Spiraling Costs Driven By:
- Increased utilization (Health Crisis has led to the Cost Crisis)
- Disconnected/fragmented control levers with significant quality gaps
- Epidemiologic trends (“Silver Tsunami”, increasing BOI/BOR)

Market Asking for Integrated Population Health & Productivity Solution:
- Moving “upstream” = prevention and wellness focus
- Whole Population/Whole Person Integrated Intervention Solution
- Healthy human capital is the business value proposition for better health

Simultaneous Demand-side and Supply-side Opportunities
- Consumer movement
- Tools, technologies and strategies
- Aligning Incentives among Stakeholders (Consumer & Provider P4P, PCMH, ACOs)

We Need More Prevention and Better Quality from our Healthcare System
Historic Paradigm Shift

MONUMENTAL TRANSITION FROM “SICK” CARE SYSTEM TO TRUE “HEALTH” CARE SYSTEM
Personal Health Behaviors are the Main Causes of Death

Health Behaviors: The Main Mortality Risk Factors in U.S.

- Lifestyle: 51%
- Heredity: 20%
- Environment: 19%
- Health Services: 10%

70% of All Deaths in US are Related to Chronic Illness

Relative Risks by Cause of Death (for people born in the U.S. in 2004)

- Heart Disease
- Cancer
- Stroke
- Diabetes
- Car Accidents
- Gunshot
- Drowning
- Lightning
- Earthquakes
- AIDS
- Obesity
- Smoking
- Deaths per million
- Deaths

The uncommon death statistics from: National Safety Council, Odds of Death Due to Injury, United States, 2004
Smoking statistic: (Centers for Disease Control and Prevention) http://www.cdc.gov/tobacco/data_statistics/factsheets/tobacco_related_mortality.htm
Another Problem: Quality Inconsistency Leads to Gaps in Care

- 22% of PCPs nationally do not feel they can provide high quality care to all their patients. (Center for Studying Health System Change)
- 24% of PCPs feel that the scope of care they are expected to provide is greater than what is reasonable. (NEJM 1999)
- On Average, only about 55% of US adults receive the evidence based recommended care, with specific rates by conditions as follows: (McGlynn, E, et.al., NEJM, June 26, 2003)

Health Care Industry Benchmarks for Evidence-Based Medicine

- Diabetic care
- Post heart attack medications
- Depression care
- Low back treatment
- Doctor prescription writing
- Airline baggage handling
- Airline fatalities

BMI and Relative Risk of Type 2 Diabetes
The heavier you are the greater the risk

Health is an Action Verb

"Give it to me straight, Doc. How long do I have to ignore your advice?"
How Does Obesity Cause Disease?
Intra-Abdominal and Liver Fat Is the Critical Fat Depot
But there is good news: modest weight loss drastically reduces intra-abdominal and liver fat and multiple cardiometabolic risk factors simultaneously.

Before weight loss
(95 kg, BMI 32)

After 10%-weight loss
(85 kg, BMI 29)

That’s why it will be cost-effective


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The Bigger Problem:

The Full Cost of Poor Health to Employers

- **Personal Health Costs**
  - Medical Care
  - Pharmaceutical costs

- **Productivity Costs**
  - Absenteeism
  - Presenteeism
  - Short-term Disability
  - Long-term Disability
  - Overtime
  - Turnover
  - Temporary Staffing
  - Administrative Costs
  - Replacement Training
  - Off-Site Travel for Care
  - Customer Dissatisfaction
  - Variable Product Quality

Iceberg of Full Costs from Poor Health

Sources:
Health Risks Impact Productivity

% of Workplace Productivity Loss

- 0-2 risks: 14.7%
- 3-4 risks: 20.9%
- 5+ risks: 26.9%

Work days lost / Person / Year

- 1 risk: 6.4 Days
- 3 risks: 9.3 Days
- 4+ risks: 12.6 Days

STD Days / Year

- 0-1 risks: 2.4 Days
- 2-3 risks: 5.3 Days
- 4+ risks: 13.1 Days

Reduce Costs by Reducing Risks

Costs Increased

- Costs Reduced

- Risks Reduced

- Risks Increased

Improve Workforce Productivity by Reducing Health Risk

The Solution: Reduce the Burden of Risk And Illness

Current system focus on the financial transactions of healthcare does not lower total costs — it tends to only shift them.

Reducing the burden of health risks and illness leads to a healthier population and measurable TOTAL COST DECREASES.
Prevention...is the Ultimate Solution

Milken Study Finds:
- Primary Prevention (wellness, health promotion)
- Secondary Prevention (earlier detection/diagnosis)
- Tertiary Prevention (earlier EBM condition mgmt)

could have an economic impact of $1 trillion annually...

The Clinical Model of Preventive Medicine

Prevention:
An Investment to be Leveraged rather than a Cost to be Justified

**PRIMARY**
Wellness/Health Promotion

**SECONDARY**
Early Detection/Diagnosis

**TERTIARY**
Early Intervention/EBM Care Mgt
A Bundled Clinical Model of Prevention

Primary, Secondary, & Tertiary Prevention

New Benefit | Comprehensive Solution

High-Tech, High-Touch Model
A cross-sectional study of 124 employers with 882,275 eligible employees completing 344,825 Health Risk Assessments (HRAs) was done using multiple regression analysis.

Incentive Value along with Communications and Organizational Commitment (Com/Org) Level were the strongest predictors of HRA Completion Rates.

To achieve a 50% HRA Completion Rate, employers with a Low Com/Org Level needed an Incentive Value of approximately $120 whereas employers with a High Com/Org Level only needed approximately $40.

EMPLOYER TOOLS

- Assistance with Implementing Worksite Wellness
  - Guide to Creating a Culture of Health

GUIDE TO CREATING A CULTURE OF WELLNESS IN YOUR COMPANY

Tools, Templates and Step-by-Step Tips on Building a Healthier Company
Learn, Act and Explore Top Health Risks

My Prevention Plan

Top Risks
- Future Diabetes: High risk
- Future Heart Disease: Moderate risk
- Future Skin Cancer: Moderate risk
- Future Depression: Moderate risk
- Future Back Pain: Moderate risk

Results and Recommendations
You are at high risk for developing diabetes in the future. There are many risk factors for developing diabetes. The more risk factors you have, the more likely you will develop diabetes...

Learn
- About Diabetes
- Videos on Diabetes
- Tools for Diabetes
- Diabetes News
- Additional Diabetes Screening

Act
- Enroll in Action Programs for Diabetes
- Subscribe to Diabetes News

Explore
- Pre-Diabetes FAQs (CDC)
- American Diabetes Association (ADA)
- The National Diabetes Education Program
- National Diabetes Information Clearinghouse
- Life with Diabetes
Prevention Schedule

My Prevention Plan

- Physical Exam - Completed
- Skin Exam - Completed
- Testicular Exam
- Blood Pressure Screening - Completed
- Electrocardiogram (EKG)
- Cholesterol (blood lipids) test - Completed
- Fasting Glucose - Completed
- PSA Blood Test
- Eye Exam (MD)
- Dental Exam
- Dental Cleaning
- Flu (Influenza)
- Tetanus - Completed
- Hepatitis A
- Hepatitis B
- Meningitis (meningooccal) - Completed
Prevention Score

**Employer -**
Align Incentives and Rewards to Individuals’ Health Proactivity

**Employee -**
Track Progress Toward Prevention Goals
Measurable Impact of The Prevention Plan
Evaluation of Participation Rates in The Prevention Plan for Eligible Population Across Multiple Employer Groups
Effect of Premium Reduction on Engagement Rates

Data as of 3/5/10

Proprietary and Confidential
U.S. Preventive Medicine, Inc.

PREMIUM (n = 23,573)  OTHER (n = 9,918)

HRA Completion

64%  47%
Effectiveness In Improving Health Risks Demonstrated

*Impact of The Prevention Plan on Employee Health Risk Reduction*

October, 2010 Issue: *Population Health Management*

**Co-authored by:**

Ron Loeppke, MD, MPH, FACOEM, FACPM  
Vice-Chairman of the Board, U.S. Preventive Medicine, Inc.

Dee Edington, PhD  
Director of the Health Management Research Center  
at the University of Michigan  
Member of the U.S. Preventive Medicine International Advisory Board

Sami A. Bég MD, MPA, MPH  
Associate Medical Director for U.S Preventive Medicine, Inc.

All information herein is confidential and not for distribution.
Wellness Works and Prevention Pays


Average ROI

$3.27 + $2.73

Med/Rx Absenteeism Savings

$6.00 saved for every $1.00 invested

In Comprehensive Wellness
Beyond ROI to the Business Value of Health

ROI

Return on Investment

Financial Indicators

VOI

Value of Investment

Financial Indicators/Net Savings

Participation Indicators

Preventive Screening Indicators

Health Risk Indicators

EBM Clinical Indicators

Utilization Indicators

Productivity Indicators

Shareholder Value

The Business Value of Better Health and Productivity

- Market cap value impact from regaining 1 Day of productivity per year per FTE
- Example: 58,000 employees, current 8 Days per FTE of health-related productivity loss

1 Day per FTE of Regained Productivity = $18.8M EBITDA impact
13x (EBITDA Multiple)
$244.4M estimated market cap increase
÷ 292M shares
$0.84 in additional per share value
Employer Health & Productivity Initiatives

Demonstrate Superior Financial Performance*

Employers with Highly Effective Health & Productivity Improvement Programs:

- Yielded 20% More Revenue per Employee
- Demonstrated a 16.1% Higher Market Value
- Delivered 57% Higher Shareholder Returns

Good Health is Good Business
From the Exam Room to the Board Room