DECREASING AT RISK HEALTH BEHAVIOR.....

One Individual at a Time
HISTORY
WHY???

Slow rate of rise of health care costs.
Excess Medical Costs due to Excess Risks

- **Low Risk (0-2 Risks)**: $840
- **HRA Non-Participant**: $1,261
- **Medium Risk (3-4 Risks)**: $3,321
- **High Risk (5+ Risks)**: $5,520

77 participants

Risk Status- 8 high/45 medium/24 low risk (Edington’s “bakers dozen” risks)

84% (63) completed program (6 mos of regular meetings with nurse educator to set and work on wellness goals)

36 men/ 27 women completed program
HISTORY-
INITIAL WELLNESS PILOT

- Risk Status- 0 high/19 medium/47 low
- 6 of 8 smokers quit-no group program
- 71% of those completing program lowered risk
- 39% (14) of males decreased risk category
- 70% (19) of females decreased risk category
HISTORY
WELLNESS PILOTS THAT DID NOT WORK!

- Company wide, after hours phone encounters using protocols for risk management and trained operators (X2 different efforts)
- Poor rates of (and unsustainable) participation
- Participants guarded, coaches and participants less engaged, say what you want to hear, marked variation in reported vs taken measurements, viewed interventions primarily as inconvenient
“Points for Playing” pilot

Did not assess risks per se and rewarded non confirmed changes

No real data 100-150- participants
HISTORY

LESSONS LEARNED FROM PILOTS

- Individuals change when invested in the process and when the change is important to them.
- Individuals change at different rates over time.
- Individual investment is highly variable and changes over time.
Individuals feel more valuable when participating in coaching programs.

Change plans are more often achieved when individualized to each participant’s time frames and interest.

Program acceptance/completion high in one on one program.
Face to face encounters “on the clock” produce more reliable data, higher participation rates, higher program satisfaction and program continuity/sustainability, and substantial health behavior changes.

After hours phone, email, etc. encounters can compliment one on one but alone are less likely to result in substantial sustained participation or significant population risk burden reduction.

To reduce costs much have large proportion of spenders in program.
FACE TO FACE?
YOU DO WHAT YOU HAVE TO DO!
Program Evolution - 2001

- Return to one on one, on-site, face to face encounter as cornerstone of program
- Health coach role evolution/Motivational Interviewing
- Incentives added/gradually modified
- Manager education- pros/cons of on site and productivity concerns
PROGRAM EVOLUTION

- Environmental changes- (manager sales and support at as many levels as possible, newsletter, healthy vending/menus, smoke free, soda free, tobacco free including possession, online resources,) “Partnering” essential
- Benefit structure must support healthy living
- Presenteeism
- Stress
- Life balance
- Cost risk analysis
WHAT’S NEXT?

- Productivity impact measurement and quantification
- Individualized, face to face condition management as an extension of wellness
- Interactive software pieces
- “ON LINE” HRA completion capability with integrated behavior change module, coach monitored for additional outreach
What’s next?

- Cultural diversity training for all health coaches
- Explore limits in incentivized performance criteria
- Increase spouse engagement
Two Year Risk Burden Change (%)

HLP Decrease/Increase in Behavior Risk
(Total Occurrences)
January 1, 2004 to December 31, 2005

- Decrease in Risk
  - -81% Inactivity
  - -56% Tobacco Use
  - -19% Overweight
  - -21% High Cholesterol

- Increase in Risk
  - 0% Hypertension

-100% -80% -60% -40% -20% 0% 20% 40%
CHANGE IN BEHAVIOR RISK INCIDENCE

- Prehypertension: -15.7%
- Seriously Overweight: -0.9%
- High Total Cholesterol: -27.7%
- Inactivity: -40.8%
- Tobacco Smoke: -39.0%
- Overweight: -32.8%
- High Blood Pressure: -39.0%
- Stress: 55.0%
- Tobacco Chew: -20.0%
Healthy Lifestyles Program Effects on Cost Risk Status and Associated Savings
2006 Cianbro Employees

- **Cost Risk Spending Decrease 2006**
- **Total Savings**: $1,110,444
- **2006 Average Cost per Individual in Each Risk Level**
  - Low: $2,588.61
  - Medium: $4,220.97
  - High: $7,161.79

**Cost Risk Score**
- **High**: 22%
- **Med**: 40%
- **Low**: 72%

**Dollars Spent**
- **High**: $0
- **Med**: $500,000
- **Low**: $1,000,000
- **Total Savings**: $3,083,582

**2006 Estimated Risk Burden & Estimated Cost w/o HLP**

**2006 Acutal Risk Burden & Cost w/ HLP**
Healthy Lifestyle Program Effects on Cost Risk Status and Associated Costs 2007 Participants

- 2007 Estimated Risk Burden & Estimated Cost w/o HLP
- 2007 Actual Risk Burden & Cost w/ HLP

Cost Risk Score

- High: 22%
- Medium: 40% (22% decrease)
- Low: 75% (38% decrease)

Total Savings: $2,400,459.00

2007 Average Cost per Individual in Each Risk Level:
- Low: $3757
- Medium: $5688
- High: $9223

Total Estimated Savings: $10,006,504

Total Actual Savings: $7,606,045
Healthy Lifestyle Program Effects on Cost Risk Status and Associated Costs 2008 Cianbro Participants

- 2001 Risk Burden & Cost at start of wellness program
- 2008 Actual Risk Burden & Cost

Average Cost Per Individual in Each Risk Category Level:
- High Risk $6,490.39
- Medium Risk $4,166.03
- Low Risk $2,397.40

COS 1,612,395.77
% Change Year to Year Employer Per Member Cost

Wellness Program begins
August 2001
EXPECTED VS ACTUAL COSTS

Expected vs Actual Costs

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual Dollars Spent</th>
<th>@ Cigna Expected Trend</th>
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<tbody>
<tr>
<td>2001</td>
<td>$5,000,000.00</td>
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<tr>
<td>2007</td>
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<tr>
<td>2008</td>
<td>$40,000,000.00</td>
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## Participant Attainment of Healthy Living Reward

### TEAM MEMBERS

<table>
<thead>
<tr>
<th>REGION</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
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<tbody>
<tr>
<td>NNE</td>
<td>56%</td>
<td>64%</td>
<td>71%</td>
</tr>
<tr>
<td>SNE</td>
<td>43%</td>
<td>54%</td>
<td>64%</td>
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<tr>
<td>MAR</td>
<td>48%</td>
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<td>CORP</td>
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<td>54%</td>
<td>56%</td>
<td>70%</td>
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<tr>
<td>FAB</td>
<td>51%</td>
<td>62%</td>
<td>67%</td>
</tr>
<tr>
<td>CONSTRUCTORS</td>
<td>-</td>
<td>53%</td>
<td>69%</td>
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<tr>
<td>TOTAL %</td>
<td>54%</td>
<td>61%</td>
<td>70%</td>
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### SPOUSES

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<tr>
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<th>2007</th>
<th>2008</th>
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<tbody>
<tr>
<td>SPOUSES</td>
<td>50%</td>
<td>55%</td>
<td>68%</td>
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# Spouse In-Person Encounter Improvements

<table>
<thead>
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<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
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<tbody>
<tr>
<td>Total Spouse Encounters</td>
<td>1288</td>
<td>1562</td>
<td>1313</td>
<td>923</td>
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<tr>
<td>Total In Person Spouse Encounters</td>
<td>341</td>
<td>390</td>
<td>385</td>
<td>407</td>
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<tr>
<td>Percentage of Total Spouse Encounters Seen In person</td>
<td>26%</td>
<td>25%</td>
<td>29%</td>
<td>44%</td>
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**CHANGE IN BEHAVIOR RISK SCORE**

### Report Criteria

- **Start Date:** From October 01, 2004 to February 28, 2005
- **End Date:** 10/10/2008
- **Wellness Status:** Active
- **Participant Type:** Employee, Spouse
- **Gender:** Female, Male
- **Age:** 0-17, 18-34, 35-44, 45-54, 55-64, 65-74, 75+
- **Company Medical Ins:** Yes, No
- **Company:** Accounting, Bone Pins, CNC Mill, Deburr, Facilities, Grinding, Large Hole, Lathe, Maintenance, Material Handling, Officers, Operations, Pratt & Whitney, Project Manager, Purchasing, QM, Quality, Sales, Scheduling, Shotpeen, Small Hole, Tooling, Unidrill

### All Participants:

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>Begin Date Count</th>
<th>End Date Count</th>
<th>Change Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>14, 9%</td>
<td>75, 46%</td>
<td>61, 35.7%</td>
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<tr>
<td>Medium</td>
<td>70, 43%</td>
<td>66, 40%</td>
<td>-4, -5.7%</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>79, 48%</td>
<td>22, 13%</td>
<td>-57, -72.2%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>163</td>
<td>163</td>
<td>-57</td>
<td>-72.2%</td>
</tr>
</tbody>
</table>

*Note: % columns may not total exactly 100% due to sample size and rounding precision.*
CHANGE IN BEHAVIORAL RISK INCIDENCE - MAINE COMPANY

Start Date: From October 01, 2004 to February 28, 2005
End Date: 10/10/2008

- Poor Nutrition: -76.5%
- Low HDL Cholesterol: -35.3%
- Prehypertension: 32.1%
- Inactivity: -32.7%
- High Total Cholesterol: -9.8%
- No Seatbelt/Helmet Use: -30.5%
- Low Back Pain: -77.8%
- Tobacco Smoke: -23.5%
- No Testicular Cancer Self-exam: 74.3%
- Seriously Overweight: -13.8%
BEYOND “0” TREND
Wellness Program Effects on Cost Risk Status and Associated Costs 2009

- **2007 Actual Risk Burden & Cost at start of wellness program**
- **2009 Actual Risk Burden & Cost after wellness program**

**2009 Average Cost per Individual in Each Risk Level**
- Low: $2,770.69
- Medium: $3,370.65
- High: $5,510.81

Total Savings: $43,582.20

Cost Risk Level:
- High: $830,271.90
- Medium: $786,689.70

Dollars Spent: $0.00, $100,000.00, $200,000.00, $300,000.00, $400,000.00, $500,000.00, $600,000.00, $700,000.00, $800,000.00, $900,000.00