15th ANNUAL MEETING OF THE MEMBERS

DECEMBER 7, 2011
Population Health and Worksite Wellness in the 21st Century

A Transformation

UNIVERSITY OF MICHIGAN HEALTH MANAGEMENT RESEARCH CENTER

Dee W. Edington

December 7, 2011
Business Problem

Currently, most costs associated with workplace and workforce performance are growing at an **unsustainable rate**

How are we going to be successful in this increasingly competitive world without a healthy and high performing workplace and workforce?

**How can we turn costs into an investment?**
What if you worked for the best organization you could imagine. An organization that was a high performing company and a best company to work for.

What words would you use to describe the workplace and how would you describe the workforce?
The Journey of Becoming a Champion Organization: High Quality Products, High Mission Margin, Zero Cost Trends and a Best Place to Work

**Natural Flow of a Population**

High Risks and High Costs

**Business Case**

Health as a Serious Economic Strategy

**Mission**

Change the Economic Assumptions from Treating Disease to the 21\textsuperscript{st} Century Assumptions about Creating and Maintaining Healthy Populations

**Solution**

Engage Champion Companies in Systematic, Systemic and Sustainable Five Pillars which Promote a Healthy and High Performing Workplace and Workforce
First Story
1978-2010

The first 32 years of Worksite Wellness at UM-HMRC
Solution for the 20th Century

Wait for Disease or Health Risks and then Treat

(...in Quality terms this strategy translates into “wait for defects and then fix the defects” ...)
## Estimated Health Risks

<table>
<thead>
<tr>
<th>Health Risk Measure</th>
<th>High Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body Weight</td>
<td>41.8%</td>
</tr>
<tr>
<td>Stress</td>
<td>31.8%</td>
</tr>
<tr>
<td>Safety Belt Usage</td>
<td>28.6%</td>
</tr>
<tr>
<td>Physical Activity</td>
<td>23.3%</td>
</tr>
<tr>
<td>Blood Pressure</td>
<td>22.8%</td>
</tr>
<tr>
<td>Life Satisfaction</td>
<td>22.4%</td>
</tr>
<tr>
<td>Smoking</td>
<td>14.4%</td>
</tr>
<tr>
<td>Perception of Health</td>
<td>13.7%</td>
</tr>
<tr>
<td>Illness Days</td>
<td>10.9%</td>
</tr>
<tr>
<td>Existing Medical Problem</td>
<td>9.2%</td>
</tr>
<tr>
<td>Cholesterol</td>
<td>8.3%</td>
</tr>
<tr>
<td>Alcohol</td>
<td>2.9%</td>
</tr>
<tr>
<td>Zero Risk</td>
<td>14.0%</td>
</tr>
</tbody>
</table>

*From the UM-HMRC Medical Economics Report*

Estimates based on the age-gender distribution of a specific corporate employee population

### OVERALL RISK LEVELS

- **Low Risk**: 0-2 risks
- **Medium Risk**: 3-4 risks
- **High Risk**: 5 or more

*University of Michigan Health Management Research Center*

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Risk Transitions (Natural Flow)

Time 1 – Time 2

High Risk (>4 risks)
- 2,373 (50.6%)
- 4,691 (10.8%)
- 678 (14.4%)
- 892 (3.2%)

Low Risk (0 - 2 risks)
- 21,750 (77.8%)
- 26,591 (61.4%)
- 27,951 (64.5%)

Medium Risk (3 - 4 risks)
- 11,495 (26.5%)
- 4,163 (10.8%)
- 1640 (35.0%)
- 1,961 (18.4%)

Average of three years between measures

Modified from Edington, AJHP. 15(5):341-349, 2001
Costs Associated with Risks
Medical Paid Amount x Age x Risk

Business Concept

Relationships of Risks and Disease with Measures of Performance
Excess Diseases Associated with Excess Risks (Heart, Diabetes, Cancer, Bronchitis, Emphysema)

Excess Medical Costs due to Excess Risks

- Low Risk (0-2 Risks): $2,199
- HRA Non-Participant: $3,039
- Medium Risk (3-4 Risks): $3,460
- High Risk (5+ Risks): $5,520

## Association of Risk Levels with Organizational Cost Measures

<table>
<thead>
<tr>
<th>Outcome Measures</th>
<th>Low-Risk</th>
<th>Medium-Risk</th>
<th>High-Risk</th>
<th>Excess Cost Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-term Disability</td>
<td>$120</td>
<td>$216</td>
<td>$333</td>
<td>41%</td>
</tr>
<tr>
<td>Worker’s Compensation</td>
<td>$228</td>
<td>$244</td>
<td>$496</td>
<td>24%</td>
</tr>
<tr>
<td>Absence</td>
<td>$245</td>
<td>$341</td>
<td>$527</td>
<td>29%</td>
</tr>
<tr>
<td>Medical &amp; Pharmacy</td>
<td>$1,158</td>
<td>$1,487</td>
<td>$3,696</td>
<td>38%</td>
</tr>
<tr>
<td>Total</td>
<td>$1,751</td>
<td>$2,288</td>
<td>$5,052</td>
<td>36%</td>
</tr>
</tbody>
</table>

Wright, Beard, Edington. JOEM. 44(12):1126-1134, 2002
Medical and Drug Cost (Paid)*

- 2001: $1,500
- 2002: $2,000
- 2003: $2,500
- 2004: $3,000

Slopes differ
P=0.0132

- Improved slope=$117/yr
- Non-Impr slope=$614/yr

Improved=Same or lowered risks
The Economics of Total Population Engagement and Total Value of Health

Low or No Risks → Health Risks → Disease

- Increase
- Increase
- Decrease

Total Value of Health
- Medical/Hospital
- Drug
- Absence
- Disability
- Worker’s Comp
- Effective on Job
- Recruitment
- Retention
- Morale

Where does cost turn into an investment?
Health Strategies in 20th Century

Healthier Person

Lifestyle Change

Health and Disease Management Programs

Behavior Change and Treating Disease

Better Employee

Gains for the Organization

Health Status
Life Expectancy
Disease Care Costs
Health Care Costs
Productivity

Absence
Disability
Worker’s Comp.
Presenteeism
Quality Multiplier
Recruitment/Retention
Company Visibility
Social Responsibility

A Short Health & Performance Quiz

If you continue to wait for defects and then try to fix the defects: Will you ever solve the fundamental problems?

Is it better to keep a good customer or find a new one?

Is the action you reward, the action that is sustained?

If you put a changed person back into the same environment: Will the change be sustainable?
The world we have made as a result of the level of thinking we have done thus far creates problems we cannot solve at the same level of thinking at which we created them.

- Albert Einstein
Where do we go next?

TO A NEW LEVEL OF THINKING...
Vision for Zero Trends

Zero Trends was written to be a transformational approach to the way organizations ensure a continuous healthy and high performing workplace and workforce.

Based upon over 200 Research Publications
Second Story
2008 and into the 21st Century
Solution by or before 2023

Integrate Health and Well-Being into the Environment and Culture

(...in Quality terms this strategy translates into “fix the systems that lead to the defects”)

By 2023

Healthy and High Performing Workplaces and People will be the Competitive Advantage

The transformational solutions with have to be Strategic, Systematic, Systemic and Sustainable
Integrate Health into Core Business

Healthier Person  Better Employee  Gains for The Organization
Lifestyle Change  Company Culture and Environment
Health Management Programs  Senior Leadership  Operations Leadership  Self-Leadership  Reward Positive Actions  Quality Assurance

1. Health Status
2. Life Expectancy
3. Disease Care Costs
4. Health Care Costs
5. Productivity
   a. Absence
   b. Disability
   c. Worker’s Compensation
   d. Presenteeism
   e. Quality Multiplier
6. Recruitment/Retention
7. Company Visibility
8. Social Responsibility


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# Five Fundamental Pillars

## Strategic, Systematic, Systemic and Sustainable

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<tr>
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</thead>
<tbody>
<tr>
<td>Strong Vision</td>
<td>Culture of Health</td>
<td>Create Winners</td>
<td>Reward Champions</td>
<td>Continuous Improvement</td>
</tr>
<tr>
<td>Visible</td>
<td>Supportive Environment</td>
<td></td>
<td>Reinforce at every touch point</td>
<td>Drives Program Improvements</td>
</tr>
<tr>
<td>Committed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Committed</td>
<td></td>
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</tbody>
</table>

### Communication, Engagement & Culture
- Communication and Enrollment
- Engagement and Culture

### Programs Along the Health Continuum
- Prevention and Wellness
- Case Management
- Disease Management

### Program Impact
- Outcomes
  - Self-leaders
  - Healthier
- Cost Savings
  - Medical costs
  - Productivity
- Best Place to Work

### Strategic, Systematic, Systemic and Sustainable
- Communication
- Engagement
- Culture
- Supportive Environment
- Case Management
- Disease Management
- Medical costs
- Productivity
- Best Place to Work

- Communication and Enrollment
- Engagement and Culture
The Transformation needs New Tools
Purpose, Values, Mission, Vision and Strategy
Environmental Audit
Perception of Company Environment and Culture
Next Generation Healthy Life Assessment
Self-Leadership, Low Risk and Resilience Training
Quality Assurance/Metrics Driven Feedback
Perception of Community and Workplace
A Systems Approach (Strategic, Systematic, Systemic and Sustainable)
From 20th Century Best Practices to 21st Century Next Practices
Senior Leadership: Strategic

Create the Vision

- Connect vision to business strategy
- Commit to healthy culture
- Provide adequate resources
- Leadership engaged as visible committed participants
- Courage

“Establish the business value of a healthy and high performing organization and workplace as a world-wide competitive advantage”
Example Vision - Intel

Health for Life

Intel’s Strategic Direction
“Care for our people, the planet, and inspire the next generation”

Vision
A culture where employees and their families are healthy, productive and engaged in living wellness-oriented lifestyles everyday

Mission
To transform health care delivery...to an integrated, preventative focused model that...provides convenience, quality, and cost effective solutions.

Health for Life
Operations Leadership: Systematic and Systemic

Align Workplace & Policies with the Vision

• Integrate policies into health culture
• Brand health management strategies
• Engage everyone

“You can’t put a changed person back into the same environment and expect the change to hold”
Communication & Dissemination

Pillar 1: Senior Leadership

All Mid-level Managers Embody the Vision

All First-level Supervisors Embody the Vision

Employees Embody the Vision

Support Each Other to Achieve Goals

Formal and Informal Mechanisms for Communicating Feedback from all Levels

Engagement and communication

Trained, engaged, and reinforcing message
Population Health: Benefit Strategy

Health Management
--healthy stay healthy
--don't get worse

Disease Management
--stay on protocol
--don't get worse

Sickness Management
--reduce errors
--coordinate services

Where is the economic strategy?

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What is a “Culture of Health”

• ...set of core attributes reflecting the prevailing values, underlying assumptions, expectations and definitions that members of a work organization collectively maintain.

• The sum of these characteristics effect the way members think, feel, and behave related to matters of personal and group health.
Assess Current Environment and Culture

Analyze the Gaps

**Organizational Assessment**
- Assess what exists and doesn’t exist in current environment and culture
- Survey health/wellness and human resource professionals
- Survey responses generate a score related to “ideal”

**Management Perception**
- Assess management perceptions of level of support in environment and culture
- Survey managers who have responsibility for development, communication and delivery of wellness program

**Employee Perception**
- Assess employees’ perception of supportive environment and culture
- Survey entire employee population
- High level of participation: improves analysis

**GAP ONE:**
Current environmental & cultural practices compared to “Ideal”

**GAP TWO:**
Manager’s perceptions of environment & culture compared to vision

**GAP THREE:**
Employee’s perceptions of environment, culture and management support compared to vision

Plan health management strategy based on addressing these and other key gaps

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Align External Influences: Family and Community

<table>
<thead>
<tr>
<th>Within the Family</th>
<th>Within the Community</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Including employees' families in organizational wellness programs</td>
<td>• Participate in local health coalitions and collaborate with other businesses, government agencies, and non-profit organizations to develop healthy cities programs</td>
</tr>
<tr>
<td>• Encourage Participation of Employees and Their Families in Community Health Events</td>
<td>• Sponsor a Community Event (e.g. 5K, 10K)</td>
</tr>
<tr>
<td>• Sponsor a Contest for Employees’ Children to Create Health Promotional Posters for Work</td>
<td>• Sponsor School/Parks/ Recreation Programs for Health</td>
</tr>
</tbody>
</table>

Self-Leadership: Systemic

Create Winners

• Help the low-risk people stay low-risk
• Provide training in resilience, self-leadership, purpose
• Recognize the whole person and the major determinates of health

“Create winners, one step at a time and the first step is don’t get worse”
Healthy Life Assessment

- Supportive Community
- Supportive Family and Friends
- Supportive Workplace
- Self-Leader Assessment

21st Century Healthy Life Assessment

Determinates of Health and Well Being
Self-Leadership and High Performance

- Environment and culture
- Purpose-Values-Mission-Vision
- Consumerism
- Engagement

- Personal Control
- Resilience
- Optimism

Self-leadership

- Confidence / Self-efficacy
- Self-esteem
- Vitality/Vigor
- Low-Risk Health Status

- Knowledge
- Health Literacy
- Negotiation Skills
- Social Support
  - Colleagues
  - Community
  - Family

Other possible *constructs: Change, Vision, Trust, Thrive, Enthusiasm, Ethics, Energy, Spirituality, Creativity, …

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Recognize Positive Actions: Sustainable

Reinforce the Culture of Health

• Align recognition to the vision
• Recognize champions
• Set positive recognition for positive choices
• Reinforce at every touch point

“What is rewarded is what is sustained”
Recognize Positive Action

Incentives can be **tangible or intangible**

**Tangible Incentives**
- Cash
- Merchandise
- Vacation days
- Avoidance of costs (such as health care premiums or deductibles)

**Intangible Incentives**
- **Extrinsic:**
  - Recognition
  - Group competition
  - Acceptance and approval of peers
- **Intrinsic:**
  - Personal challenges
  - A sense of accomplishment
  - A sense of belonging

*Can be the tipping point that moves someone from inaction to action*

The Science and Art of Motivating Healthy Behaviors, by Barry Hall, BENEFITS QUARTERLY, Second Quarter 2008.

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Quality Assurance: Sustainable

- Integrate all data
- Evaluate program outcomes
- Use a conceptual outcomes framework
- Provide timely feedback of progress toward vision, culture, self-leaders, actions, economic outcomes

"Support decisions throughout the total workplace system"
Levers of Program Success: Sustainable

Communication, Engagement, Culture

Communication & Culture
- Communication
- Engagement & Culture

Impactful Health Programs

Programs Along the Health Continuum
- Prevention & Wellness
- Case Management
- Disease Management

Program Impact
- Outcomes
  - Self-leaders
- Cost Savings
  - Medical costs
  - Productivity
- Best Place to Work

Pillar 1: Senior Leadership
Pillar 2: Operations Leadership
Pillar 3: Self-Leadership
Pillar 4: Reward Actions
Pillar 5: Quality Assurance

Continuous Improvement

Continuous feedback of information about program processes and outcomes

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## Create a Strategy
What is Your Vision?

<table>
<thead>
<tr>
<th>Champion</th>
<th>Senior Leadership</th>
<th>Operational Leadership</th>
<th>Self-Leadership</th>
<th>Reward Positive Actions</th>
<th>Quality Assurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vision from Leaders</td>
<td>Healthy System &amp; Culture</td>
<td>Everyone a Self-Leader</td>
<td>Reward Sustained Results</td>
<td>Progress in All Areas</td>
<td></td>
</tr>
<tr>
<td>Speech from Leader</td>
<td>Reduction in Risks</td>
<td>Reduce Health Risks</td>
<td>Reward Achievement</td>
<td>Change in Risk &amp; Sick Costs</td>
<td></td>
</tr>
<tr>
<td>Inform Leader</td>
<td>Programs Targeting Risks</td>
<td>Health Risk Awareness</td>
<td>Reward Enrollment</td>
<td>Change in Risks</td>
<td></td>
</tr>
<tr>
<td>Status Quo</td>
<td>Status Quo</td>
<td>Status Quo</td>
<td>Status Quo</td>
<td>Status Quo</td>
<td></td>
</tr>
</tbody>
</table>

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Characteristic of a Champion Organization

Strategic Vision

Systematic Strategy

Systemic Solutions

Sustainable Policies
What’s the Point
Thank you for your attention
Please contact us if you have any questions

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