Workplace Health Promotion
(Wellness) Programs – Do They Really Work?
Webinar Series
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AGENDA

• Do Workplace Wellness Programs Work?
• Literature Reviews
• Wall Street Studies
• Dissemination of Best/Promising Practices

Do Health Promotion Programs Work?
What Do We Mean When We Say: A Wellness Program Works?

- “Make workers aware of their health and how it improves quality of life.”
- “High participation and engagement.”
- “Lose weight, stop smoking, exercise more.”
- “Medical claims costs should go down.”
- “Less absenteeism, fewer safety incidents.”
- “Attract the best talent.”
- “Happier workers with more energy.”
- “Create a culture of health.”

What Do We Mean When We Say: A Wellness Program Works? (con’t)

“Produce a positive return on investment (ROI)?”
Employer Per Capita Spending on Healthcare

TRENDS IN MEDICAL AND PHARMACY CLAIMS COSTS

U.S. employees' employers' average health costs have increased every year since 2007. This increase in costs is due to various factors, including rising medical expenses, increased demand for healthcare services, and inflation.

Figure 2
Comparing EHM programs based on best practice score

<table>
<thead>
<tr>
<th>Best practice score (average for group)</th>
<th>Low scorers</th>
<th>Average scorers</th>
<th>High scorers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>45</td>
<td>90</td>
<td>136</td>
</tr>
<tr>
<td>EHM spending per eligible per month</td>
<td>$6</td>
<td>$11</td>
<td>$13</td>
</tr>
<tr>
<td>Number of respondents</td>
<td>144</td>
<td>149</td>
<td>149</td>
</tr>
</tbody>
</table>


Convince me...

Why should I invest in the health and well-being of my workers?

It Seems So Logical...

If you improve the health and well-being of your employees...

- quality of life improves
- health care utilization is reduced
- absenteeism is controlled
- productivity is enhanced
Seems Like A No Brainer – Right?

What Is The Evidence Base?

- Modifiable health risks can be improved through workplace sponsored health promotion and disease prevention programs (Wilson et al., 1996, Heaney & Goetzel, 1997, Pelletier, 1991-2011, Soler et al. 2010)
- Improvements in the health risk profile of a population can lead to reductions in health costs (Edington et al., 2001, Goetzel et al., 1999, Carls et al., 2011)

Diseases Caused (At Least Partially) by Lifestyle

- **Obesity**: Cholestasis/Cholelithiasis, Coronary Artery Disease, Diabetes, Hypertension, Lipid Metabolism Disorders, Osteoarthritis, Sleep Apnea, Venous Embolism/Thrombosis, Cancers (Breast, Cervix, Colorectal, Gallbladder, Biliary Tract, Ovary, Prostate)
- **Tobacco Use**: Cerebrovascular Disease, Coronary Artery Disease, Osteoporosis, Peripheral Vascular Disease, Asthma, Acute Bronchitis, COPD, Pneumonia, Cancers (Bladder, Kidney, Urinary, Larynx, Lip, Oral Cavity, Pharynx, Pancreas, Trachea, Bronchus, Lung)
- **Lack of Exercise**: Coronary Artery Disease, Diabetes, Hypertension, Obesity, Osteoporosis
- **Poor Nutrition**: Cerebrovascular Disease, Coronary Artery Disease, Diabetes, Diverticular Disease, Hypertension, Oral Disease, Osteoporosis, Cancers (Breast, Colorectal, Prostate)
- **Alcohol Use**: Liver Damage, Alcohol Psychosis, Pancreatitis, Hypertension, Cerebrovascular Disease, Cancers (Breast, Esophagus, Larynx, Liver)
- **Stress, Anxiety, Depression**: Coronary Artery Disease, Hypertension
- **Uncontrolled Hypertension**: Coronary Artery Disease, Cerebrovascular Disease, Peripheral Vascular Disease
- **Uncontrolled Lipids**: Coronary Artery Disease, Lipid Metabolism Disorders, Pancreatitis, Peripheral Vascular Disease

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Age-Adjusted Prevalence of Obesity and Diagnosed Diabetes Among US Adults

1994

- **Obesity**: BMI ≥ 30 kg/m²
- **Diabetes**

- **Missing Data**
- **<4.0%**
- **4.0%–4.9%**
- **5.0%–5.9%**
- **6.0%–6.9%**
- **≥7.0%**

Age-Adjusted Prevalence of Obesity and Diagnosed Diabetes Among US Adults

1995

Obesity (BMI ≥ 30 kg/m²)

Diabetes

18.0%–21.9%

≥ 26.0%

< 4.5%

6.0%–7.4%

≥ 9.0%


1996

Obesity (BMI ≥ 30 kg/m²)

Diabetes

18.0%–21.9%

≥ 26.0%

< 4.5%

6.0%–7.4%

≥ 9.0%


1997

Obesity (BMI ≥ 30 kg/m²)

Diabetes

18.0%–21.9%

≥ 26.0%

< 4.5%

6.0%–7.4%

≥ 9.0%


1998

Obesity (BMI ≥ 30 kg/m²)

Diabetes

18.0%–21.9%

≥ 26.0%

< 4.5%

6.0%–7.4%

≥ 9.0%

Age-Adjusted Prevalence of Obesity and Diagnosed Diabetes Among US Adults

2003

Obesity (BMI ≥ 30 kg/m²)

- Missing Data
- 14.0%–17.9%
- 18.0%–21.9%
- 22.0%–25.9%
- ≥ 26.0%

Diabetes

- Missing Data
- 14.0%–17.9%
- 18.0%–21.9%
- 22.0%–25.9%
- ≥ 26.0%

2004

Obesity (BMI ≥ 30 kg/m²)

- Missing Data
- 14.0%–17.9%
- 18.0%–21.9%
- 22.0%–25.9%
- ≥ 26.0%

Diabetes

- Missing Data
- 14.0%–17.9%
- 18.0%–21.9%
- 22.0%–25.9%
- ≥ 26.0%

2005

Obesity (BMI ≥ 30 kg/m²)

- Missing Data
- 14.0%–17.9%
- 18.0%–21.9%
- 22.0%–25.9%
- ≥ 26.0%

Diabetes

- Missing Data
- 14.0%–17.9%
- 18.0%–21.9%
- 22.0%–25.9%
- ≥ 26.0%

2006

Obesity (BMI ≥ 30 kg/m²)

- Missing Data
- 14.0%–17.9%
- 18.0%–21.9%
- 22.0%–25.9%
- ≥ 26.0%

Diabetes

- Missing Data
- 14.0%–17.9%
- 18.0%–21.9%
- 22.0%–25.9%
- ≥ 26.0%

A Systematic Review of Selected Interventions for Worksite Health Promotion
The Assessment of Health Risks with Feedback


Summary Results and Team Consensus

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Body of Evidence</th>
<th>Consistent Results</th>
<th>Magnitude of Effect</th>
<th>Finding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol Use</td>
<td>9</td>
<td>Yes</td>
<td>Variable</td>
<td>Sufficient</td>
</tr>
<tr>
<td>Fruits &amp; Vegetables</td>
<td>9</td>
<td>No</td>
<td>0.09 serving</td>
<td>Insufficient</td>
</tr>
<tr>
<td>% Fat Intake</td>
<td>13</td>
<td>Yes</td>
<td>-5.4%</td>
<td>Strong</td>
</tr>
<tr>
<td>% Change in Those Physically Active</td>
<td>18</td>
<td>Yes</td>
<td>+15.3 pct pt</td>
<td>Sufficient</td>
</tr>
<tr>
<td>Tobacco Use Prevalence</td>
<td>23</td>
<td>Yes</td>
<td>-2.3 pct pt</td>
<td>Strong</td>
</tr>
<tr>
<td>Cessation</td>
<td>11</td>
<td>Yes</td>
<td>+3.8 pct pt</td>
<td>Sufficient</td>
</tr>
<tr>
<td>Seat Belt Non-Use</td>
<td>10</td>
<td>Yes</td>
<td>-27.6 pct pt</td>
<td>Sufficient</td>
</tr>
</tbody>
</table>
Summary Results and Team Consensus

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Body of Evidence</th>
<th>Consistent Results</th>
<th>Magnitude of Effect</th>
<th>Finding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diastolic blood pressure</td>
<td>17</td>
<td>Yes</td>
<td>Diastolic: -1.8 mm Hg</td>
<td>Strong</td>
</tr>
<tr>
<td>Systolic blood pressure</td>
<td>19</td>
<td>Yes</td>
<td>Systolic: -2.6 mm Hg</td>
<td>Strong</td>
</tr>
<tr>
<td>Risk prevalence</td>
<td>12</td>
<td>Yes</td>
<td>-4.5 pct pt</td>
<td></td>
</tr>
<tr>
<td>BMI</td>
<td>6</td>
<td>Yes</td>
<td>-0.5 pt BMI</td>
<td>Insufficient</td>
</tr>
<tr>
<td>Weight</td>
<td>12</td>
<td>No</td>
<td>-0.56 pounds</td>
<td></td>
</tr>
<tr>
<td>% body fat</td>
<td>5</td>
<td>No</td>
<td>-2.2% body fat</td>
<td></td>
</tr>
<tr>
<td>Risk prevalence</td>
<td>5</td>
<td>No</td>
<td>-2.2% at risk</td>
<td></td>
</tr>
<tr>
<td>Total Cholesterol</td>
<td>19</td>
<td>Yes</td>
<td>-4.8 mg/dL (total)</td>
<td>Strong</td>
</tr>
<tr>
<td>HDL Cholesterol</td>
<td>8</td>
<td>No</td>
<td>+.94 mg/dL</td>
<td></td>
</tr>
<tr>
<td>Risk prevalence</td>
<td>11</td>
<td>Yes</td>
<td>-6.6 pct pt</td>
<td></td>
</tr>
<tr>
<td>Fitness</td>
<td>5</td>
<td>Yes</td>
<td>Small</td>
<td>Insufficient</td>
</tr>
</tbody>
</table>

Summary Results and Team Consensus

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Body of Evidence</th>
<th>Consistent Results</th>
<th>Magnitude of Effect</th>
<th>Finding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated Risk</td>
<td>15</td>
<td>Yes</td>
<td>Moderate</td>
<td>Sufficient</td>
</tr>
<tr>
<td>Healthcare Use</td>
<td>6</td>
<td>Yes</td>
<td>Moderate</td>
<td>Sufficient</td>
</tr>
<tr>
<td>Worker Productivity</td>
<td>10</td>
<td>Yes</td>
<td>Moderate</td>
<td>Strong</td>
</tr>
</tbody>
</table>

What About ROI?
Critical Steps To Success

- Financial ROI
- Reduced Utilization
- Risk Reduction
- Behavior Change
- Improved Attitudes
- Increased Knowledge
- Participation
- Awareness

Health Affairs ROI Literature Review

Abstract: Amid soaring health spending, there is growing interest in workplace disease prevention and wellness programs to improve health and lower costs. In a critical multivariate analysis of the literature on costs and savings associated with such programs, we found that while costs fell by about $5.22 for every dollar spent on wellness programs and that absenteeism costs fell by about $2.27 for every dollar spent. Although further exploration of the mechanisms at work and broader applicability of the findings is needed, this return on investment suggests that the wider adoption of such programs could prove beneficial for budgets and productivity as well as health outcomes.
Results - Medical Care Cost Savings

<table>
<thead>
<tr>
<th>Description</th>
<th>N</th>
<th>Average ROI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studies reporting costs and savings</td>
<td>15</td>
<td>$3.37</td>
</tr>
<tr>
<td>Studies reporting savings only</td>
<td>7</td>
<td>Not Available</td>
</tr>
<tr>
<td>Studies with randomized or matched control group</td>
<td>9</td>
<td>$3.36</td>
</tr>
<tr>
<td>Studies with non-randomized or matched control group</td>
<td>6</td>
<td>$2.38</td>
</tr>
<tr>
<td>All studies examining medical care savings</td>
<td>22</td>
<td>$3.27</td>
</tr>
</tbody>
</table>

Results – Absenteeism Savings

<table>
<thead>
<tr>
<th>Description</th>
<th>N</th>
<th>Average ROI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studies reporting costs and savings</td>
<td>12</td>
<td>$3.27</td>
</tr>
<tr>
<td>All studies examining absenteeism savings</td>
<td>22</td>
<td>$2.73</td>
</tr>
</tbody>
</table>

Goetzel’s rule: 
An ROI of 1:1 is good enough…

…if you can demonstrate health improvement!
Poor Health Costs Money

Drill Down…
- Medical
- Absence/work loss
- Presenteeism
- Risk factors

Top 10 Most Costly Physical Health Conditions

Medical, Drug, Absence, STD Expenditures (1999 annual $ per eligible), by Component

The Big Picture: Overall Burden of Illness by Condition

Using Average Impairment and Prevalence Rates for Presenteeism

($23.15/hour wage estimate)

Prevalence of Certain Conditions

An Unhealthy Workforce
Solving America’s Health Care Crisis Starts with Health Care Workers

Source: Goetzel, Long, Comstock et al. JOEM 46:4, April, 2004

Source: Aetna 2011 book of business study
## Higher Healthcare Utilization and Cost

**EXHIBIT 1** Average Unadjusted And Adjusted Medical Expenditures, In 2009 Dollars, By Risk Levels

<table>
<thead>
<tr>
<th>Risk measure</th>
<th>Risk level</th>
<th>Unadjusted means ($)</th>
<th>Adjusted means ($)</th>
<th>Unadjusted difference (%)</th>
<th>Adjusted difference (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>High</td>
<td>6,207</td>
<td>6,738</td>
<td>8.5</td>
<td>48.0</td>
</tr>
<tr>
<td></td>
<td>Lower</td>
<td>3,902</td>
<td>4,553</td>
<td>17.1</td>
<td>31.6</td>
</tr>
<tr>
<td>Blood glucose</td>
<td>High</td>
<td>6,532</td>
<td>6,849</td>
<td>4.8</td>
<td>11.8</td>
</tr>
<tr>
<td></td>
<td>Lower</td>
<td>3,842</td>
<td>5,196</td>
<td>39.6</td>
<td>37.9</td>
</tr>
<tr>
<td>Blood pressure</td>
<td>High</td>
<td>5,264</td>
<td>5,734</td>
<td>9.5</td>
<td>31.6</td>
</tr>
<tr>
<td></td>
<td>Lower</td>
<td>4,352</td>
<td>4,356</td>
<td>-0.0</td>
<td>31.6</td>
</tr>
<tr>
<td>Body weight</td>
<td>High</td>
<td>4,956</td>
<td>5,078</td>
<td>2.7</td>
<td>27.4</td>
</tr>
<tr>
<td></td>
<td>Lower</td>
<td>3,498</td>
<td>3,988</td>
<td>14.0</td>
<td>27.4</td>
</tr>
<tr>
<td>Tobacco use</td>
<td>High</td>
<td>4,192</td>
<td>4,184</td>
<td>-0.2</td>
<td>16.5</td>
</tr>
<tr>
<td></td>
<td>Lower</td>
<td>3,784</td>
<td>4,097</td>
<td>8.7</td>
<td>16.5</td>
</tr>
<tr>
<td>Physical inactivity</td>
<td>High</td>
<td>4,477</td>
<td>4,382</td>
<td>-2.0</td>
<td>15.3</td>
</tr>
<tr>
<td></td>
<td>Lower</td>
<td>3,357</td>
<td>3,976</td>
<td>21.6</td>
<td>15.3</td>
</tr>
<tr>
<td>Stress</td>
<td>High</td>
<td>5,024</td>
<td>5,249</td>
<td>4.7</td>
<td>8.6</td>
</tr>
<tr>
<td></td>
<td>Lower</td>
<td>4,444</td>
<td>4,830</td>
<td>8.9</td>
<td>8.6</td>
</tr>
<tr>
<td>Cholesterol</td>
<td>High</td>
<td>4,780</td>
<td>4,913</td>
<td>2.1</td>
<td>2.1</td>
</tr>
<tr>
<td></td>
<td>Lower</td>
<td>4,688</td>
<td>5,037</td>
<td>6.3</td>
<td>2.1</td>
</tr>
<tr>
<td>Nutrition and eating habits</td>
<td>High</td>
<td>3,245</td>
<td>3,261</td>
<td>0.6</td>
<td>-5.2</td>
</tr>
<tr>
<td></td>
<td>Lower</td>
<td>4,226</td>
<td>4,440</td>
<td>5.2</td>
<td>-5.2</td>
</tr>
<tr>
<td>Alcohol consumption</td>
<td>High</td>
<td>3,857</td>
<td>5,843</td>
<td>-35.2</td>
<td>-9.4</td>
</tr>
<tr>
<td></td>
<td>Lower</td>
<td>4,015</td>
<td>4,246</td>
<td>-5.9</td>
<td>-9.4</td>
</tr>
</tbody>
</table>

Source: Truven Health Analytics

## Risk-Cost Impacts – HERO II

**EXHIBIT B** Estimated Effect Of Each Health Risk On Annual Medical Expenditure By Employer And Employee

<table>
<thead>
<tr>
<th>Risk factor</th>
<th>Estimated annual effect per high-risk person ($)</th>
<th>Prevalence number of people at high risk</th>
<th>Cost ($)</th>
<th>% of total expenditures</th>
<th>Cost per capita ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High blood pressure</td>
<td>-124</td>
<td>15,000</td>
<td>10.0</td>
<td>30.0</td>
<td>67.2</td>
</tr>
<tr>
<td>High physical activity</td>
<td>-124</td>
<td>15,000</td>
<td>10.0</td>
<td>30.0</td>
<td>67.2</td>
</tr>
<tr>
<td>High stress</td>
<td>-124</td>
<td>15,000</td>
<td>10.0</td>
<td>30.0</td>
<td>67.2</td>
</tr>
<tr>
<td>High cholesterol</td>
<td>-124</td>
<td>15,000</td>
<td>10.0</td>
<td>30.0</td>
<td>67.2</td>
</tr>
<tr>
<td>High nutrition and eating habits</td>
<td>-124</td>
<td>15,000</td>
<td>10.0</td>
<td>30.0</td>
<td>67.2</td>
</tr>
<tr>
<td>Total expenditures attributable to high-risk</td>
<td>-124</td>
<td>15,000</td>
<td>10.0</td>
<td>30.0</td>
<td>67.2</td>
</tr>
</tbody>
</table>

---

**EXHIBIT I** Estimated Impact Of Each Health Risk On Annual Medical Expenditure By Employer And Employee

<table>
<thead>
<tr>
<th>Risk factor</th>
<th>Estimated annual effect per high-risk person ($)</th>
<th>Prevalence number of people at high risk</th>
<th>Cost ($)</th>
<th>% of total expenditures</th>
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<td>15,000</td>
<td>10.0</td>
<td>30.0</td>
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<td>High nutrition and eating habits</td>
<td>-124</td>
<td>15,000</td>
<td>10.0</td>
<td>30.0</td>
<td>67.2</td>
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<td>-124</td>
<td>15,000</td>
<td>10.0</td>
<td>30.0</td>
<td>67.2</td>
</tr>
</tbody>
</table>

---

**Individual vs. Population-Based Costs**

- Estimated annual effect per high-risk person: $-124
- Prevalence number of people at high risk: 15,000
- Cost: $10.0
- % of total expenditures: 30.0
- Cost per capita: $67.2
Cost Per Capita of Risk Factors

Risk Factors and Presenteeism (N = 5,875)

Research on Risk-Cost Relationships - Novartis

The Relationship Between Modifiable Health Risk Factors and Medical Expenditures, Absenteeism, Short-Term Disability, and Presenteeism Among Employees at Novartis

Research on Risk-Cost Relationships at PepsiCo
PepsiCo – Overweight / Obese Analysis (N=11,217)

*At least one difference significant at the 0.05 level

NHLBI Multi-Center Study: Estimated Annual Costs of Healthcare Utilization, Absenteeism, and Presenteeism by BMI Category

* P < .05
Recent Experience in Health Promotion At Johnson & Johnson: Lower Health Spending, Strong Return On Investment

Results adjusted for age, sex, region * p<0.05 ** p<0.01

Health Risks – Biometric Measures – Adjusted

Health Risks – Health Behaviors – Adjusted

Health Risks – Psychosocial – Adjusted

Results adjusted for age, sex, region * p<0.05 ** p<0.01
Vanderbilt – 8-Year Study

**Health Risk Factor Modification Predicts Incidence of Diabetes in an Employee Population**

Results of an 8-Year Longitudinal Cohort Study

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Participants</th>
<th>Number of Participants with Diabetes</th>
<th>Incidence Rate</th>
<th>OR (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>10,000</td>
<td>500</td>
<td>5%</td>
<td>1.5 (1.2-1.8)</td>
</tr>
<tr>
<td>2003</td>
<td>10,000</td>
<td>500</td>
<td>5%</td>
<td>1.5 (1.2-1.8)</td>
</tr>
<tr>
<td>2004</td>
<td>10,000</td>
<td>500</td>
<td>5%</td>
<td>1.5 (1.2-1.8)</td>
</tr>
<tr>
<td>2005</td>
<td>10,000</td>
<td>500</td>
<td>5%</td>
<td>1.5 (1.2-1.8)</td>
</tr>
<tr>
<td>2006</td>
<td>10,000</td>
<td>500</td>
<td>5%</td>
<td>1.5 (1.2-1.8)</td>
</tr>
<tr>
<td>2007</td>
<td>10,000</td>
<td>500</td>
<td>5%</td>
<td>1.5 (1.2-1.8)</td>
</tr>
<tr>
<td>2008</td>
<td>10,000</td>
<td>500</td>
<td>5%</td>
<td>1.5 (1.2-1.8)</td>
</tr>
</tbody>
</table>

**Obesity and Diabetes**

**TABLE 2: Obesity**

<table>
<thead>
<tr>
<th>Group</th>
<th>Year 1</th>
<th>Year 2-4</th>
<th>Developed Diabetes in Years 5-6</th>
<th>OR (95% CI)</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keep risk factor</td>
<td>BMI ≥ 30</td>
<td>BMI ≥ 30</td>
<td>55 (30.1%)</td>
<td>1.5 (1.2-1.8)</td>
<td>0.03</td>
</tr>
<tr>
<td>Lose risk factor</td>
<td>BMI ≥ 30</td>
<td>BMI &lt; 30</td>
<td>22 (3.4%)</td>
<td>1.5 (1.2-1.8)</td>
<td>0.03</td>
</tr>
<tr>
<td>Keep healthy habit</td>
<td>BMI ≥ 30</td>
<td>BMI &lt; 30</td>
<td>55 (30.1%)</td>
<td>1.5 (1.2-1.8)</td>
<td>0.03</td>
</tr>
<tr>
<td>Lose healthy habit</td>
<td>BMI ≥ 30</td>
<td>BMI &lt; 30</td>
<td>22 (3.4%)</td>
<td>1.5 (1.2-1.8)</td>
<td>0.03</td>
</tr>
</tbody>
</table>

BMI, body mass index; CI, confidence interval; OR, odds ratio.

*P < 0.05 using a chi-squared test with 1 degree of freedom.
Wall Street Studies

Ray Fabius’ 2013 study

The Link Between Workforce Health and Safety and the Health of the Bottom Line
Tracking Market Performance of Companies That Nurture a “Culture of Health”

Ryen H. Fabius, MSG, P. C. Show, Ph.D., S. L. Cashwell, P.H.D., Charles R. Teicher, S.D.

Yale School of Management, New Haven, Connecticut; M.I.T., Cambridge, Massachusetts; and Harvard University, Cambridge, Massachusetts

An integrated approach to workforce health management involves the development of comprehensive health and safety programs. These programs should be designed to improve the health and safety of employees, while also enhancing organizational performance. A recent study by Ray Fabius, and colleagues, has demonstrated that companies with strong health and safety programs tend to have higher levels of employee productivity, lower rates of absenteeism, and lower healthcare costs. The study also found that companies with a strong culture of health are more likely to achieve higher levels of financial performance.

AECOM CHAA Winners – 1996 - 2013

ACOEM Winners vs. S&P 500

FIGURE 1. Portfolio starting at five winners versus S&P 500.

HERO Study:
Connecting Corporate Health and Wellness Best Practices to Superior Market Performance

Average Change In Medical Expenditures

Average Percent Change in Medical Expenditures Over Three Years for the Study Sample (Adjusted to 2012 Dollars – Not Adjusted for Confounders)

Comparison of Expenditures by HERO Score, Adjusted for Confounders

Predicted Average Annual Per Member Healthcare Expenditures (Adjusted to 2012 dollars) for Organizations with High and Low HERO Scores

The Predictive Validity of the HERO Scorecard in Determining Future Health Care Cost and Risk Trends

RON Z. GORZEL, PhD, Rachel Mosher Honke, PhD, Richard Benoist, MS, Mayron J. Tabaco, PhD, MS, Karen R. Kort, MPH, Krizanne J. Smith, BA, Erin Chadwick Rowner, PhD, Janessa Gjovestad, PhD, MPH, Sharon T. Mazon, PhD, Daniel R. Gold, PhD, Steven P. Norden, PhD, and David R. Anderson, PhD, LP

OBJECTIVE: To determine the ability of the Health Enhancement ResearchOrga- nizations HERO Scorecard to predict changes in health care expenditures. Methods: Institutional health care consumer claims data for 13 employers comprising the HERO Scorecard were compared. The effects of the HERO Scorecard on the predicted change in cost were compared. A secondary analysis was conducted to predict health care outcomes. Results: The HERO Scorecard was significantly associated with changes in health care expenditures (average annual rate of -1.4%) over 3 years compared with “low” scores when adjusted for confounders. The risk adjustment was necessary because of the uncontrolled nature of expenditures. Conclusions: The HERO Scorecard predicts health care cost trends among employers. More research is needed to determine how well it predicts health care costs for employees.

Design and implement effective evidence-based programs and then determine whether these programs contain the essential elements to be meaningful.

To assist employers with the task of identifying and implementing best and promoting worksite health promotion practices, several organizational assessment tools have been developed. One example is the Health Enhancement Research Organizations (HERO) Employee Health Management Best Practices Scorecard in Collaboration with Merck, also known as the HERO Scorecard. The HERO Scorecard is an on-line survey tool for employers that measures the presence of organizational systems to support health promotion, participation rates, cost, and return, using metrics selected by employers. This survey tool has been validated by the HERO Scorecard, and other stakeholders to determine the performance of employee health management best practices.

The HERO Scorecard is one of the most widely used tools of...
Grossmeier et al., HERO S&P Study

Linking Workplace Health Promotion Best Practices and Organizational Financial Performance
Tracking Market Performance of Companies With Highest Scores on the HERO Scorecard

Jessica Grossmeier, PhD, MPH, Roy Fabian, MD, Jennifer P. Fearn, MS, Steven P. Noedling, PhD,
Dan Fabian, MBI, Ron Z. Goetzel, PhD, and David R. Anderson, PhD, LIP

Objectives: The aim of this study was to evaluate the stock performance of publicly traded companies that scored high on the HERO Employer Health Management Best Practice Scorecard in Collaboration with Morgan Stanley based on the implementation of evidence-based workplace health programs. We assessed differences in stock price performance, estimated future stock price performance, and market capitalization of companies on the HERO Scorecard as compared to the S&P 500 index. Results: We identified companies with high scores in a corporate health and wellness self-assessment approach used by HERO companies. For example, companies with high scores were more likely to offer employees access to a variety of health and wellness programs, and to be free from occupational health and safety issues. Conclusions: Our findings suggest that companies with high scores on the HERO Scorecard may be better positioned for long-term financial performance and may be more attractive to investors. Future research should explore the mechanisms by which higher scores on the HERO Scorecard are associated with better financial performance.

Goetzel et al., Koop S&P Study

The Stock Performance of C. Everett Koop Award Winners Compared With the Standard & Poor’s 500 Index

Ron Z. Goetzel, PhD, Raymond Fabian, MD, David Fabian, MS, Todd C. Brower, PhD, Nicole Thorstein, BA, Rebecca E. Kelly, PhD, MS, and Kerri S. Pollock, PhD, MPH (Inv)

Objectives: To explore the relationship between corporate health promotion programs and stock performance of publicly traded companies.

Methods: We analyzed the stock performance of C. Everett Koop Award winners over a 10-year period, comparing them to the S&P 500 index. Regression analysis was used to assess the relationship between stock performance and award status.

Results: The Koop Award winners had higher stock performance than the S&P 500 index, with a statistically significant difference in mean stock returns. The regression analysis showed a positive relationship between award status and stock performance.

Conclusions: Our findings suggest that corporate health promotion programs may positively influence stock performance. Further research is needed to understand the specific mechanisms underlying this relationship.

Koop Award Winners and S&P 500 Index

FIGURE 2. Relative performance of HERO Scorecard high-scoring portfolio compared with S&P 500—percent return.
Koop Winners: 1999-2014

<table>
<thead>
<tr>
<th>Company</th>
<th>Ticker</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>BP America</td>
<td>BP</td>
<td>2014</td>
</tr>
<tr>
<td>Eastman Chemical</td>
<td>EMN</td>
<td>2011</td>
</tr>
<tr>
<td>Prudential Financial</td>
<td>PFGU</td>
<td>2011</td>
</tr>
<tr>
<td>Ralph, Inc.</td>
<td>RFE</td>
<td>2009</td>
</tr>
<tr>
<td>The Volvo Group</td>
<td>VOLAYF</td>
<td>2010</td>
</tr>
<tr>
<td>Allied Data Systems Corp.</td>
<td>ALDS</td>
<td>2008</td>
</tr>
<tr>
<td>El Paso Chemical Company</td>
<td>EPW</td>
<td>2008</td>
</tr>
<tr>
<td>International Business Machines</td>
<td>IBB</td>
<td>2008</td>
</tr>
<tr>
<td>Pella Roofing Group</td>
<td>PELRA</td>
<td>2007</td>
</tr>
<tr>
<td>PE Energies</td>
<td>EOC</td>
<td>2007</td>
</tr>
<tr>
<td>USS Pacific Railroad</td>
<td>UNP</td>
<td>2006</td>
</tr>
<tr>
<td>Under Armour</td>
<td>UAM</td>
<td>2004</td>
</tr>
<tr>
<td>Johnson &amp; Johnson Services, Inc</td>
<td>JNJ</td>
<td>2002</td>
</tr>
<tr>
<td>FedEx Corp.</td>
<td>FDX</td>
<td>2002</td>
</tr>
<tr>
<td>Barnes-Staples Inc.</td>
<td>BS</td>
<td>2002</td>
</tr>
<tr>
<td>Williams</td>
<td>WMT</td>
<td>2001</td>
</tr>
<tr>
<td>West Virginia Energy</td>
<td>WVN</td>
<td>2001</td>
</tr>
<tr>
<td>Northeast Utilities</td>
<td>NU</td>
<td>2001</td>
</tr>
<tr>
<td>Coach Inc.</td>
<td>COH</td>
<td>2000</td>
</tr>
<tr>
<td>Continental Tire</td>
<td>CT</td>
<td>2000</td>
</tr>
<tr>
<td>DaimlerChrysler Corporation</td>
<td>DAIM</td>
<td>2000</td>
</tr>
<tr>
<td>Fannie Mae</td>
<td>FMMA</td>
<td>2000</td>
</tr>
<tr>
<td>Intel</td>
<td>INTC</td>
<td>1999</td>
</tr>
<tr>
<td>Procter &amp; Gamble, Inc.</td>
<td>PG</td>
<td>1999</td>
</tr>
<tr>
<td>GlaxoSmithKline</td>
<td>GSK</td>
<td>1999</td>
</tr>
<tr>
<td>UNUM/Provident</td>
<td>UNM</td>
<td>1999</td>
</tr>
</tbody>
</table>


Best/Promising Practice Dissemination

- Robert Wood Johnson Foundation – Promoting Healthy Workplaces
- Transamerica Center for Health Studies – Employer Guide to Workplace Health Promotion
- American Heart Association – Developing a Culture of Health “Playbook”
- Centers for Disease Control and Prevention – Workplace Health Research Network
- Centers for Disease Control and Prevention – Information Clearinghouse

Getting the Word Out on Best and Promising Practices in Workplace Health Promotion
Promoting Healthy Workplaces by Building Cultures of Health and Applying Strategic Communications

Kareem Kent, MPH, Rim Z. Gocert, PhD, Endo C. Rosme, PhD, Jaihunyana Pual, MPH, MBBS, and Xavier Femandez, MA

Objectives: The aim of the study was to identify key success elements of workplace health promotion programs. Methods: To conduct an exploratory literature review, both descriptive and subjective content, and selected case studies and exemplary programs to examine key successful strategies. Results: This paper presents lessons learned from constructing a healthy workplace culture and environmental support. The findings from this study are designed to include success measures, costs of change, and lessons learned. Conclusion: Lessons learned from employees who have built cultures of health and excellent communication strategies can apply these lessons more broadly in workplace settings.

Learning Objectives:

1. Summarize the methods used by Gocert et al. in their empirical model of best practices in employee-focused health programs.
2. Discuss the concept of building a culture of health and social, individual, and community support.
3. Identify the importance of strategies, communication, and the implementation of an effective communication program.

Case Studies – Companies That Do It “Right”

Johnson & Johnson
Dell
GRACO
Citibank
In nextjump
USAA
TURCK
Industrial Automation
L.L.Bean
Lincoln Industries

Health & Wellness Empowerment

From Evidence to Practice: Workplace Wellness That Works

From Evidence to Practice: Workplace Wellness That Works

Case Study 1: Johnson & Johnson

Johnson & Johnson has implemented a comprehensive workplace wellness program that includes initiatives such as fitness classes, healthy food options, and stress management workshops. The program has resulted in improved employee health outcomes and decreased healthcare costs.

Case Study 2: Dell

Dell has established a culture of health by offering employee health and wellness programs, such as on-site fitness centers and healthy eating options. These initiatives have led to improved employee morale and productivity.

Case Study 3: GRACO

GRACO’s workplace wellness program focuses on promoting physical activity and healthy eating. The company offers on-site health screenings and provides incentives for employees who participate in these activities.

Case Study 4: Citibank

Citibank’s wellness program includes programs to reduce stress and promote mental health. The company offers resources like employee assistance programs and opportunities for professional development.

Case Study 5: nextjump

nextjump’s wellness program is designed to support employees’ physical health and mental well-being. The company offers a range of services, including access to wellness coaches and health insurance discounts.

Case Study 6: USAA

USAA’s workplace wellness program prioritizes mental health and offers resources like stress management training and mindfulness workshops. The program has led to improved employee satisfaction and reduced healthcare costs.

Case Study 7: TURCK

TURCK’s wellness program focuses on promoting physical activity and healthy eating. The company offers on-site fitness centers and healthy eating options to support employee health.

Case Study 8: Industrial Automation

Industrial Automation has established a culture of health by offering employee health and wellness programs, including on-site health screenings and healthy eating options.

Case Study 9: L.L.Bean

L.L.Bean’s workplace wellness program includes initiatives to promote physical activity and mental health. The company offers resources like fitness classes and mindfulness workshops.

Case Study 10: Lincoln Industries

Lincoln Industries has implemented a comprehensive workplace wellness program that includes initiatives such as fitness classes and healthy eating options. The program has resulted in improved employee health outcomes and increased employee satisfaction.
How to Design a Corporate Wellness Plan That Actually Works

Workplace Health Playbook

Workplace Health Research Network (WHRN)

A new PRC thematic research network.....
1. Culture of Health
   - More than just a wellness program – it’s a way of life
   - Ingrained in every part of the organization
   - Business Mission
   - Built Environment
   - Performance Metrics
   - Programs, Policies, Health Benefits

2. Leadership Commitment
   - CEO Driven
   - Lead by Example
   - Middle Management Support
   - Budget/business plan
   - Empowered workers/ unions

3. Specific Goals and Expectations
   - Think big, start small, act fast -- one step at a time
   - Set short and long term objectives
   - Be realistic about what can be achieved in 1, 3, 5, 10+ years
   - Accountability – leaders and employees are accountable for doing their part to support a culture of health
4. Strategic Communications

Relentless  Surround Sound

• Messages need to be:
  • Consistent
  • Constant
  • Engaging
  • Targeted

• Two-way dialogue using a variety of channels

• Wellness champions

5. Employee Engagement in Program Design/Implementation

• Wellness Committees

• Employee Feedback Surveys

• Participatory Based Program Design

• Focus Groups

6. Best Practice Interventions

• Convenience, removing barriers

• Many choices

• Making the healthy choice the easy choice

• Applying behavior change theory/practice

7. Effective Screening and Triage

• Health Risk Assessments with Follow-up -- PLUS

• Biometric Screenings (USPSTF Guidelines)

• On-site Clinics and Counselors
8. Smart Incentives

- Tailoring, and providing alternative paths to motivate, reward, and help employees achieve their goals
- Tiered Incentive Programs
- Non-Monetary Incentives
- Carrots, Not Sticks
- Voluntary – reasonable dollar amounts

9. Effective Implementation

- Tailored to the company’s culture
- Integrated solutions
- Flexibility
- Fresh ideas
- Fun

10. Measurement and Evaluation

- Structure:

- Process:

- Outcomes:

This Is Hard!
Workplace Health Promotion (Wellness) Works
– If You Do it Right!

Financial Outcomes

Health Outcomes

QOL and Productivity Outcomes

Cost savings, return on investment (ROI) and net present value (NPV).

Where to find savings:

- Medical costs
- Absenteeism
- Short term disability (STD)
- Safety/Workers' Comp
- Presenteeism
- Adherence to evidence-based medicine.
- Behavior change, risk reduction, health improvement.
- Improved "functioning" and productivity
- Attraction/retention – employer of choice
- Employee engagement
- Corporate social responsibility (CSR)
- Balanced scorecard

Another Benefit:

Engaged Workers Who Love Their Job!

WHERE WE NEED TO GO...

OLD PARADIGM

- Bad behavior (poor diet)…leads to
- High risk condition (obesity)…leads to
- Disease (diabetes)…leads to
- Death

NEW PARADIGM

- Good health (physical, mental, emotional, social, financial, spiritual)…leads to
- Well-being (energy)…leads to
- Purposeful life

AND HIGH VALUE

Learn More at...
http://www.jhsph.edu/promoting-healthy-workplaces