



## **Compliance Matters:**

### **Improving Employee Health Gives Self-Funded Employers Better Cost Control**

#### **September 2011**

When CoreSource, a leading third-party employee benefits administrator, launched *YourCare* health and wellness programs in January 2007 to 10 clients with 23,400 members, the goal was to control self-funded employers' healthcare spending by focusing on member compliance with evidence-based standards of care. To determine the program's effect on cost trends and health outcomes, CoreSource conducted comprehensive research involving the claims data of members across the country over a two-year period.

*YourCare* has since grown to provide services to more than 130 groups with more than 300,000 members. Industry research indicates that improving compliance with evidence-based standards of care for chronic disease should result in lower total health plan costs because compliant members are less likely to need emergency room treatment or admission to hospitals. An analysis of our book of business supports that finding.

#### **Key Findings**

Our research of 2008 and 2009 data found that:

- *YourCare* participants with chronic conditions had better health outcomes than members who did not participate because they complied better with evidence-based standards of care.
- Because of improved compliance, *YourCare* participants with chronic disease experienced a higher level of stable medical conditions with fewer complications and a reduced need for emergency room treatment and hospital admissions.
- *YourCare* generates an estimated return on investment of 4.7 to 1 by engaging members in the program and encouraging them to be compliant in the most cost-effective way possible.\*
- Employers offering *YourCare* gained better control over their healthcare costs compared to similar CoreSource clients that did not use the health and wellness programs. From 2008 to 2009, clients that did not implement the program had, on average, an 8.9 percent increase in healthcare costs, while employers with *YourCare* experienced an average increase of only 4.1 percent.
- Employer groups that used *YourCare* had better compliance with preventive cancer screenings for women (mammography and Pap smears), which led to earlier breast cancer diagnoses for nearly three-quarters of at-risk women who are participating in the program.
- Treatment costs were significantly lower for cancer cases with early diagnoses: 10.4 percent lower for women who had either a mammogram or a Pap smear and 21.9 percent lower for women who had both tests.

\* ROI calculation is available in the Appendix on Page 7.

## Background

YourCare focuses on compliance with evidence-based standards of care for managing chronic conditions and preventive health screenings and tests, while encouraging one-on-one communication between members and their doctors.

Healthy members who are compliant with evidence-based guidelines for chronic disease management or who are up to date with their preventive health tests may not ever be contacted by YourCare. However, if members with chronic conditions are not following evidence-based standards of care, YourCare will notify them about “gaps” in their care and encourage them to make an appointment with their doctor. Everyone is so busy these days, so it’s easy for a patient with a chronic condition to miss a regularly scheduled blood test or for a diabetic to miss an annual eye exam. Meanwhile, members who are overdue for important preventive tests are mailed friendly reminders.

The program also goes beyond traditional disease management by identifying high-risk employees for targeted interventions. Our Registered Nurses reach out to help high-risk members get back on track before serious illness occurs and costly healthcare bills are incurred.

### **YourCare provides:**

- Personalized preventive care reminders to increase the use of wellness benefits and preventive health screenings;
- Chronic condition monitoring to help members with chronic conditions comply with evidence-based standards of care by identifying gaps in their treatment plan;
- Focused disease management to identify members who have not yet incurred major medical costs but are at a high risk of doing so in the future;
- Health coaching to support members who want to quit smoking, better manage stress, lose weight or change unhealthy lifestyle behaviors;
- Self-service tools to help members take charge of their own health; and
- Onsite health screenings to collect important data for our nurses and coaches, so they can be most effective in helping members reach their health goals.

## Purpose of the study

CoreSource studied its own book of business to assess the effectiveness of YourCare health and wellness programs by determining:

- How YourCare programs influenced member compliance with evidence-based standards of care for treatment of chronic disease;
- How YourCare programs influenced member compliance with recommended preventive health screening schedules; and
- How YourCare programs affected employers’ benefit plan costs.

## Chronic Condition Monitoring

### **YourCare targets plan members with:**

- Asthma
- Chronic musculoskeletal pain (back pain, neck pain and osteoarthritis)
- Chronic obstructive pulmonary disease
- Coronary artery disease
- Congestive heart failure
- Diabetes
- Depression
- High blood pressure
- High cholesterol

## YourCare's Effect on Compliance with Standards of Care for Treatment of Chronic Conditions

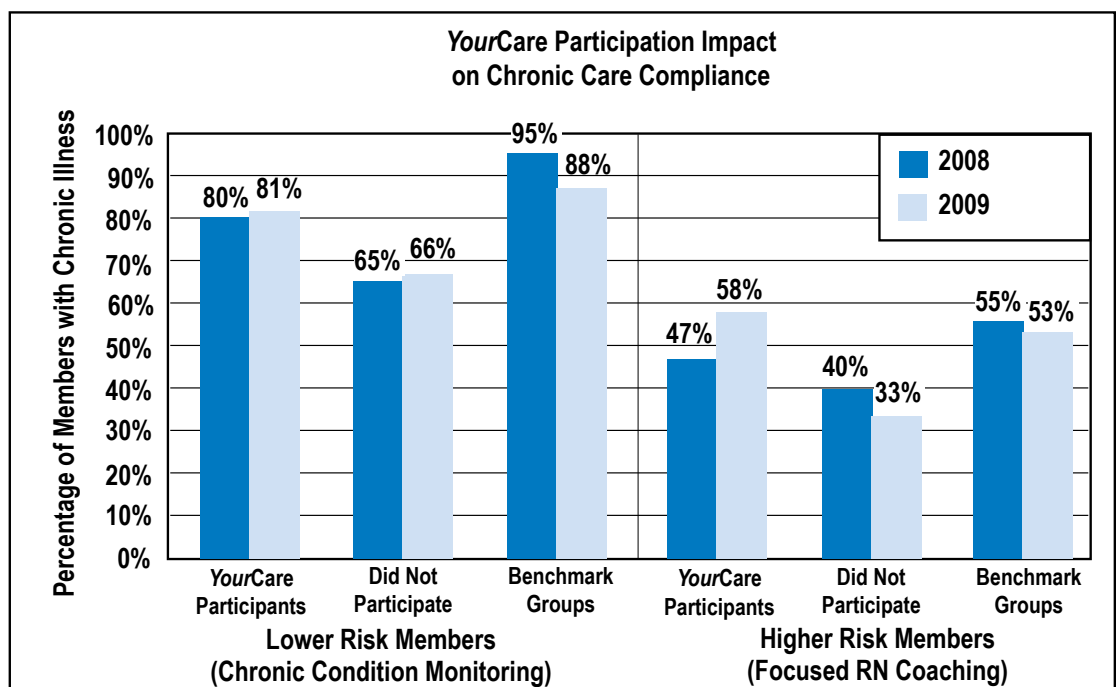
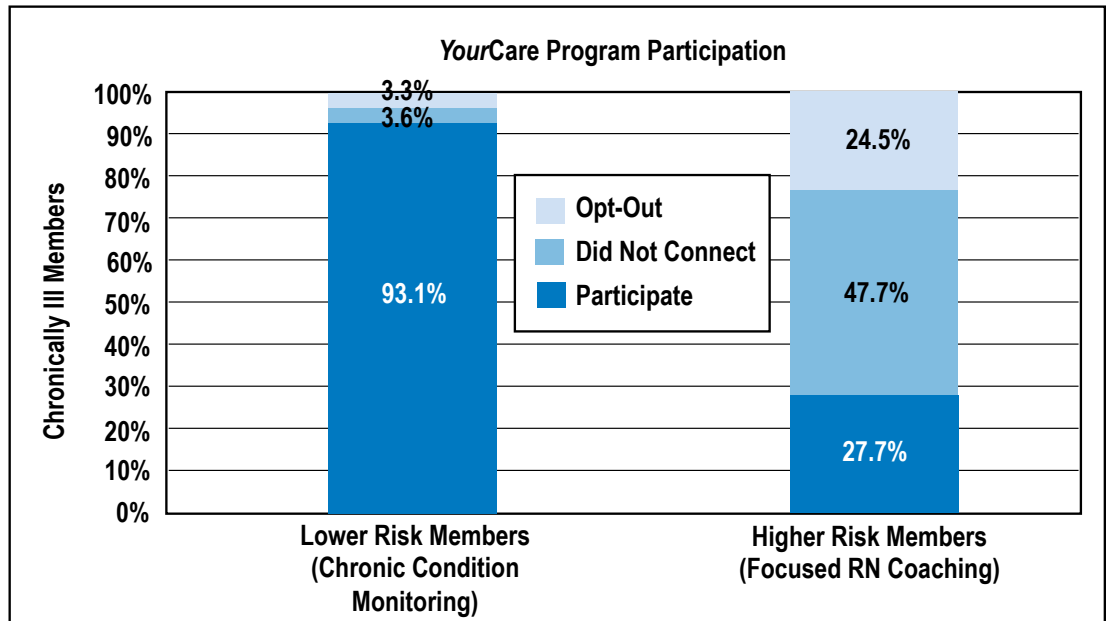
To reduce healthcare costs and improve members' health, *YourCare* focuses on improving compliance with evidence-based standards of care for treatment of chronic conditions in two ways.

First, *YourCare* determines whether members with chronic conditions are following standards of care for treatment of their disease(s). If any gaps in care are identified, *YourCare* alerts members and their physicians about opportunities to improve treatment and encourages the scheduling of an office visit to determine the next steps in managing the disease(s).

Second, *YourCare* works to identify high-risk members before serious illness occurs (and high medical bills are incurred) by using data from eligibility forms, medical and pharmaceutical claims, Health Risk Assessments and, when available, biometric screenings. *YourCare* Registered Nurses reach out to these members to encourage them to make an appointment with their doctor, schedule recommended tests or work with a Health Coach to change unhealthy lifestyle behaviors.

More than 90 percent of chronically ill members whose employers offered *YourCare* participated in the health and wellness programs. Our research found that 53 percent of high-risk members contacted by *YourCare* participated in one-on-one coaching with a *YourCare* Registered Nurse, a statistic that is well above the industry average of 30 percent, according to the Disease Management Association of America.

The chart on the right shows that *YourCare* participants complied with standards of care for treatment of chronic conditions better than nonparticipants, defined for purposes of this study as those who declined to participate or who could not be contacted.



YourCare participants experienced better health outcomes than similar members who did not participate, as demonstrated by:

- Better compliance with fewer gaps in care
- Fewer emergency room visits and hospital admissions
- More effective use of physician services and prescription medications to manage their chronic condition(s)
- Smaller increases in average annual healthcare costs for members and more members with costs under control

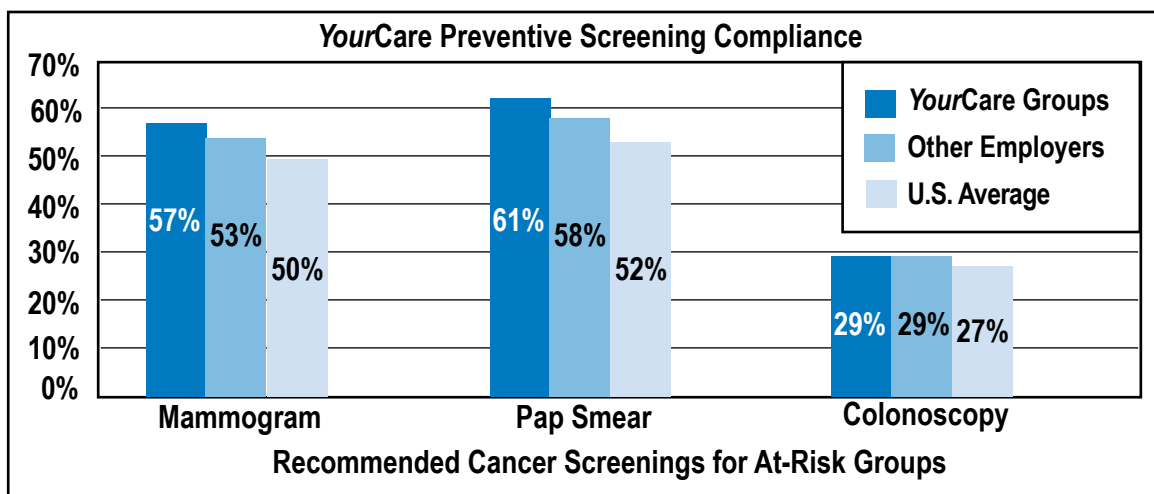
### YourCare's Influence on Compliance with Preventive Health Screenings

YourCare reminds members if they are overdue for important health screenings to help prevent disease from occurring and to detect disease early for better health outcomes and lower treatment costs.

#### Our YourCare research showed that:

- The health and wellness programs succeeded in improving compliance with recommended cancer screenings for women;
- Nearly three-quarters of women in a key risk group who were YourCare participants were diagnosed earlier with breast cancer or cervical cancer than women who did not participate; and
- Treatment costs were significantly lower for YourCare-participating women who were diagnosed earlier with cancer.

The following graph illustrates that members of health plans with YourCare complied better with mammography and Pap smear screening schedules than others without access to YourCare.



Our research found that 89 percent of cancer cases, including breast, cervical, ovarian and colon, that can be identified early by preventive screenings, occur in women who are 40 to 65 years old.

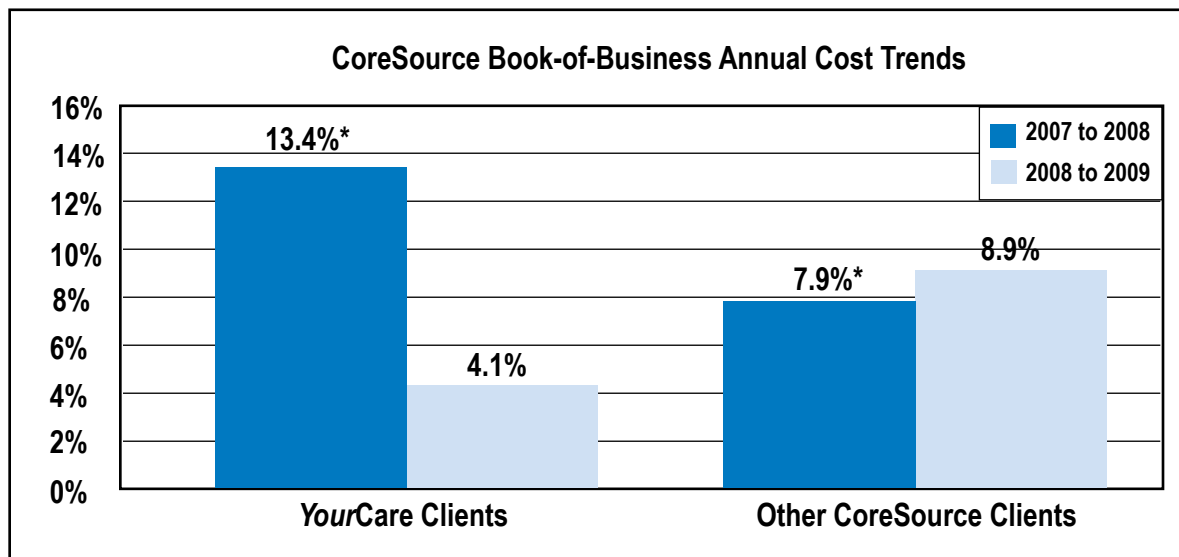
Our research also found that, because of compliance with mammograms and Pap smear screening schedules for women in that age group, nearly three-quarters of the cancer diagnoses, or 72 percent, were diagnosed earlier than for women in the same age group who were not participating in YourCare. In addition, the cost of treating these women was significantly lower: 10.4 percent less for members who had either a Pap smear or a mammogram and 21.9 percent lower for members who had both screenings.

Members with Breast, Ovarian or Cervical Cancer	Average Benefit Plan Costs per Member with Cancer	Difference in Benefit Plan Costs per Member
No Preventive Screenings	\$92,273	--
Member had either Pap smear or Mammography	\$83,111	10.4% lower
Member had both Pap smear and Mammography	\$72,404	21.9% lower

## YourCare's Impact on Health Plan Costs

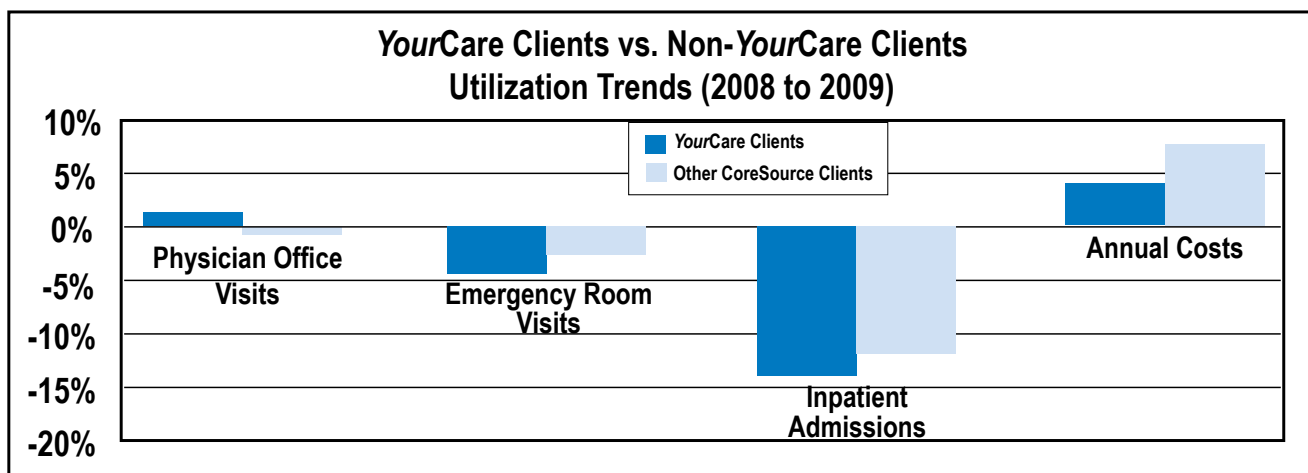
Employers that participated in *YourCare* earned an average return on investment (ROI) of 4.7 to 1, according to our research. Employers that implemented *YourCare* for at least one year gained better control over their total healthcare spend, with lower overall annual cost increases, compared to similar employers that did not use the health and wellness programs.

Employers with *YourCare* experienced an average increase of 4.1 percent in their healthcare costs from 2008 to 2009, while clients that did not implement the program had, on average, an 8.9 percent increase in costs. *YourCare*'s focus on chronic disease management and preventive health led to lower use of hospital services and higher use of generic drugs, which cost less than brand-name drugs.



\* Participants are identified for disease management during the program's first year, and savings are typically seen the following year.

Members with chronic conditions typically have higher medical costs compared to other employees because they use healthcare services and medication more often. Our research shows that employers offering *YourCare* gained more control over healthcare costs for this population than employers that did not offer the programs. Members with chronic illness who are *YourCare* participants visited their primary care physician more often, resulting in improved condition management, so they had less need to use high-cost hospital inpatient and emergency room services and prescription drugs.



## Conclusion

In 2007, CoreSource launched *YourCare* to control healthcare expenses by focusing on member compliance, and an analysis of our own book of business showed that the suite of health and wellness programs achieved that goal.

Our research found that *YourCare* participants who have chronic conditions had better health outcomes compared to those who did not participate because *YourCare* members complied better with evidence-based standards of care. Because compliant members generally had stabilized medical conditions, they avoided costly emergency room treatment and inpatient hospitalizations, all of which helped control employers' healthcare spend.

From 2008 to 2009, employers offering *YourCare* to members of their health plan earned an ROI of 4.7 to 1. They experienced an average increase of 4.1 percent in their healthcare costs, while clients that did not implement the program had, on average, an 8.9 percent increase in costs.

Because of better compliance with mammograms and Pap smear screening schedules, nearly three-quarters of the diagnoses of breast and cervical cancer for *YourCare* members in an at-risk age group occurred earlier than for women in this group who were not participating. The cost of treating the cancer cases with early diagnoses was significantly lower: 10.4 percent less for members who had either a Pap smear or a mammogram and 21.9 percent lower for members who had both screenings.

In January 2010, CoreSource added health coaching to *YourCare* to help improve members' unhealthy lifestyles. Most members who have contacted a health coach are working to address mental health issues, including stress, or want to lower their high cholesterol or high blood pressure; others want to lose weight or stop smoking. In the future, CoreSource will analyze their outcomes and release the results.

For more information, please contact us at **800.832.3332**, or e-mail us at **[inquiries@coresource.com](mailto:inquiries@coresource.com)**.

## YourCare's Impact on Member Health and Health Plan Costs: ROI Calculation

The YourCare program generates a return on investment (ROI) of 4.7 to 1. The estimated savings were calculated using a utilization-based approach recommended by the Disease Management Association of America (DMAA), which is based on relative changes in hospital utilization (patient days and emergency room visits) for participants as compared to non-participants or other benchmark groups. The savings are based on the average cost per patient per day or emergency room visit applied to the difference in hospital services used.

### Utilization-Based ROI Results

#### DMAA-Recommended Approach – Based on Change in Utilization\*

Comparison of Utilization	Benchmark	YourCare	NonParticipants	YourCare Totals
<b>Patient days per person per year</b>	0.310	0.296	0.531	0.311
- Change from prior year	0.144	0.062	0.153	0.082
- Projected current year		0.377	0.531	0.399
Actual vs. Projected difference				(0.088)
<b>ER visits per person per year</b>	1.177	0.194	0.318	0.209
- Change from prior year	0.001	(0.011)	0.049	(0.005)
- Projected current year		0.206	0.318	0.222
Actual vs. Projected difference				(0.013)

Estimated Savings of YourCare's Impact on Change in Hospital Utilization	Actual vs. Projected PMPY Difference	Annualized Usage Reduction	Average Cost per Hospital Encounter	YourCare Savings PMPY Estimate
Hospital inpatient days	(0.088)	1,077	\$3,840	\$339
ER room visits	(0.013)	159	\$1,150	\$15
YourCare estimated impact				\$353

Estimated ROI per dollar in YourCare fees = \$4.74\*\*

ROI based on annual YourCare fees per member/participant .....\$17.40

(Based on average of 23 percent of all participants with a chronic illness potentially impacted by YourCare assuming lower turnover for members with a chronic illness as compared to all other members.)

Estimated average annual fees per potential YourCare participant .....\$74.50

\* Only includes members participating on benefit plan for 24 months or more excluding retirees and COBRA participants. Members potentially impacted by YourCare excludes members with cancer, large case management or prior year costs exceeding \$25,000.

\*\* Estimated ROI per dollar in YourCare fees (\$353 / \$74.50 = \$4.74)

