children, seniors, and every age in between – make healthy lifestyles a lifelong habit. Through community partnerships, worksite collaboratives, health education, wellness screenings, and fun & fit activities, Saint Elizabeth's is energizing and inspiring its communities to take control of their health by reducing their risk factors and managing chronic disease.



Hi Ho...It's All for Health We Go!

A shining example of community health is Saint Elizabeth's *Hi Ho, Hi Ho...It's All for Health We Go!* This healthy kids program set out to build

awareness of the importance of physical activity and healthy eating among children and parents. The eight-week program involved equipping Wabasha-Kellogg elementary students with pedometers that measured steps, and snack chats that taught valuable lessons about health and wellness. A comprehensive packet was thoughtfully created that incorporated log sheets, snack chat activities, and parent handouts. Tracking of steps, minutes of exercise, and number of fruits and vegetables consumed was encouraged to highlight progress made among the classes. In the end, 300 children logged close to **60,000,000 steps and consumed over 30,400 servings** of fruits and vegetables!

A new and improved four-week version was rolled out to a second school in Wabasha, resulting in 113 students logging **15 million steps (that's 7,630 miles) and consuming over 2,752 servings** of fruits and vegetables!

Community-wide activities promote wellness:

Wabasha Walks the Mississippi • Ring Around Wabasha • Riverboat Days Run • Diabetes Screenings • Tobacco Cessation • Cholesterol & Blood Pressure Screenings • Women's Night Out • Senior Health Fairs • Wellness and Health Education Classes • Grocery Store Label-Reading Tours



"I feel good knowing that I'm helping a group that has had few alternatives. For many older adults, going to a gym or fitness club is not an option because of physical limitations, financial expense, or lack of exercise knowledge. Fit City Seniors provides a safe and affordable alternative for monitored exercise. It is amazing to see participants who have arthritis, joint replacements, or back injuries experience relief and improved health." **Christina Mroz, Instructor**



Fit City Seniors

Thanks to a grant from the Blue Cross/Blue Shield Prevention Minnesota program, Saint Elizabeth's Medical Center is a member of a community-wide collaborative that is targeting inactive seniors (55+). Fit City Seniors motivates seniors to take more steps and incorporate healthful food choices into their daily diet. Four six-week series, along with special events, activities, and classes are engaging, educating, and empowering seniors to move for improved health. After a successful kickoff, 30+ seniors – and the number continues to grow- have been attending chair aerobics classes, walking events, and nutrition classes. In year two, Fit City Seniors is self-sustaining and meets twice a week at Saint Elizabeth's.

Fit City Seniors Outcomes

- Reduction in symptoms of arthritis and fibromyalgia
- Improvement in strength, flexibility and endurance
- Reduction in blood pressure
- Decrease in medication usage
- Improved quality of life and sense of well-being
- Increase in physical activity levels and fruit/vegetable consumption