

## PROOF POSITIVE:

Study demonstrates  
Interactive Health Outcomes-Based  
Wellness Program lowers medical costs  
and increases productivity

*Results of a multi-year, independent review conducted by  
Zoe Consulting, Inc., a nationally recognized consulting company.*



# Abstract

Interactive Health is the market leader and innovator in outcomes-based employee health and wellness. They take a scientific approach to wellness, leveraging clinical data from health evaluations to measure, motivate and reward each individual on the pathway to better health. Their outcomes-based program rewards individual success based on achieving personalized clinical goals. When employees improve their health, employers gain competitive advantage through reduced healthcare costs and improved worker productivity. Currently, Interactive Health provides a health and wellness program to over 1,400 employers nationally.

To measure the effectiveness of the Interactive Health outcomes-based program, a third party consulting company, C. Everett Koop winner Zoe Consulting, Inc., analyzed medical claim data over a multi-year period. The study was comprised of two parts. In part one, Zoe Consulting compared medical costs of employers using the Interactive Health program versus employers that did not use Interactive Health. In part two, Zoe Consulting measured the financial impact of the Interactive Health program on individual clients' medical costs and productivity.

# Findings

Zoe Consulting concluded that the Interactive Health program had a *positive impact on organizational financial performance*. The study demonstrated:

- Interactive Health clients had a 20% *lower medical spend* compared to employers not using the Interactive Health program
- The Interactive Health program *reduced medical spend* vs. forecast by up to \$1,332 per member per year (PMPY)
- Interactive Health members *returned to work sooner* than claimants who did not participate in the Interactive Health program
  - 11 days sooner on average from workers' compensation
  - 16.8 days sooner on average from short term disability
- The Interactive Health program on average saved \$2,554 per workers' compensation claimant and \$451 per short term disability claimant

# Methodology

The purpose of this multi-year, independent study was to research the financial impact of the Interactive Health wellness and health management program.

The overall objectives of the study were to analyze:

- Medical cost trends of Interactive Health clients vs. non-client employer groups
- Medical costs and claims trends for select Interactive Health clients vs. forecast to determine impact to individual clients
- The effect of productivity (workers' compensation and short term disability) on financial performance

## *The study was comprised of two parts:*

**Part 1:** The first part was a broad-range macro analysis comparing Interactive Health clients with companies not utilizing the Interactive Health program from 2008-2011. Zoe Consulting, Inc. looked at a population size of 130,000 representing a total of 275 employer groups.

In order to provide an unbiased estimation of the Interactive Health program, propensity score matching was used to identify populations that were similar to the Interactive Health-studied employer groups. This comparison control group was based on matching variables for age, gender and medical services utilization (emergency room visits, physician visits, and percent of population with core conditions). After propensity score matching, the study population was modified to focus on 22,500 lives across 56 employer groups.

**Part 2:** The second part of the study concentrated solely on three additional Interactive Health clients. Zoe Consulting analyzed the Interactive Health program's impact on three different employer types – financial, manufacturing, distribution – together having a study population of 34,600 health plan members (employees and spouses). Data was compiled from 2006-2010 for the manufacturing and distribution clients and from 2008-2010 for the financial client.

The study process included a cost trend analysis for all eligible plan members to determine the differential between forecasted and actual medical costs on a per member per month (PMPM) basis. Forecasts were based on a regression analysis that returned the predicted exponential growth or decay curve that best fit a set of known historical PMPM values. PMPM values were based on total dollars allowed to eliminate plan design bias.

The study analysis accomplished the following:

- Established baseline and forecast trends
  - Reviewed medical and productivity (workers' compensation and short term disability) claims
  - Used forecast trends from history and compared actual outcomes and trends to baseline
- Compared patterns to baseline and actual impact on trends
- Provided reports of the impact on healthcare trends

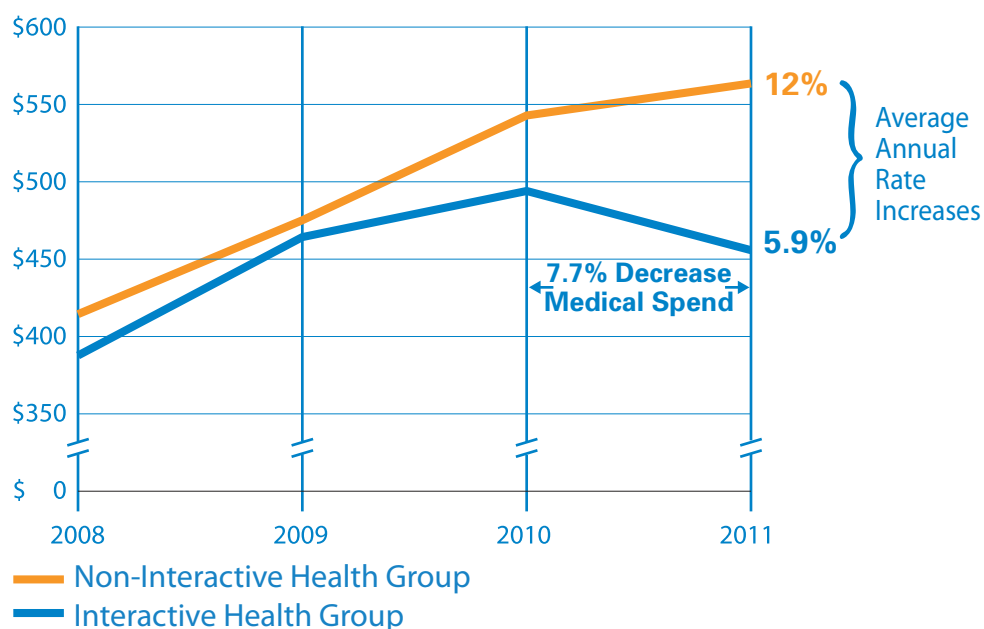
Zoe Consulting's study methodology included a peer review process incorporating biostatisticians and other subject matter experts. Zoe Consulting included all medical costs, including catastrophic cases, in their study methodology. The cost of the Interactive Health program was included in medical claims.

## STUDY FINDINGS

## Impact on Medical Costs: Interactive Health Clients vs. Non-Interactive Health Employer Groups

**Overview:** The chart on this page looks at the aggregate impact on medical spend across a study population of 56 employer groups: 23 control groups (non-Interactive Health) and 33 clients using the Interactive Health program. The goal was to determine medical spend of Interactive Health clients compared to groups not using Interactive Health. All differences were averaged out between the two group populations by using propensity score matching to take into account variances in age, gender and medical services utilization (emergency room visits, physician visits, and percent of population with core conditions). The costs for the Interactive Health program are included in the medical costs shown below.

## Medical Spend (PMPM): Interactive Health Clients vs. Non-Interactive Health Employer Groups



## Key takeaways:

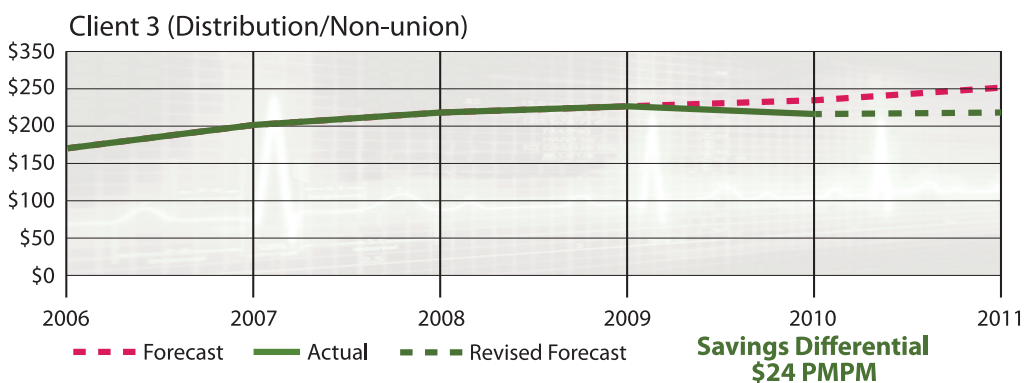
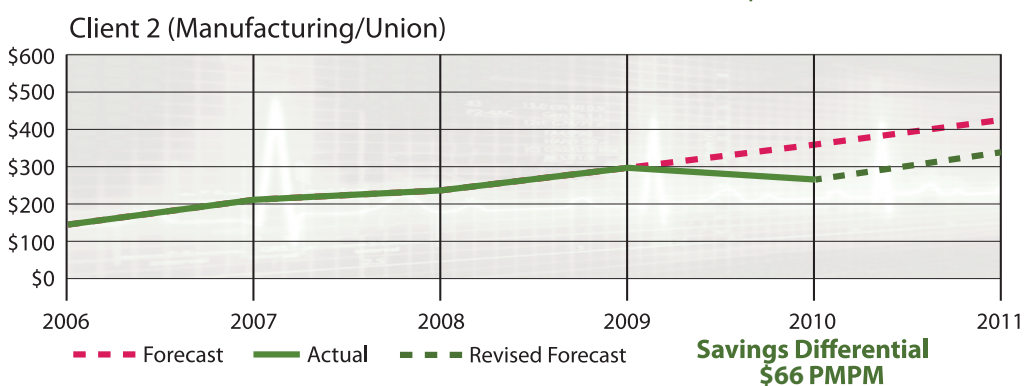
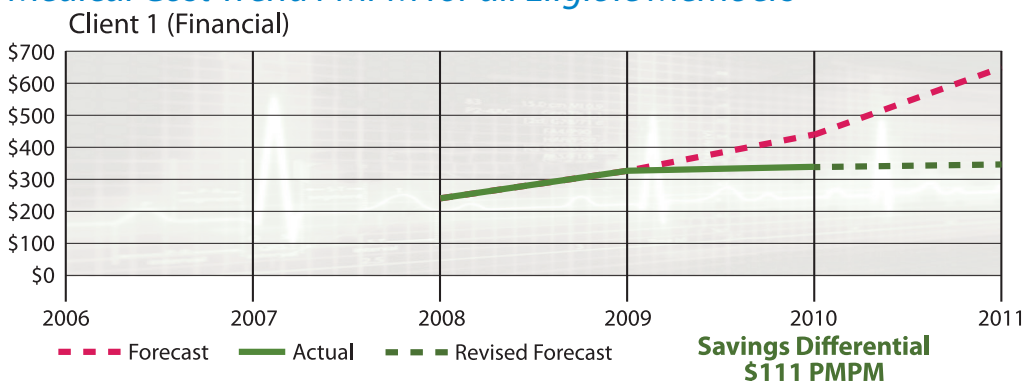
- There was an overall *favorable trending and reduction in medical spend* for employers with the Interactive Health program
  - Interactive Health clients had 20% lower medical spend compared to employers not using Interactive Health programs
  - Interactive Health clients had lower average annual rate increases
    - 5.9% Interactive Health Clients
    - 12% Employers not using Interactive Health
  - From 2010 to 2011, Interactive Health clients had a significant reduction of 7.7% in medical spend

## STUDY FINDINGS

## Impact on Medical Costs: Cost Trend Analysis on Clients

**Overview:** Zoe Consulting, Inc. conducted an in-depth audit of three Interactive Health clients from the financial, manufacturing, and distribution sectors. The process included a cost trend analysis for all eligible plan members to determine the differential between forecasted and actual medical costs on a per member per month (PMPM) basis. The findings below indicate actual costs fell below the projected costs due to the positive impact of the Interactive Health program.

## Medical Cost Trend PMPM for all Eligible Members



## Methodology:

- Forecasts are based on a regression analysis that returns the predicted exponential growth or decay curve that best fits a set of known historical PMPM values
- PMPM values were based on Total Dollars Allowed to eliminate plan design bias
- This method is industry-recognized for predicting future medical costs
- The cost of the Interactive Health program is included in medical claims

## Key takeaways:

- The Interactive Health program demonstrated a *significant trend reduction in medical costs* vs. 2010 forecast across all clients studied, with even greater projected savings in 2011:
  - Financial Services: \$1,332 annual savings per member
  - Manufacturing: \$792 annual savings per member
  - Distribution: \$288 annual savings per member



Interactive  
HEALTH

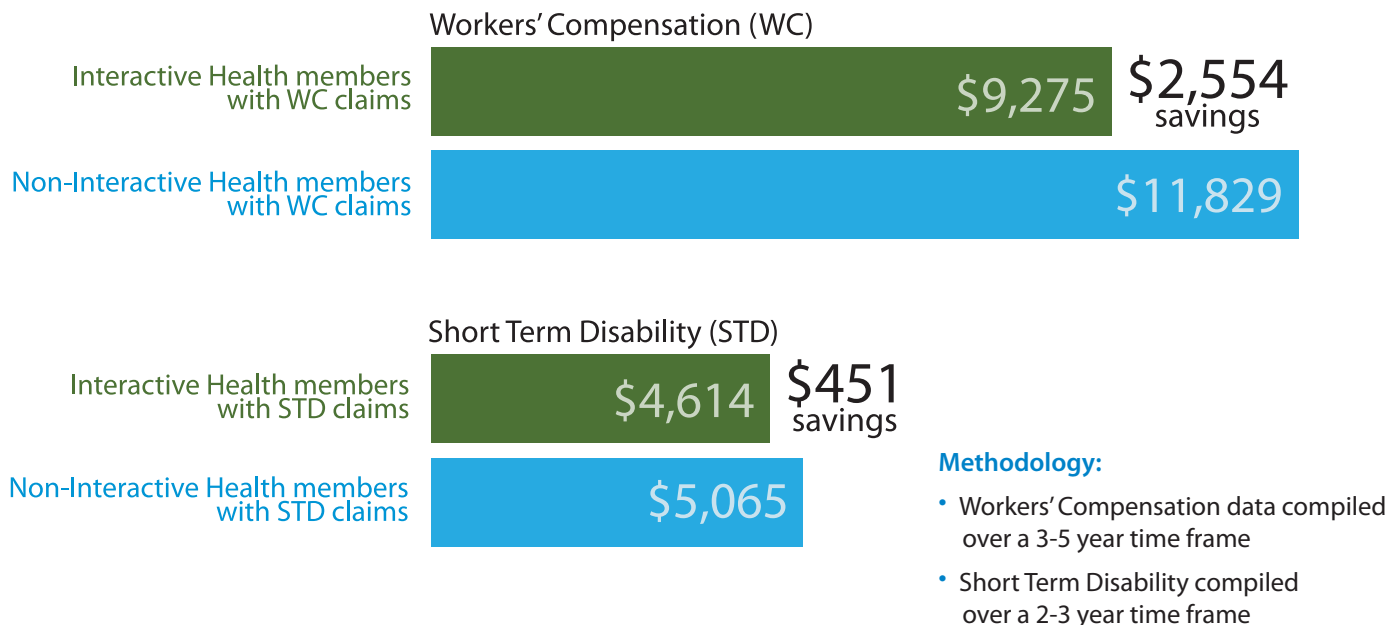
Brilliant Performance. Proven Results.

## STUDY FINDINGS

# Impact on Workforce Productivity: Average Cost Per Claimant

**Overview:** The study analyzed productivity data by comparing claimants who were Interactive Health members vs. claimants who chose not to participate in the Interactive Health program. Zoe Consulting, Inc. measured productivity through two critical components: workers' compensation and short term disability (excluding pregnancy-related disability expense). Workers' compensation is a work-related injury expense whereas short term disability is illness as well as injuries suffered outside of work. The bar graphs below identify the savings demonstrated by Interactive Health members vs. non-Interactive Health participants.

## Workers' Compensation and Short Term Disability Average Annual Cost Per Claimant



### Key takeaways:

- Interactive Health members had **lower claim costs** vs. claimants who chose not to participate in the Interactive Health program
  - Average workers' compensation cost per claimant was \$2,554 lower for Interactive Health members
  - Average short term disability cost per claimant was \$451 less for Interactive Health members



## STUDY FINDINGS

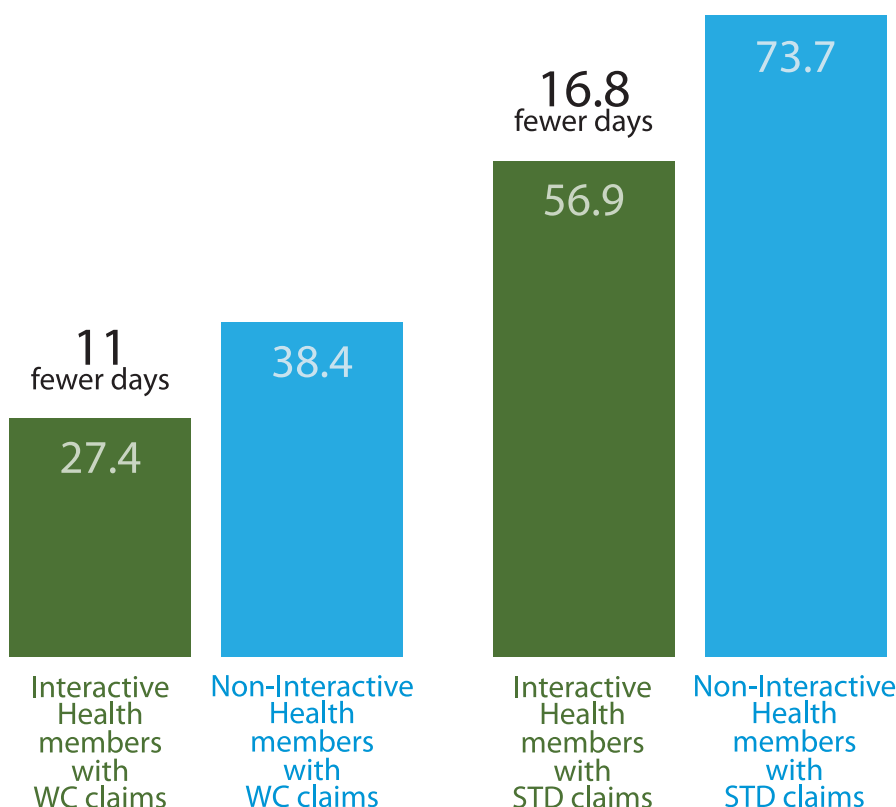
### Impact on Workforce Productivity: Days Lost Per Claimant

**Overview:** Data clearly proved the positive impact on productivity (workers' compensation and short term disability) as measured in fewer days absent from work. Interactive Health members returned to work sooner than claimants who chose not to participate in the Interactive Health program. This demonstrates the improved recoverability the Interactive Health program provides. Healthier employees are less prone to injury or the risk of serious disease.

#### Average Days Absent Per Workers' Compensation & Short Term Disability Claimant

##### Workers' Compensation (WC)

##### Short Term Disability (STD)



##### Methodology:

- Workers' Compensation data compiled over a 3-5 year time frame
- Short Term Disability compiled over a 2-3 year time frame

#### Key takeaways:

- Interactive Health members *returned to work sooner* than claimants who did not participate in the Interactive Health program
  - 11 days sooner on average from workers' compensation
  - 16.8 days sooner on average from short term disability
- The recoverability of Interactive Health members was a function of their overall health
- Quicker returns to work have a *positive financial effect* through lower payroll replacement costs

## Conclusion

This multi-year, independent study proved without a doubt that the Interactive Health outcomes-based wellness program is effective at controlling company medical costs and improving workplace productivity. Interactive Health treats wellness as a quantifiable science and uses biometric data to drive improved clinical outcomes. The Interactive Health approach demonstrated successful results across all financial measurements studied.

Zoe Consulting, Inc. recommends the Interactive Health program for employer groups searching for a proactive strategy to reduce or maintain their medical cost trend and gain competitive advantage in today's marketplace.

The Zoe Consulting findings clearly demonstrate:

- Interactive Health clients had a 20% *lower medical spend* compared to companies not using Interactive Health
- The Interactive Health program reduced medical spend vs. forecast by up to \$1,332 per member per year (PMPY)
- Interactive Health members *returned to work sooner* than claimants who did not participate in the program
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Zoe Consulting clearly found that the Interactive Health program achieved promising results by reducing a client's overall medical expenses and productivity losses.

Further, the more integrated the Interactive Health program was the better the results. Incorporating care connection, outcomes-based incentives, and linking program resources to individual health risk all had a positive impact on reducing medical cost trends and improving productivity.

In summary, the study proved that the Interactive Health outcomes-based program, which integrates employee health data with a rewards-based suite of tools, is the *optimal option* to maximize financial benefits.

*"We have 2,000 employees, 13 facilities and manufacture steel. In heavy manufacturing, it's critical to keep medical spend down. Since working with Interactive Health, we've seen more positive health choices being made by our employees. This was confirmed by the Zoe Consulting findings, which showed our medical claim spend was 4.6% lower than last year."*

*Interactive Health has definitely had a significant impact on our bottom line."*

Director of Finance,  
Manufacturing Client

*"We're in the distribution industry so if we lose an employee for any amount of time, our replacement cost is 100%. Since we've been working with Interactive Health, we've tracked average days lost to short term disability and it's 17 days lower than years prior. That's just one of the ways Zoe Consulting proved to us that the Interactive Health program was working. Sometimes it's hard to measure our productivity, but after seeing the data we have proof."*

*Numbers don't lie."*

Vice President of  
Human Resources,  
Distribution Client



## About Zoe Consulting, Inc.

Zoe Consulting, Inc. is a top-tier, nationally recognized research firm with extensive experience, expertise and custom reporting tools in the health and productivity management field. They are well regarded for delivering unbiased third party analysis that can provide a path to optimal health and financial outcomes.

Zoe Consulting has earned *national recognition* through the following:

- Two-time C. Everett Koop award-winner for outcomes achieved in maternity and disease management
- Winning the AWHP (Association for Worksite Health Promotion) Distinguished Leadership and Service Award; the American Cancer Society recognition for Program Excellence; and the Ethel Martus Lawther Award for Leadership in the Field of Health and Human Performance from UNC
- Publishing studies in leading managed care and health management journals, including best practices in program evaluation
- Offering secure information infrastructure to house data and electronically support coordination of care
- Maintaining a rigorous peer review process including physicians, epidemiologists, statisticians, technology, and data analysts
- Using academic and validated methodologies to ensure audit results are sound and defensible

# About Interactive Health

Interactive Health is the market leader and innovator in outcomes-based health management solutions for employers. Outcomes-based health programs are designed to engage employees in the management of their health through early detection and identification of risk factors. Clinical data is leveraged to measure, motivate and reward each individual as they begin a journey on the pathway to better health. Interactive Health creates a pathway to better health that is personalized based on an individual's health status. Test results from the health evaluation are also used to connect the individual's doctor to the outcomes-based program.

Each program seamlessly integrates an employee's health data with the tools and resources needed to achieve and/or maintain their personal health goal. Interactive Health takes a scientific approach to wellness and has a 20-year track record building the Healthiest Companies in America.

## CONTACT INFO

To learn more about the study results, or to find out how Interactive Health can create a corporate culture of health for your organization, please contact:

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