What Does the Harvard Business Review Know?

The Value of Worksite Wellness

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IAWHP 2011 Executive Summit
William B. Baun, EPD, CWP, FAWHP

- 33 years worksite wellness management/programming
- Startup team of Tenneco 1981 – 1996
- 12 years M.D. Anderson Cancer Center
- C. Everett Koop Health Project Award 1992
- Fellow AWHP & AAHPERD Research Consortium
- CEO Cancer Gold Standard Task Force
- Past Chair of Houston Mayor’s Wellness Council
- Board of National Wellness Institute, Houston Wellness Association, CAN DO Houston, International Association for Worksite Health Promotion
- Associate Editor AJHP
- 15+ Years Onsite Director AJHP Conference
- Master Level Programmer & Program Manager
MD Anderson Cancer Center

- 17,832 employees
- Over 22,257 admissions
- 163,007 patient days, 90% occupancy
- 15,566 surgeries and 55,181 surgery hours
- 922,985 outpatient clinic visits, treatment and procedures
- 8,651,960 pathology & lab medicine procedures
- 447,497 diagnostic imaging procedures
- 291,015 radiation oncology procedures
- 252,104 volunteer hours
- 1,586,955 web site visits
Why Worksites Wellness?
√ 10 Organizations / Variety of Industries & Sizes
√ Wellness Programs Achieved Measurable Results

Biltmore (hospitality and tourism)
Chevron (energy)
Comporium (communications)
H-E-B (grocery retail)
Healthwise (health information publishing)
Johnson & Johnson (healthcare products manufacturing)
Lowe’s (home-improvement retail)
MD Anderson Cancer Center (health care)
Nelnet (education planning and finance)
SAS Institute (software)

The State of Working America

- USA has highest per person healthcare cost of industrialized world and ranked 37th of 91 countries, $1 out of $7 spent on medical goods or services
- 1% of population account for 30% of costs and 5% account for 70%
- Employers health benefits cover 3/5 nonelderly
- Healthcare spending by 2015 predicted at $4T, 20%GDP, $12,320
- Median age employee 40.7 ‘08
- 2016, 55+ = 22% workforce
- 2006, 65-74, 22.8% employed
- 35% deaths attributed to poor diet, smoking, physical inactivity
- Large geographical difference in health spending and >$ not = to > life expectancy
- Presenteeism 18-60% of total health related costs
- Productivity losses related to personal / family health $1,685 per employee

Healthy Workplace 2010 & Beyond PFP 2009
Questions you should be asking.....

• Is there a “business case” to be made for worksite wellness?

• What is the evidence and is it compelling?

• Can we develop an ROI argument?
Logic Model Worksite Lifestyle Costs

Lifestyle Risk Factors
- Physical activity
- Stress
- Smoking
- Nutrition
- Seat Belts
- Multiple Health Risks

Clinical Risk Factors
- Obesity
- Blood pressure
- Cholesterol
- Blood sugar
- Musculoskeletal

Direct Health Impact
- Medical problems
- Health status

Indirect Outcome
- Health care utilization
- Health care cost
- Absenteeism
- Employee productivity
- Job/life satisfaction
- Other

Average Annual Health Insurance Premium Costs

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### Chronic Disease in America

More than 133 million Americans, **45%** of population have one or more chronic diseases, represent $3 of every $4 spent on healthcare, someone with chronic conditions 5x costs

- 23% have 1 chronic condition
- 12% have 2 chronic conditions
- 6% have 3 chronic conditions
- 4% have 4 chronic conditions
- 4% have 5+ chronic conditions

Chronic disease accounts for 7 out of 10 deaths

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<td>Chronic obstructive pulmonary disease</td>
<td>4 Chronic obstructive pulmonary disease</td>
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Johns Hopkins University (2006)  
CDC Deaths and Mortality (2007)
Iceberg Phenomenon
Direct vs. Indirect Costs

Direct Medical Costs
- Medical
- Pharmaceutical

Indirect Costs
- Presenteeism
- Short Term Disability
- Long Term Disability
- Absenteeism
- Workers Compensation

Indirect Costs represents 2-3 times Direct Medical Costs
Questions you should be asking…..

• Is there a “business case” to be made for worksite wellness?

• What is the evidence and is it compelling?

• Can we develop an ROI argument?
Modifiable Risk Status Change

- Vecchio (2011) occupational health & safety workplace programs that target modifiable risk factors may improve health capital and productivity
- Nguyen (2010) diabetes increases with weight classes, nearly half of diabetes are considered obese
- Friedenreich (2010) strong consistent evidence that physical activity recues the risk of colon, breast, and endometrial cancer / weaker for ovarian, lung and prostate
- Goetzel (2010) despite the evidence and promise, worksite wellness programs have not been embraced by small and rural businesses
- Goetzel Relationship Modifiable Health Risk Factors (2009) potential for medical & productivity savings
- Baker (2008) obesity management intervention can lead to program savings, 1 year 7 – 10 risks decreased $1.17 - $1.00 ROI
- Goetzel Systematic Review (2008) modifiable risk factors account for 25% total healthcare expenditure, employees with 7 (tobacco, no physical activity, high: stress, blood pressure, CHO, blood sugar, body weight cost 228% more
- Baker Dow Obesity Mgt (2008) over 1 year 7 of 10 risk factors change total projected savings of $311,755
- Burton (2006) 1.9% productivity lost at an annual costs of $950, “churn” of 33% adding a risk factor
- Yen (2006) excess risk accounts for 25% of medical claims, non-participant 1.99 times higher, moderate risk 2.22 and high risk 3.97 times higher
Medical Care Costs

- **Trogdon (2009)** Workplace obesity interventions result in a reduction of $90 for every 5% of body weight
- **Naydeck (2008)** Highmark wellness program four year cost savings $1,335,524 showing programming lowers rate of healthcare costs
- **Baker (2008)** over 1 year, 7 of 10 health risks decreased for a total savings of $311,755, 59% attributed to reduced healthcare expenditures
- **Dall DOD Health Risks Costs (2007)** tobacco use $564m, obesity $1.1b, alcohol $425m / non-medical excess of $965m
- **Wang (2006)** each BMI unit medical costs went up $119.70 and pharmaceutical cost $82.60
- **Musich (2004)** BMI medical costs go up, reduce risk levels reduces costs
- **Musich (2004)** 5 years for former smokers without chronic conditions to reach non-smoker levels, 10 years for those with chronic conditions
- **Wright (2004)** high risk = costs 10 – 21% higher
- **Goetzel (2004)** high BP $392, CVD $392, depression $348, arthritis $327
Absenteism

- **Baicker (2010)** meta analysis of literature shows every wellness $ spend reduces absenteeism by $2.73
- **Rodbard (2009)** 15,132 ~ greatest impairment of work and daily activities among obese individuals
- **Kuoppala (2008)** evidence that health promotion decreases sickness absence / range .1 – 1.57
- **Bachman (2007)** health promotion interventions provide cost savings from decreased absenteeism rates
- **Halpern (2007)** impact of a smoking cessation program resulted in a total saving in year 4 and included reduced absenteeism
- **Burton (2004)** 10.6% reported missing 7.7 hours over previous 2 weeks to care for sick dependent, care giving associated with increase of health risk
- **Aldana (2001)** obesity 1.5 – 1.9 times higher, stress 14% of all absenteeism caused by stress, multiple risk factors 15 – 23% of absenteeism associated
- **Serxner (2001)** 4 risk factors 1.75 times more likely to have higher absenteeism than low risk
Disability Costs and Days

• Gibson (2010) cost sharing adherence to anti-diabetic medication, increase adherence decrease costs in emergency room visits and STD

• Lambeek (2010) integrated care programs reduce chronic low back in working & private life

• Jover (2009) early cognitive-behavioral treatment complementary to rheumatologic care reduces duration of relapse

• Burton / Financial Service (2007) antidepressant medication adherence, low compliance resulted in almost 40% increase in chance of STD

• GlaxoSmithKline (2003) savings of $217 STD, $545 LTD, average of $613, estimated savings of $5.5 million

• Schultz (2002) each disability cost $200, average savings per year $623,040 or a 2.3 to 1 cost ratio

• Serxner (2001) non-participants had 23% increase in days lost, participants 6% increase, projected costs savings over 2 years $1,371,600
Productivity

- Palumbo (2010) workplace wellness Tai Chi classes cost effective option for older female workers, 3% increase in productivity
- Kirsten (2010) a global perspective making the link between health and productivity
- Katcher (2010) vegetarian / vegan diets effective in treating several chronic diseases, vegan group reports 40-60% decrease in health-related productivity impairments
- Goetzel (2009) factor analysis identified relationship between increase in health risks and > presenteeism
- Schultz (2009) the cost of presenteeism is much larger than the costs of direct healthcare
- Loeppke (2009) strong link between health and productivity / integrating productivity and health data leads to development of effective programming
- Burton (2006) arthritis, 7 – 10% loss of productivity, proper medication / treatment only 2.5% loss
- Musich Australian Population (2006) high stress, back pain, life dissatisfaction lead to significant absenteeism & presenteeism
- Burton (2005) each health risk adds 2.4% excess productivity reduction, medium risk 6.2% reduction, high risk 12.2% reduction, life dissatisfaction = 4.5% reduction, stress 4.1% reduction, job dissatisfaction 3.1% reduction
Recruitment & Retention

- Bakker (2010) Canadian cancer nurses view of recruitment – retention as a continuum / developing an environment facilitates culture change
- O’Brien (2010) by creating a generally healthier work environment, data suggests that these programs will also have a positive effect on recruitment and retention.
- Reed (2009) case study of creating a healthy workplace in a surgical trauma unit essential in recruitment and retention
- Angeletti (2008) workplace lactation program – a nursing friendly environment impacts recruitment, retention, productivity efforts
- Stichler (2005) recruitment & retention strategies that create the best workplace for women’s services, culture of excellence, job satisfaction measured by social climate, relationships, job stress, resources, control, etc
- Tsai / Baun (1987) relationship of employee turnover to exercise adherence in a corporate setting
Questions most of us are asking…..

- Is there a “business case” to be made for worksite wellness?
- What is the evidence and is it compelling?
- Can we develop an ROI argument?
What is ROI? Where does it fit in Program Evaluation?

Categories of Worksite Program Evaluation

Basic
Process – qualitative & quantitative look at programming process
Impact – overall effectiveness indicating immediate effects
Outcome – stated long-term objective & goals met

Project Effectiveness
Claims analysis
Risk factor costs appraisal

Financial Analysis
Forecasting / cost avoidance benefits
Cost effectiveness
ROI Return on investment (tangible financial benefits / tangible costs)
Cost benefit analysis (tangible & intangible benefits / tangible & intangible costs)

Chenoweth (2002) Evaluating Worksite Health Promotion
Meta Analysis Review Studies

- **Schaafsma (2010)** 37 studies looking at back pain / analysis found severe back pain improvements gained through physical activity programming
- **Blackburn (2009)** workplace weight-loss programs are a win-win with a $2.10 ROI
- **Trogdon (2009)** 5% weight loss would result in a annual cost (medical/absenteeism) or $90
- **Conn (2009)** These findings document that some workplace physical activity interventions can improve both health and important worksite outcomes
- **Naydeck (2008)** 4-year impact of Highmark ROI of $1.65
- **Goetzel (2008)** ROI $1.40 - $3.14, 80’s – 90’s study review
- **Ichihashi Oral Wellness (2007)** 2-4 visits $1.46 ROI
- **Koffmann (2007)** wellness programming $3 - $6 return over a 3 – 5 year period
- **Chapman (2005)** 56 studies meta evaluation, 500,000 individuals, evidence is strong for reductions in absenteeism, medical care costs, disability, workers compensation, 2/3 of studies single variables
ROI studies of worksite wellness programs:

- Canada and North American Life
- Chevron Corporation
- Dow Chemical
- City of Mesa, Arizona
- General Mills
- General Motors
- Highmark
- Johnson & Johnson
- Pacific Bell
- Procter and Gamble
- Tenneco

- ROI estimates in these nine studies ranged from $1.40 to $4.90 in savings per dollar spent on these programs.

- Median ROI was $3 in benefits per dollar spent on program.

- Sample sizes ranged from 500 - 50,000 subjects in these studies.

Goetzel, Presentation (2010)
An Analysis of the Cost Effectiveness of Worksite Wellness

C/B Ratio

Study Number

Traditional
Newer Programs
Outliers

Chapman (2007)
Aldana (2001) Financial Impact of Worksite HP

196 Peer reviewed studies pared down to 72 through scoring criteria

**Scoring Criteria:**
- A (experimental design)
- B (quasi-experimental – well controlled)
- C (pre-experimental, well-designed, cohort, case-controlled)
- D (trend, correlational, regression designs)
- E (expert opinion, descriptive studies, case studies)

**Health promotion program impact on health care costs:**
- 32 evaluation studies examined – Grades: A (4), B (11), other (17)
- Average duration of intervention: 3.25 years
- Positive impact: 28 studies
- No impact: 4 studies (none with randomized designs)

- **Average ROI: 3.48 to 1.00 (7 studies)**
What’s the Hard Return on Employee Wellness Programs? Wellness Dashboard

- Johnson and Johnson 10 year study $250m cumulative savings, $2.71 ROI
- MD Anderson 6 year integrated workers’ compensation program, lost work days decline 80%, modified-duty days decline by 64%, $1.5m savings
- SAS Institute (software) voluntary turnover at 4%, Biltmore (tourism) down from 19% to 9% in 4 years
- Highmark (BCBS companies) 4 year study ROI of $1.65

Modifiable risk status change
Absenteeism
Short and long-term disability
Workers’ compensation
Productivity
Recruitment and retention
Return on investment
Questions you should be asking.....

- Is there a “business case” to be made for worksite wellness?
- What is the evidence and is it compelling?
- Can we develop an ROI argument?
Who Must be Impacted?

- Peers / Buddies
- Individuals
- Teams
- Organizations
- Families
- Communities
Core Factors Impacting Individual Behavior Change and Creating Culture of Health

- Opportunity 40%
- Self confidence
- Action
- Skill 25%
- Support
- Behavioral efficacy
- Self efficacy
- Motivation readiness 30%
- Knowledge
- Awareness 5%

Modified from O’Donnell WELCOA (2010)
Both corporate climate and culture have significant influence on shaping of health behaviors and practices!
Qualitative Study

• Individual interviews with many CEO’s, CFO’s, and COO’s

• Interviews with individuals partnered with wellness (safety, employee health, human resources, benefits, vendors, etc.)

• Focus groups with wellness participants

• Focus groups with non-wellness participants

What works?
What doesn’t work?
What is the impact of wellness on the organization?
Six Essential Pillars
Foundation of Successful Programs

- Multilevel Leadership
- Alignment
- Scope, Relevance, and Quality
- Accessibility
- Partnerships
- Communications
Multilevel Leadership
Culture of health takes passionate, persistent, & persuasive leadership

• **C-suite** – “walks the talk”, policies & mandates, shows an interest in employees wellness behaviors – “how’s your wellness”

• **Middle Managers** – shaping mini-wellness cultures

• **Wellness Program Managers** – expert who develops, coordinates a comprehensive program connected to company culture and strategies

• **Wellness Champions** – volunteer wellness ambassadors serving as on-the-ground encouragement, education & mentoring
Developing Leadership Roles…

• Sharing the wellness program vision
  - connection to organizational goals
  - alignment with vision, mission

• Serving as a role model
  - share enthusiasm for being healthy
  - sharing story
  - participating in program activities

• Resource commitment
  - budget
  - supportive policies / processes

• Help remove political / barriers

• Reward Success
  - recognize group / individual progress
  - track impact / outcomes
  - celebrate success
  - honor those involved in program delivery
Alignment
Wellness - natural extension of a firm’s identity & aspirations

• **Planning and Patience** – look for way to permeate the culture with wellness, emphasize early communications & clear explanations, develop a long-term comprehensive strategy

• **Carrots not Sticks** – positive incentives promote trust & provide employees choices

• **Complement to Business Practices** – wellness programming must make business sense // sustaining a healthy, talented, satisfied labor pool is a matter of corporate responsibility & business necessity
Employee wellness needs vary tremendously

- **More than Cholesterol** – think beyond diet & exercise, stress & depression major sources of lost productivity
- **Individualization** – online health risk assessment combined with biometric data
- **Signature Program** – high profile, high quality initiative fosters employee pride & involvement
- **Fun** – never forget the pleasurable principles in wellness initiatives
- **High Standards** – health related services are personal, employees won’t use substandard services, “no one will come for free and lousy”
Program Model that Fits the Culture
MD Anderson Wellness

- Policies that support work life balance
- Brand our program as a key “employer of choice” benefit
- “Whole person” focus – emotional health, a climate of safety
- Ensure 24/7 access
- Obtain senior and middle management sponsorship
- Create value with departmental programming
- Target hard-to-reach and high risk groups
- Cultural and environmental focus
Accessibility
Convenience matters

• **True On-Site Integration** – carefully consider your wellness model & how best to integrate it across your company culture

• **Going Mobile** – high tech tools (virtual wellness programs & online resources) not only deliver the wellness message & provide individuals tracking tools & individual reports, but also compliment the high touch programs that unite individuals in a culture of health

![National Wellness Institute Wellness Model](image)
MD Anderson Stretching the Traditional Wellness Elements

- Lactation Rooms
- Massage
- Yoga
- Laughter Yoga
- Tai Chi & Qigong
- Salsa Classes
- Pilates
- Meditation
- Beyond Salad
Partnerships

- **Internal Partnerships** – help wellness gain credibility

- **External Partnerships** – enable staff to benefit from vendor competencies & infrastructure without the extra investment

- **Leveraging Resources** – internal & external partnerships help grow & maintain comprehensive programs
An Institutional Attack on Obesity

- Wellness dietitian
- Individual coach / counseling opportunities
- Multiple Weight Watcher locations
- Power Plate daily dining option
- Healthy Choice vending machines
- Reasonable costs of water, fruit, vegetables
- Supermarket Tours
- “Rock Steady” program

- Wide range of physical activity options
- Walk, run & bike clubs
- “Speed up metabolism” class
- Buddy up Challenge
- Colorful Choice Challenge

Culture / Climate Focus

- Recognition of Rock Steady departments
- Foods that Prevent Cancer
- ‘Just4U’ point of purchase dining service system
- Bike Barns
- (2) 20,000 sq. ft. Fitness Centers
Communications
Must overcome individual apathy and personal health sensitivity factors

• Tailor Messages - to fit the intended audience, hone effective practices overtime

• Media Diversity – use a variety of different communication tools to reach the audience

• Embedded Wellness Clues – wellness needs to become a “viral thing” spreading throughout the workplace
Six Essential Pillars
Foundation of Successful Programs

- Multilevel Leadership
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- Accessibility
- Partnerships
- Communications
MD Anderson Wellness
Three Words Guide our Programming

**Engage** employees in a wellness partnership

**Sustain** behavior change through appropriate program design / delivery

**Accountability** for better health & wellness practices

Individually / Teams / Organization

Design / deliver programs that facilitate employee **Accountability** for better health & wellness practices
Worksite Wellness Challenges

Programming Challenges

- Program adoption, implementation in small & middle size businesses
- Services not within healthcare payment system
- Wellness services weakly connected by healthcare system
- Bringing wellness home

Research Challenge

- Incentive research focused on simple and complex behavior change
- Research focused on wellness climate and culture change
- Dose response research

Professional & Leadership Challenges

- Standardization of wellness degree programs & certifications
- Post graduate & mentoring programs for wellness professionals
Employers Can Help Fix America’s Healthcare Crisis

“The number one benefit you can give an employee is good health.”

Jim Goodnight, Founder and CEO of SAS

“If your only reason is to cut healthcare costs, you won’t get employee buy-in and support because there’s nothing motivating for anyone other than senior management.”

Terry Heimes, CFO at Nelnet

“America’s healthcare system is backwards. We reimburse for fixing problems after they occur. We need to focus on the front end of the problem. That can take place at work. People come here every day.”

Steve Miller, EVP of Biltmore
Questions