

**MEASURABLY
ENHANCING LIVES**

Maximizing Employee Health and Productivity

Disease Management Colloquium

May 11, 2006

Ron Loeppke, MD, MPH

Integrated Health and Productivity Enhancement

- Converging Trends in the Market (When)
- Clinical/Financial Business Case (Why)
- Integrated H&P Solutions (What)
- Employer Case Studies (How)

Converging Healthcare Trends Affecting Employers

Spiraling costs driven by:

- Epidemiologic Trends (aging workforce, ↑ BOI/BOR)
- Significant quality gaps
- Rising unit costs
- Complex benefit designs

Disconnected/fragmented control levers

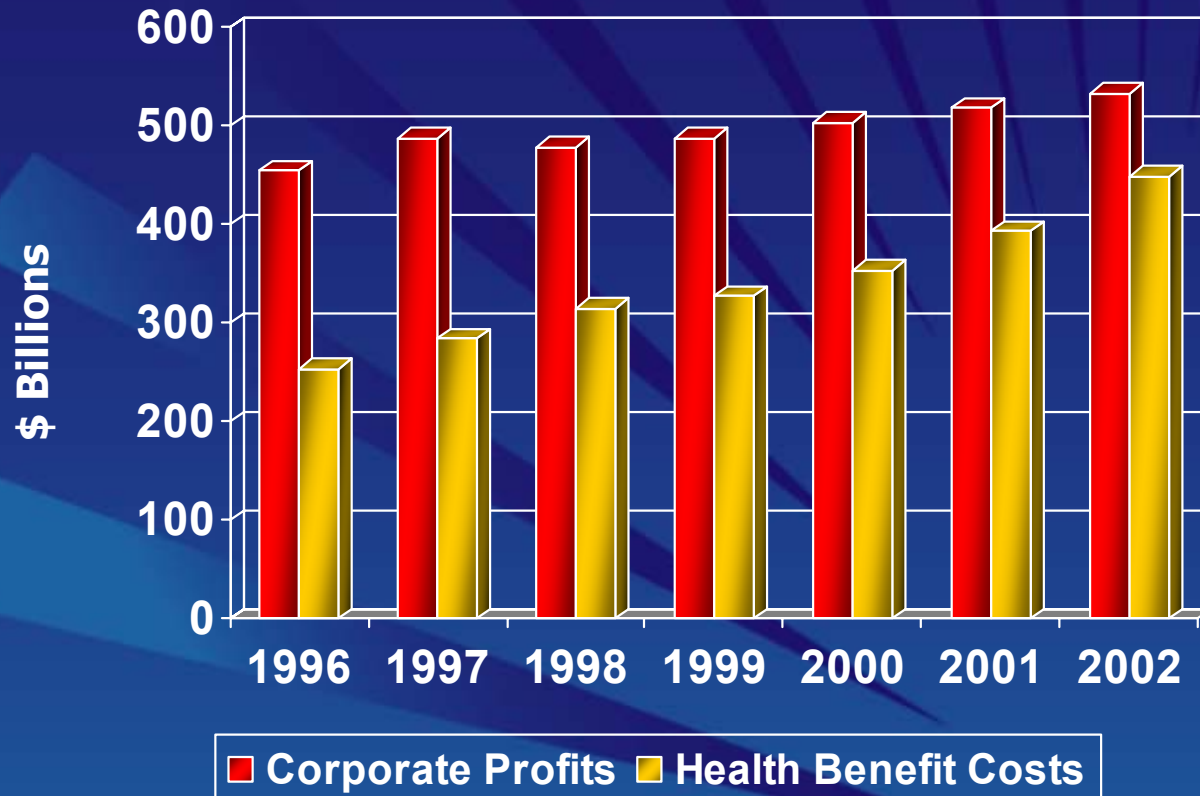
- Providers, employers, health plans, patients
- Current “non-system” too fragmented and uncoordinated

Simultaneous Demand side and Supply side opportunities

- Employer appetite for more engagement of total population
- Consumer movement and Physician Pay for Performance

Corporate Profits vs. Rising Health Benefit Costs

All U.S. Corporations



Source: The National Data Book and IRS Data Reports

The Real Problem: The Full Cost of Employee Illness

Medical &
Pharmacy Costs

*\$6,020 PEPY

*2003 PEPY Avg.

Health-related
Productivity Costs

\$12,000 PEPY

Total PEPY
= \$18,020

33%

Personal Health Costs

Medical Care
Pharmacy
Hospitalization
Behavioral Health

Workers' Comp

Medical Costs
Salary Continuation

66%

Productivity Costs

Absenteeism

STD
LTD

Presenteeism

Overtime
Turnover
Temporary Staffing
Administrative Costs
Replacement Training
Off-Site Travel for Care
Employee Dissatisfaction
Customer Dissatisfaction
Variable Product Quality

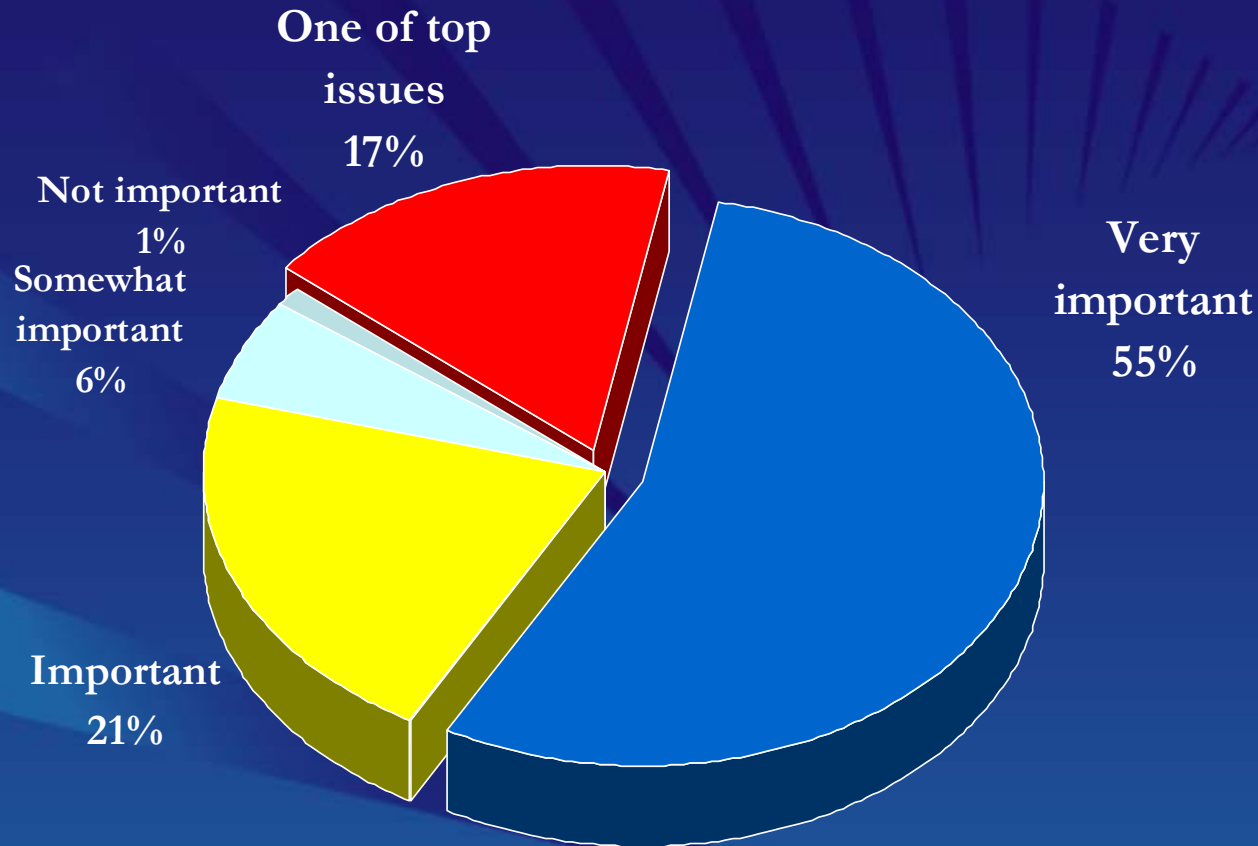
Sources: Loeppke, et.al., JOEM, 2003; 45:349-359
and Brady, et.al., JOEM, 1997; 39:224-231

Health and Human Capital

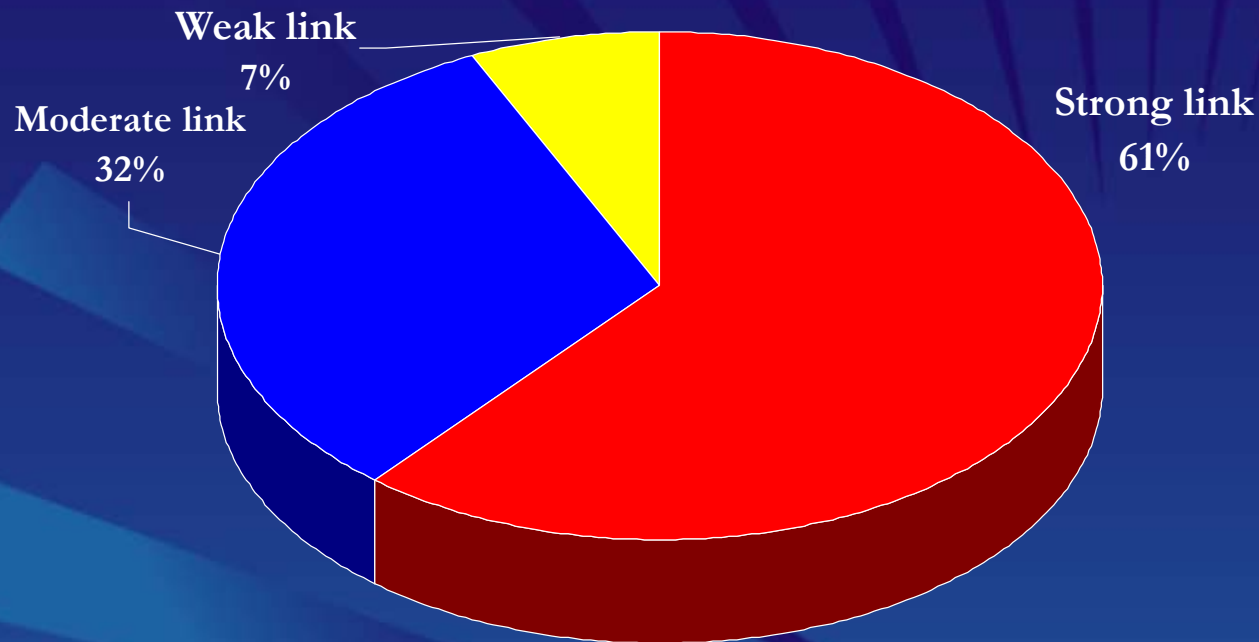
"Just as we have a corporate priority on enhancing our financial capital and economic assets of our company, we must have a corporate priority on enhancing the human capital and health assets of our company."

"The health of our workforce is inextricably linked to the productivity of our workforce and therefore the health of our bottom line."

CFO's Concern Over Rising Healthcare Costs

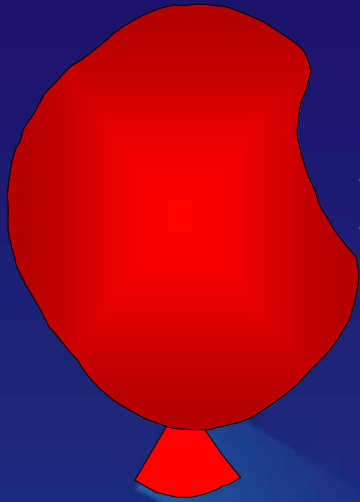


Linking Health, Productivity & the Bottom Line



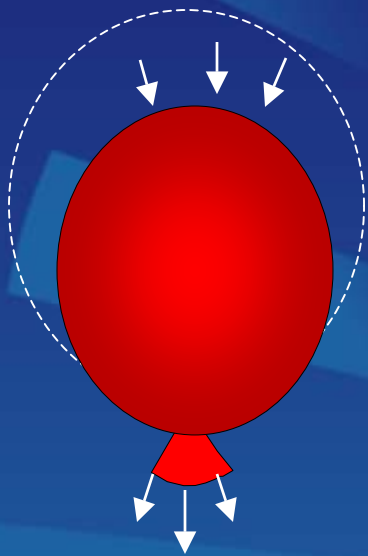
Source: IBI CFO Study 2005

Ballooning Total Health Costs



Tinkering with the peripheral financial transactions of healthcare **does not lower Total Costs**—it only shifts costs

However...



Improving the clinical transactions of healthcare by better managing the burden of illness and reducing health risks **does lower Total Costs** as well as improves the health and productivity of the workforce.

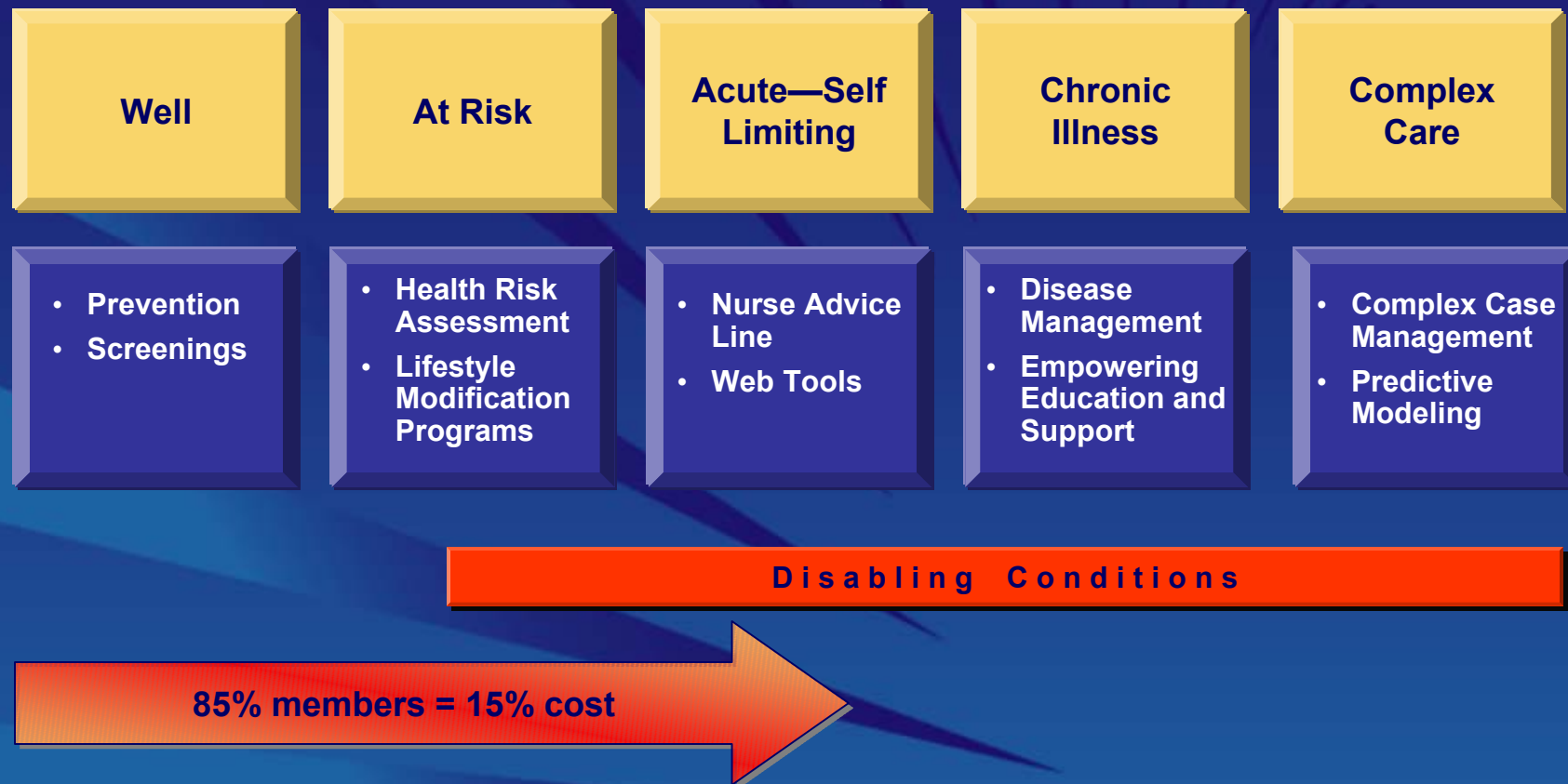
The International Value Proposition

Transforming the System

	Old Way		New Way
Focus	<ul style="list-style-type: none">▪ Medical Cost Mgt▪ Quantity/Cost of Service▪ Illness & Injury▪ Unaligned Incentives	➔	<ul style="list-style-type: none">▪ Total Cost Mgt▪ Quality/Value of Service▪ Health <i>and</i> Productivity▪ Aligned Incentives
Approach	<ul style="list-style-type: none">▪ Permission <i>to</i> Drs & Pts▪ Health <i>Benefit</i> Mgt▪ Fragmentation▪ Patients are <i>passive</i> recipients	➔	<ul style="list-style-type: none">▪ Empowerment <i>of</i> Drs & Pts▪ Health <i>Care</i> Mgt▪ Integration / Coordination▪ Patients are <i>active</i> participants
Results	<ul style="list-style-type: none">▪ Lacks Patient/MD Rewards for Clinical Results▪ EEs “Use it or Lose it”▪ Drs not rewarded for Quality▪ Employers “Pay for Volume”	➔	<ul style="list-style-type: none">▪ Shared Patient/MD Rewards for Clinical Results▪ EEs “Use Wisely & Save”▪ Dr. rewarded for Quality Care▪ Employers “Buy Value”

Integrated Solutions Must Address the Health Continuum

Population Health Management

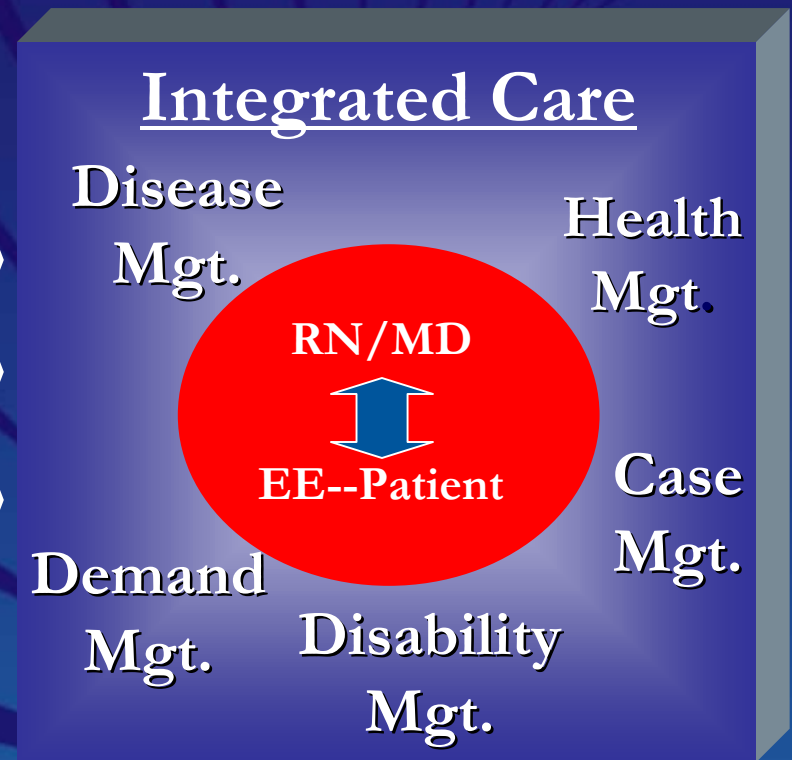


Integration With Quality Focus

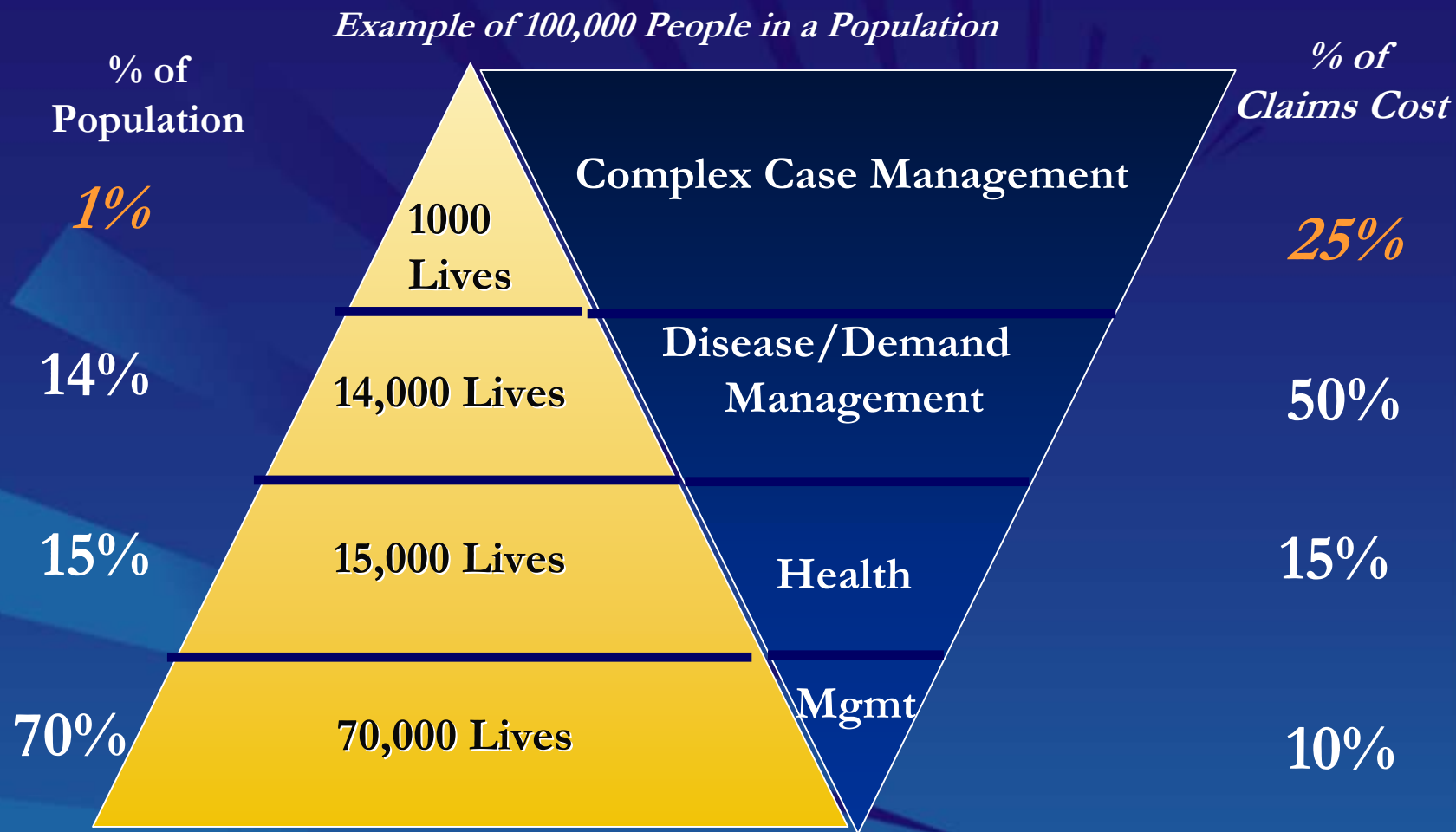
Fragmented - Uncoordinated



Integrated - Aligned



Example Percentages of Integrated Health & Productivity Solution

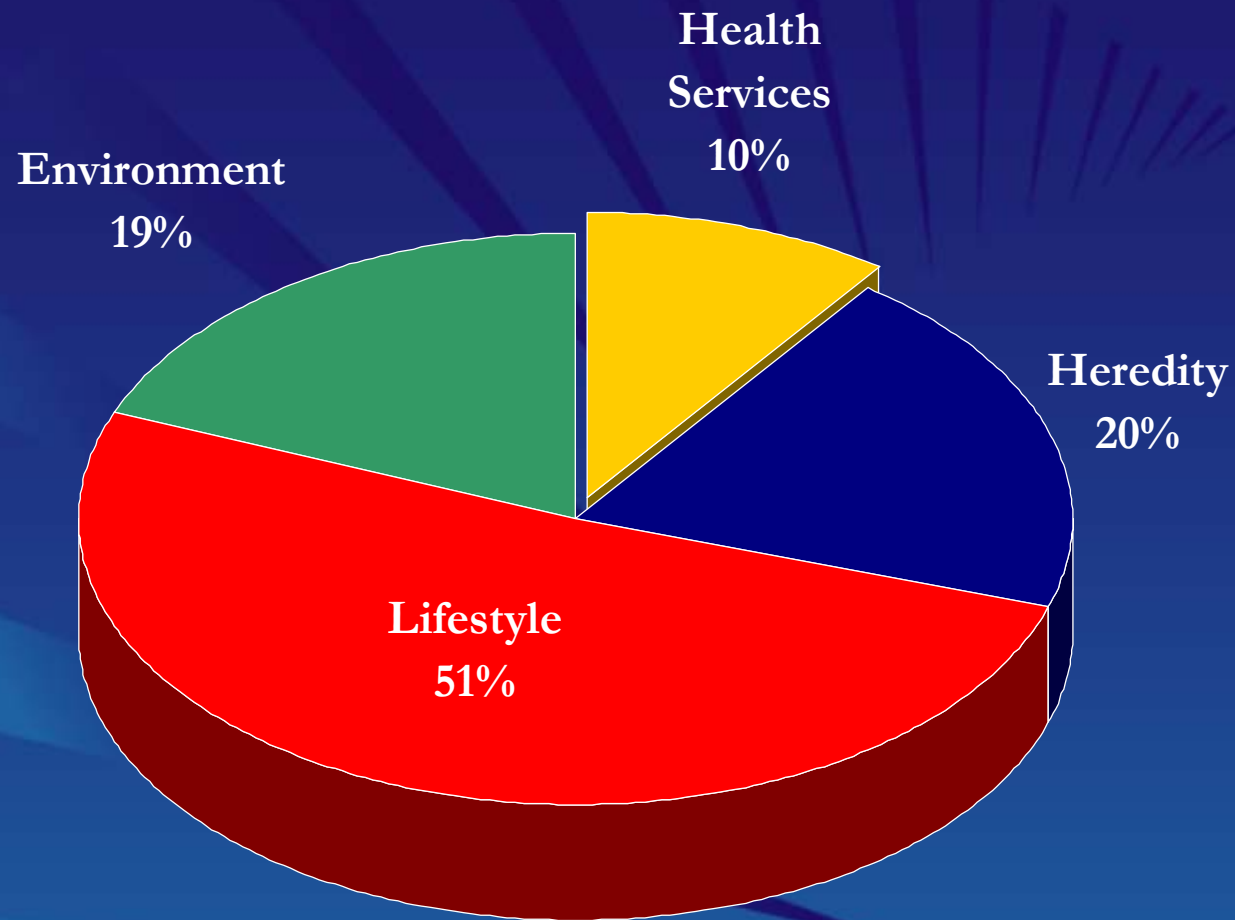


Prevention

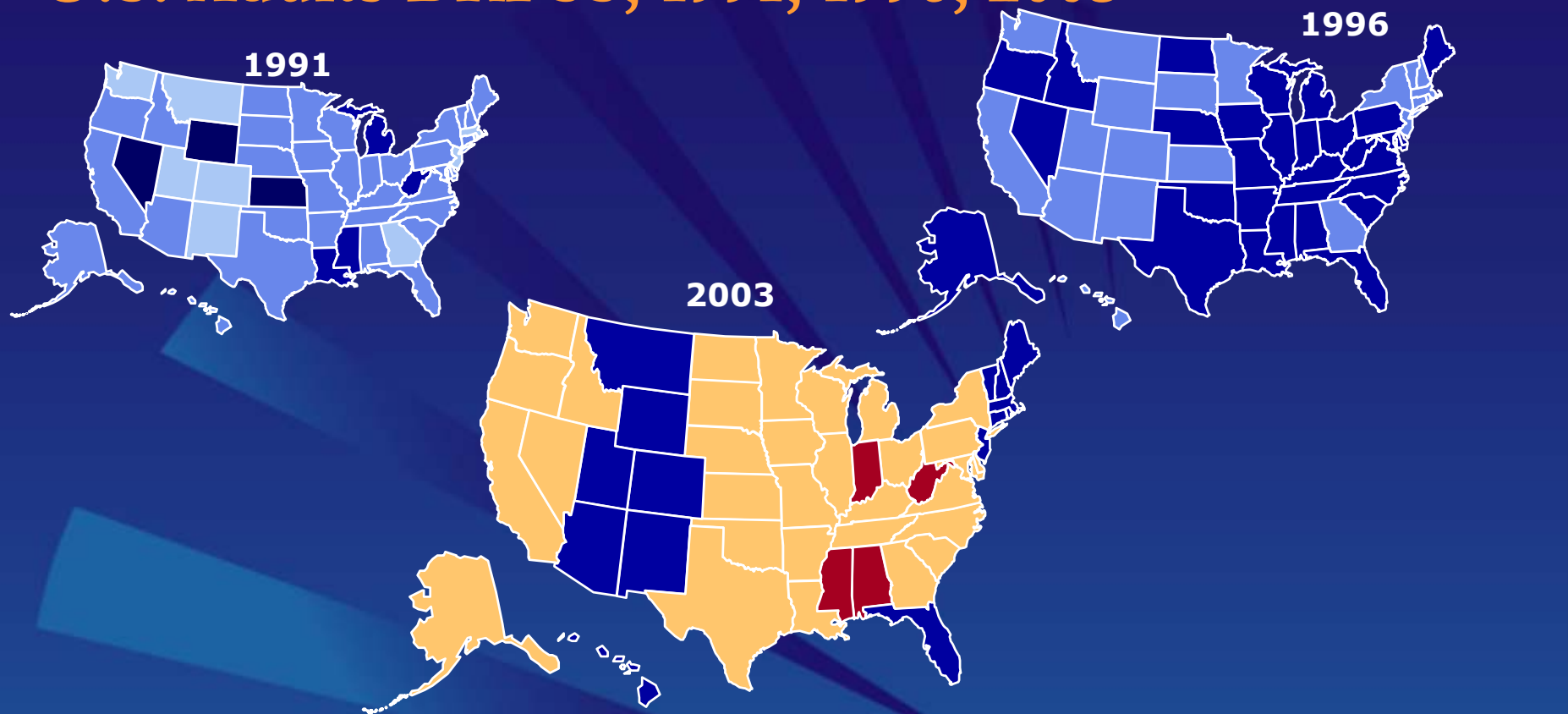
An **investment**
to be leveraged...

Rather than a **cost**
to be justified.

Mortality Risk Factors in the United States



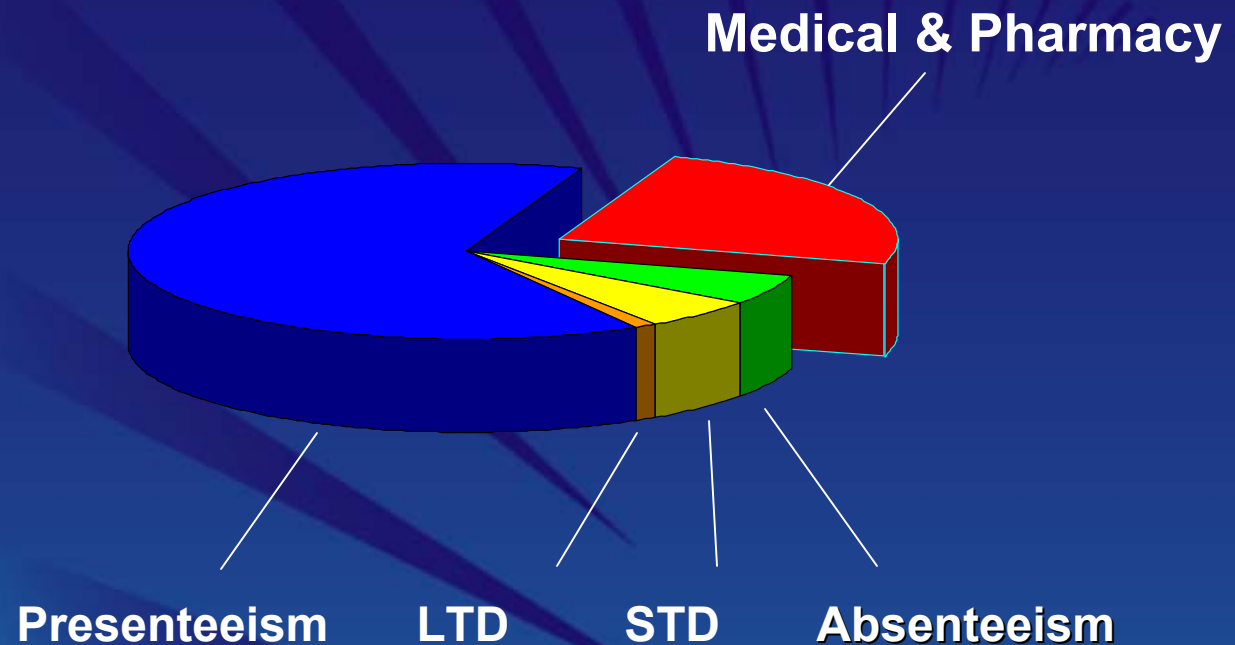
Obesity Trends* Among U.S. Adults BRFSS, 1991, 1996, 2003



(*BMI ≥ 30 , or about 30 lbs overweight for 5'4" person)



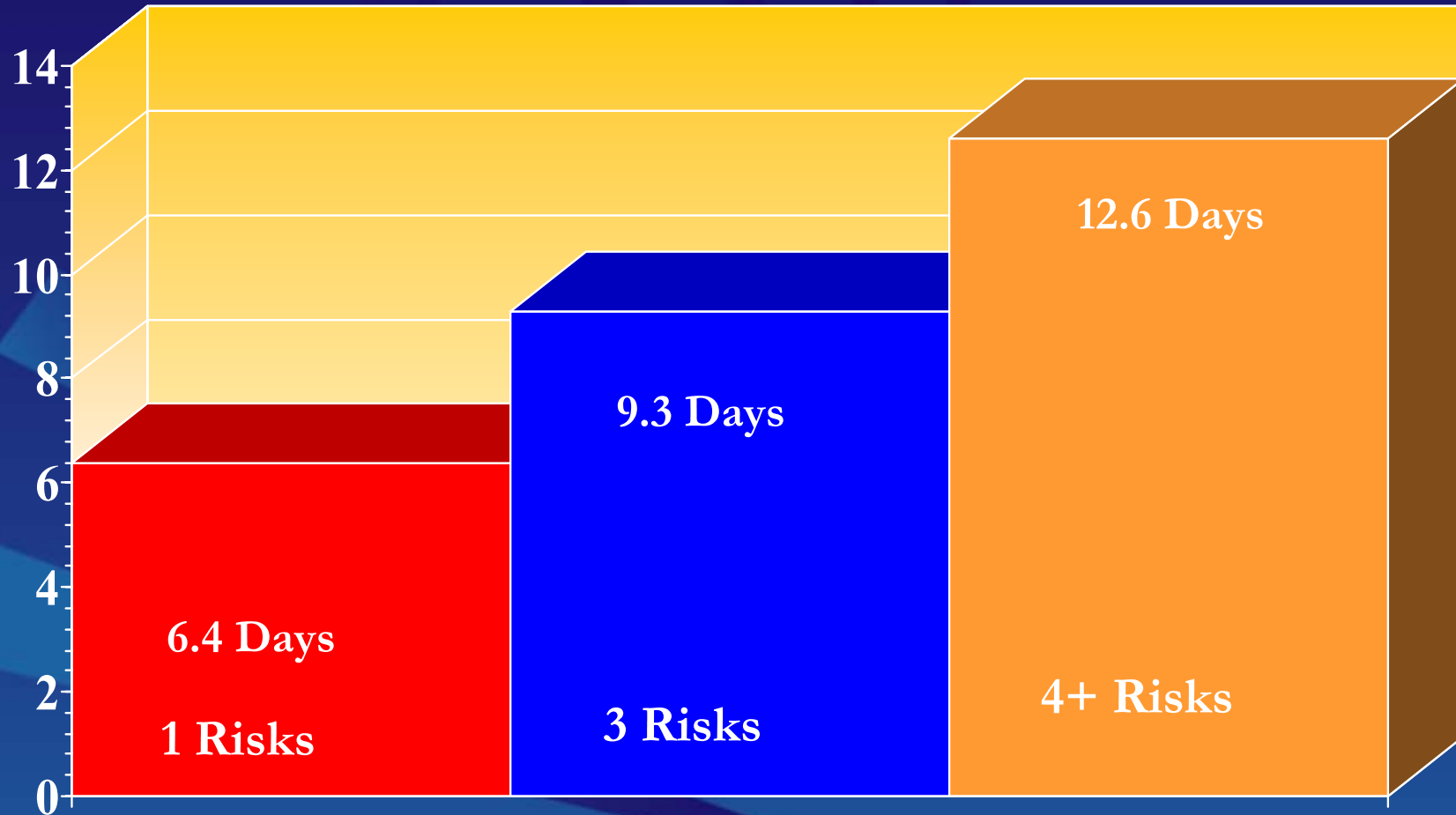
Full Costs of Poor Health: Total Value of Health



Edington, Burton. A Practical Approach to Occupational and Environmental Medicine (McCunney). 140-152. 2003

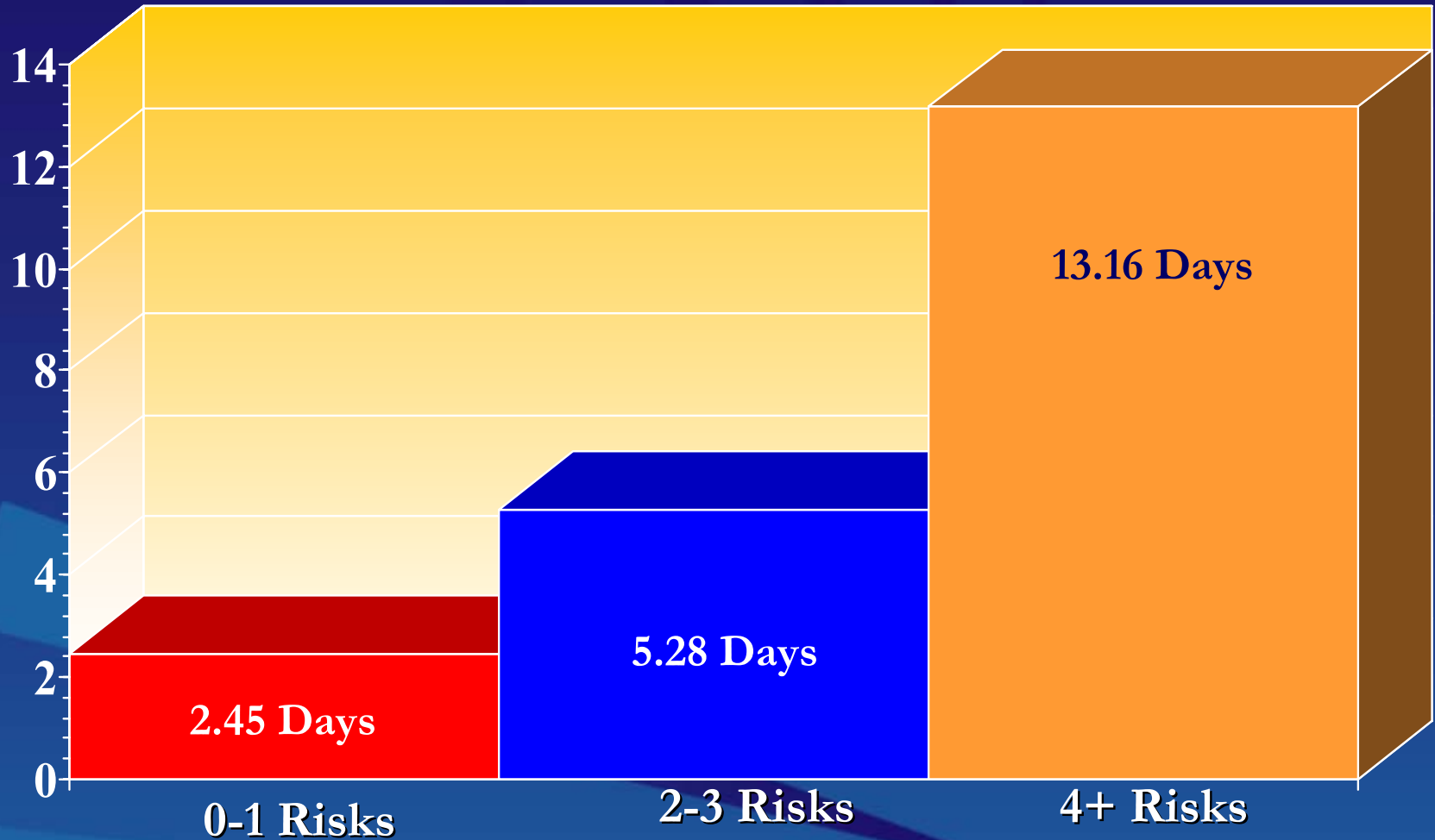
Health Risk and Absenteeism

Work Days Lost/Person/Year

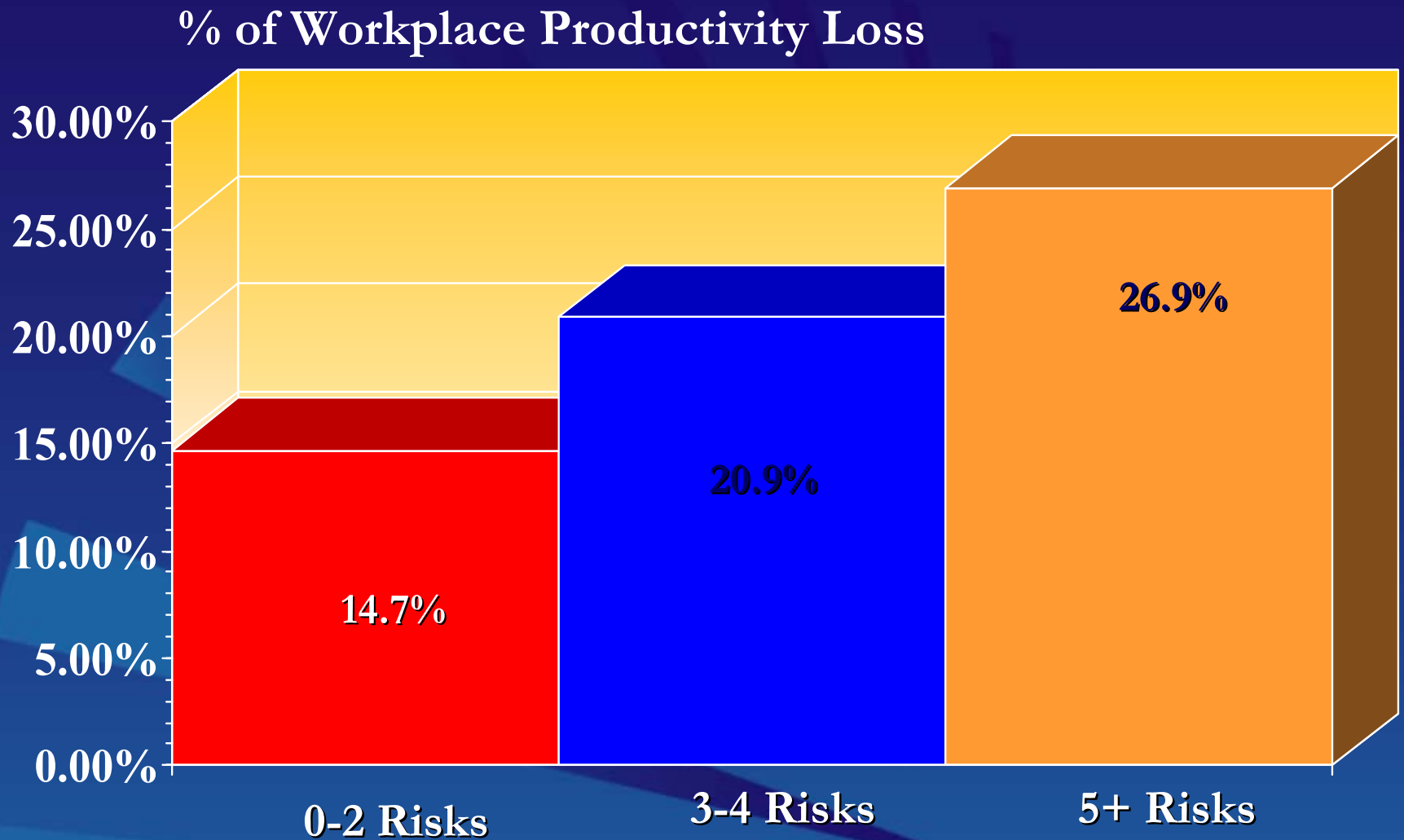


Health Risk and Disability

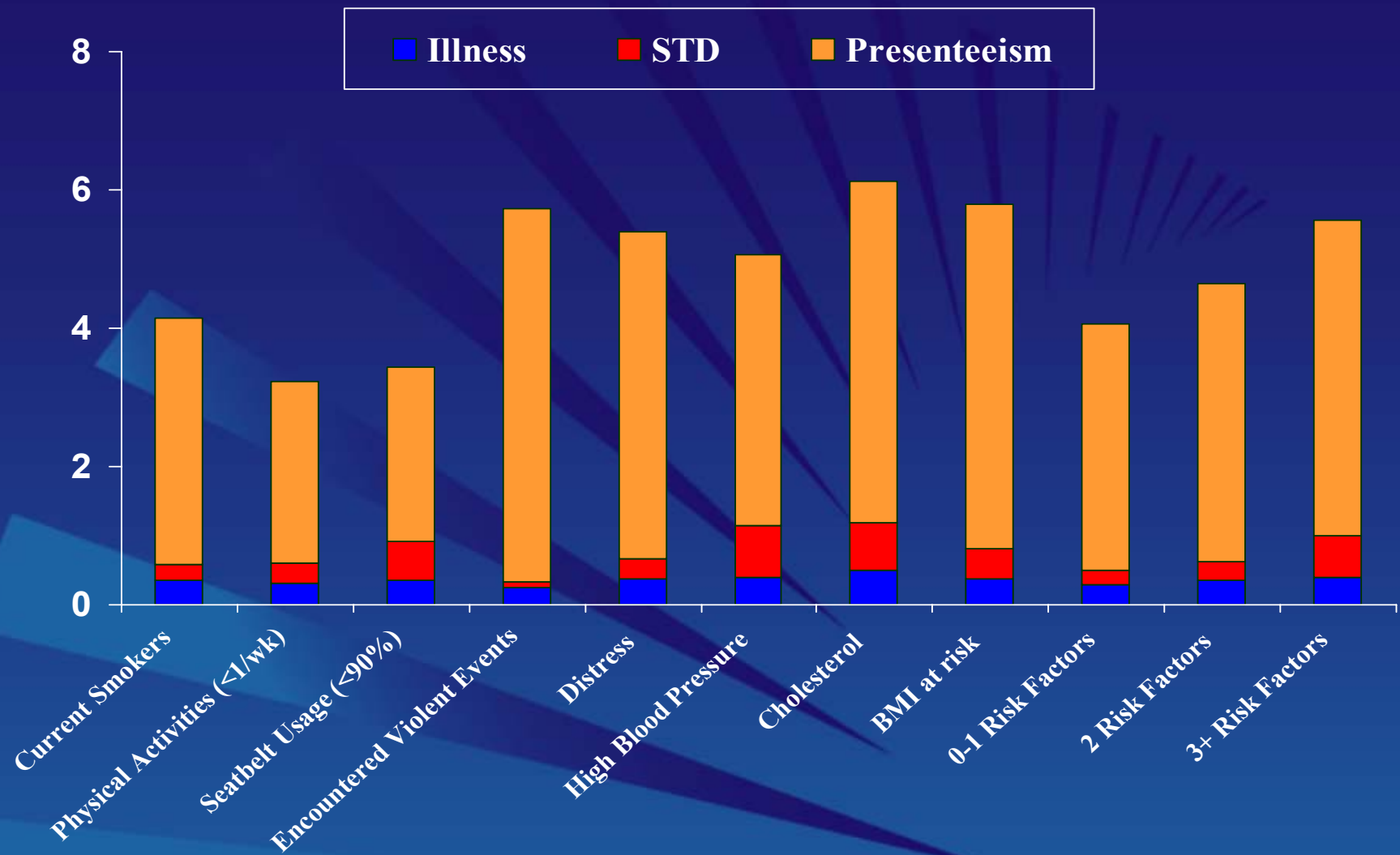
STD Days/Yr



Health Risk and Presenteeism

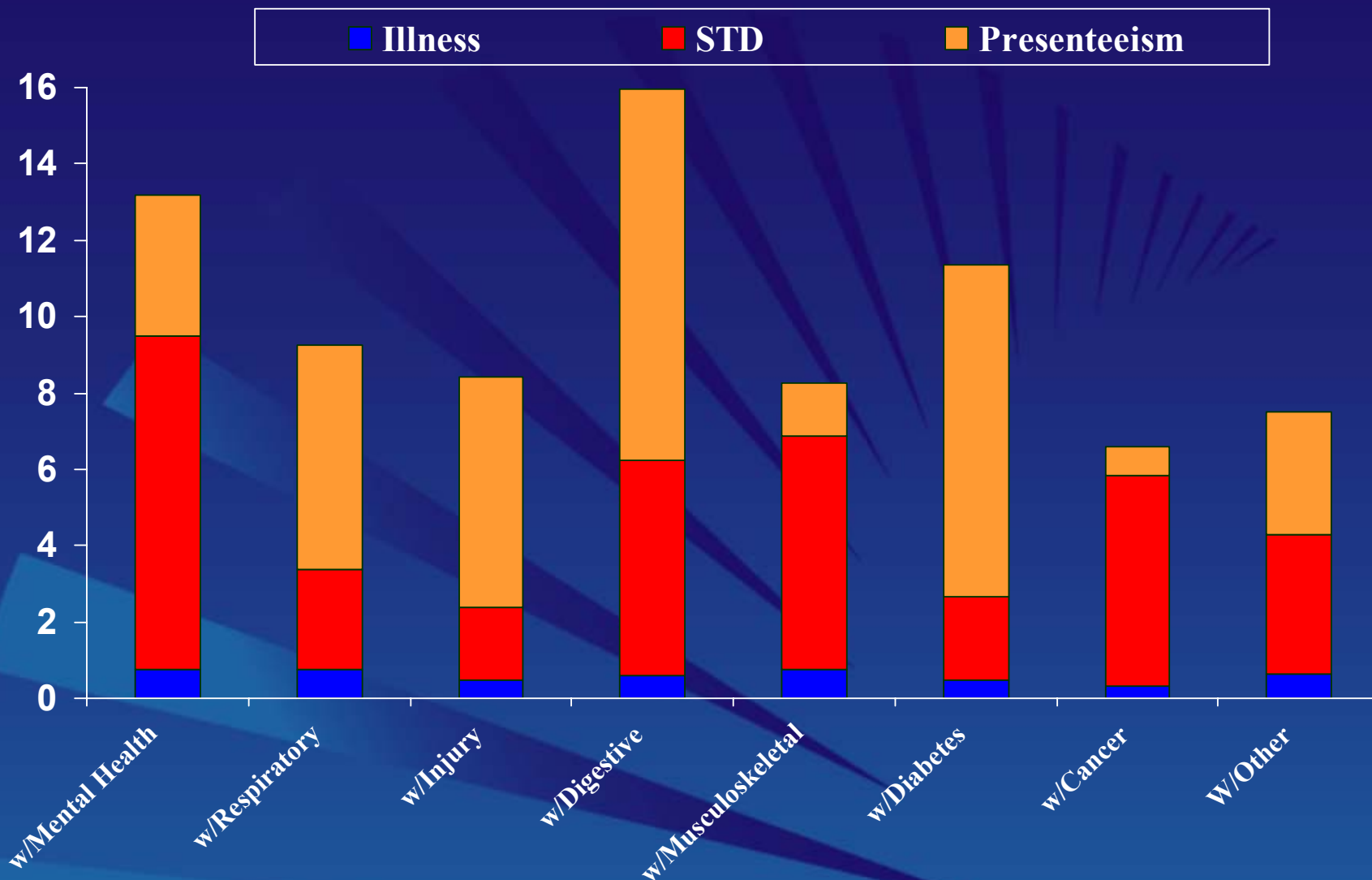


Health Risks and Behaviors: X hours lost



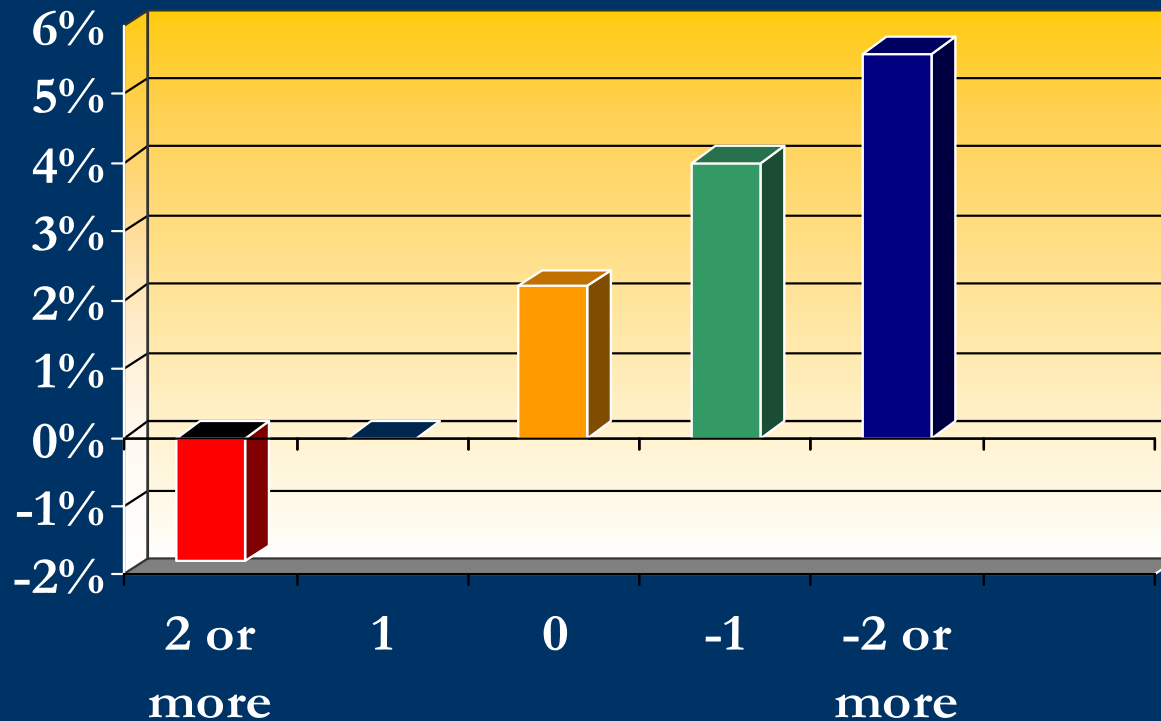
Source: Burton, Conti, Chen, Schultz, Edington. JOEM.41,863-877, 1999.

Disease States: X hours lost



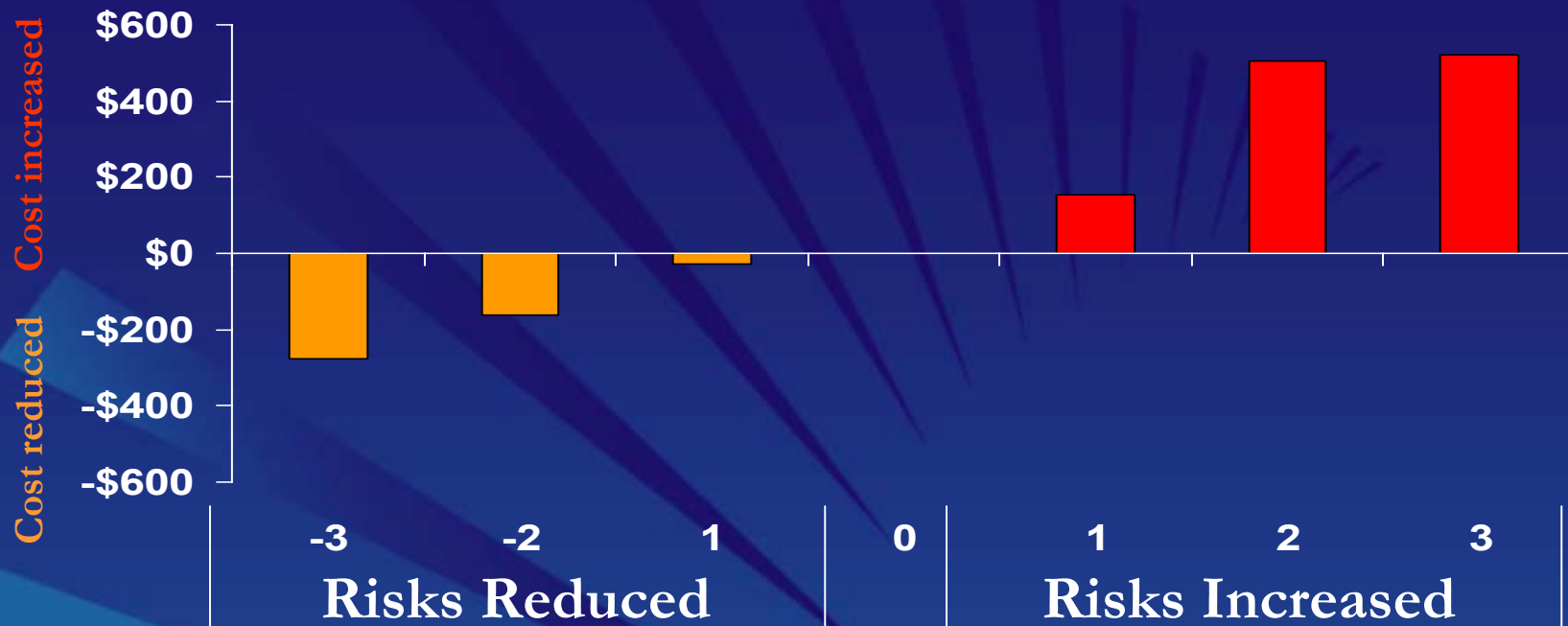
Source: Burton, Conti, Chen, Schultz, Edington. JOEM.41,863-877, 1999

Change in Productivity follows Change in Risk



■ 2 or more □ 1 ■ 0 ■ -1 ■ -2 or more

Change in Costs follow Change in Risks



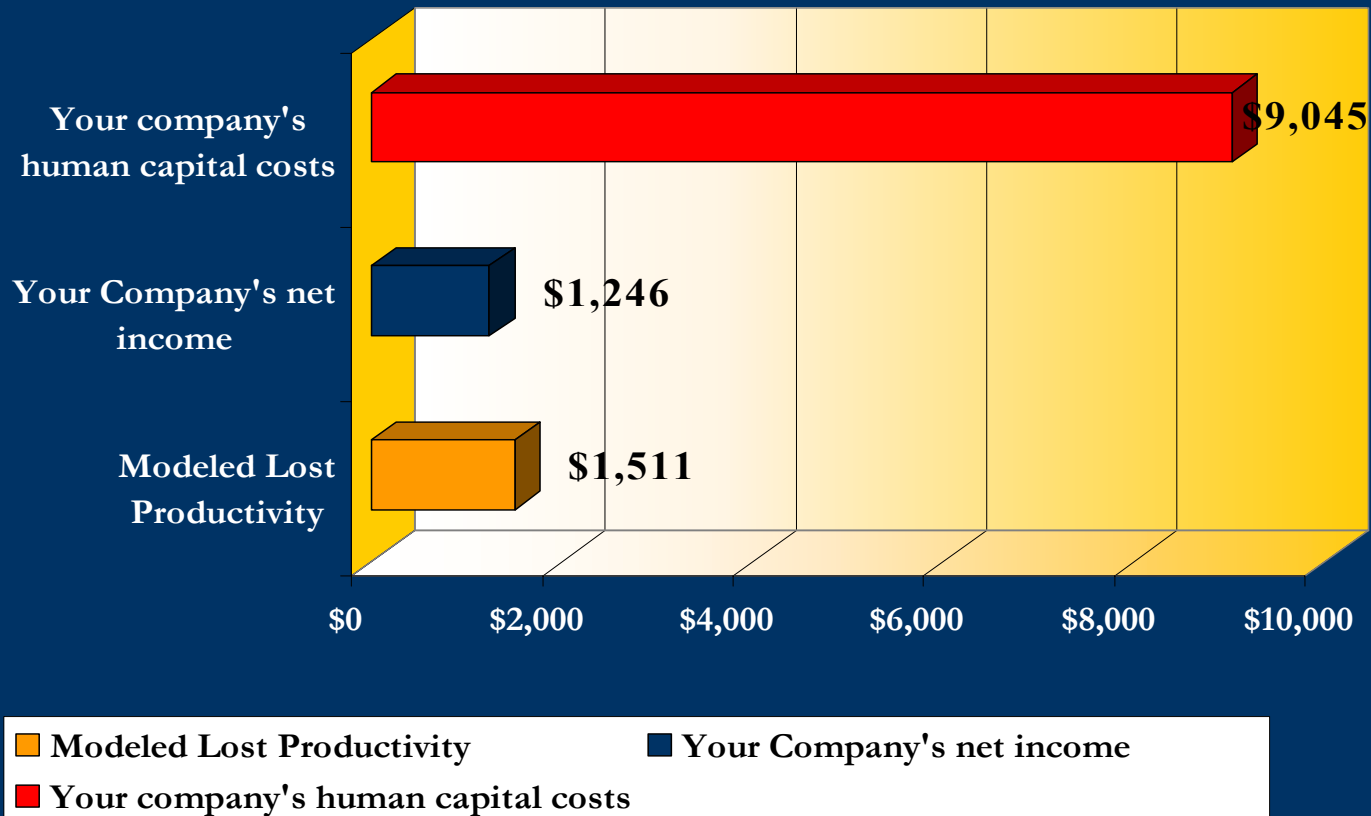
Overall: Cost per risk reduced: \$215; Cost per risk avoided: \$304

Actives: Cost per risk reduced: \$231; Cost per risk avoided: \$320

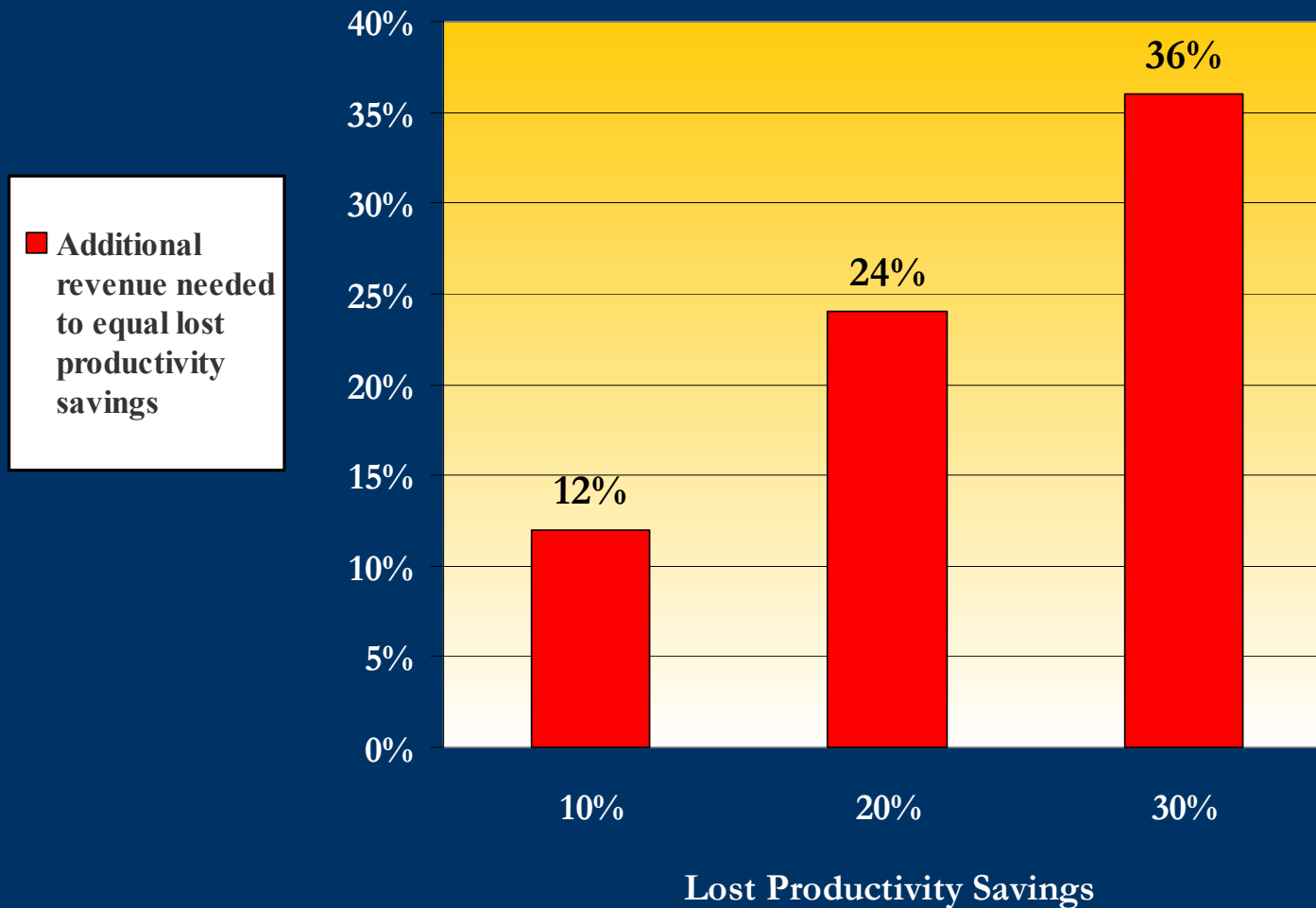
Retirees<65: Cost per risk reduced: \$192; Cost per risk avoided: \$621

Retirees>65: Cost per risk reduced: \$214; Cost per risk avoided: \$264

Health-Related Productivity Loss vs. Net Income



Profitability Through Health-Related Productivity Enhancement



Employer Case Study

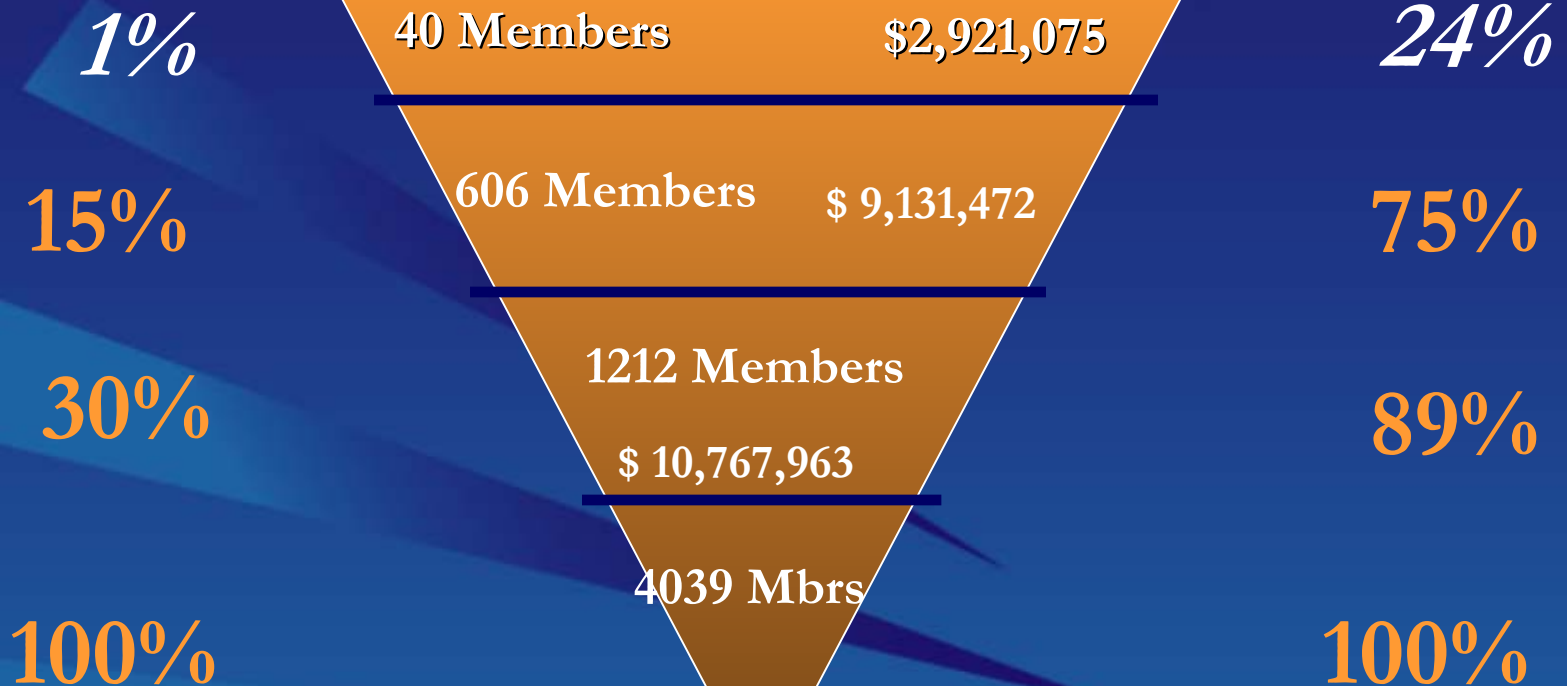
Integrated Health & Productivity Enhancement

Who Is Incurring the Medical Costs?

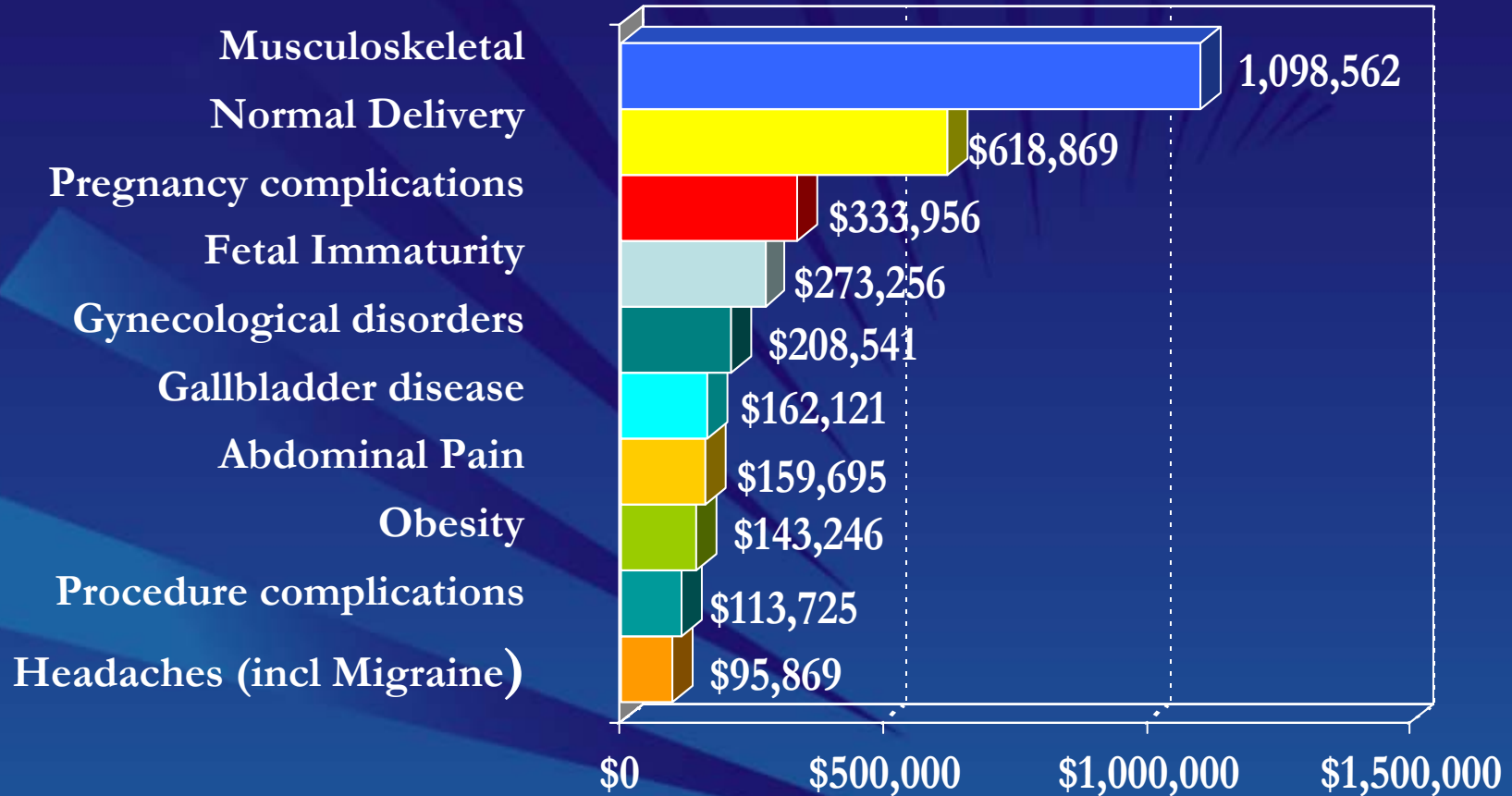
% of
Population

\$12,001,184 Medical/Rx Costs
Site

% of
Claims \$



Top Medical Conditions by Total Medical/Pharmacy Costs



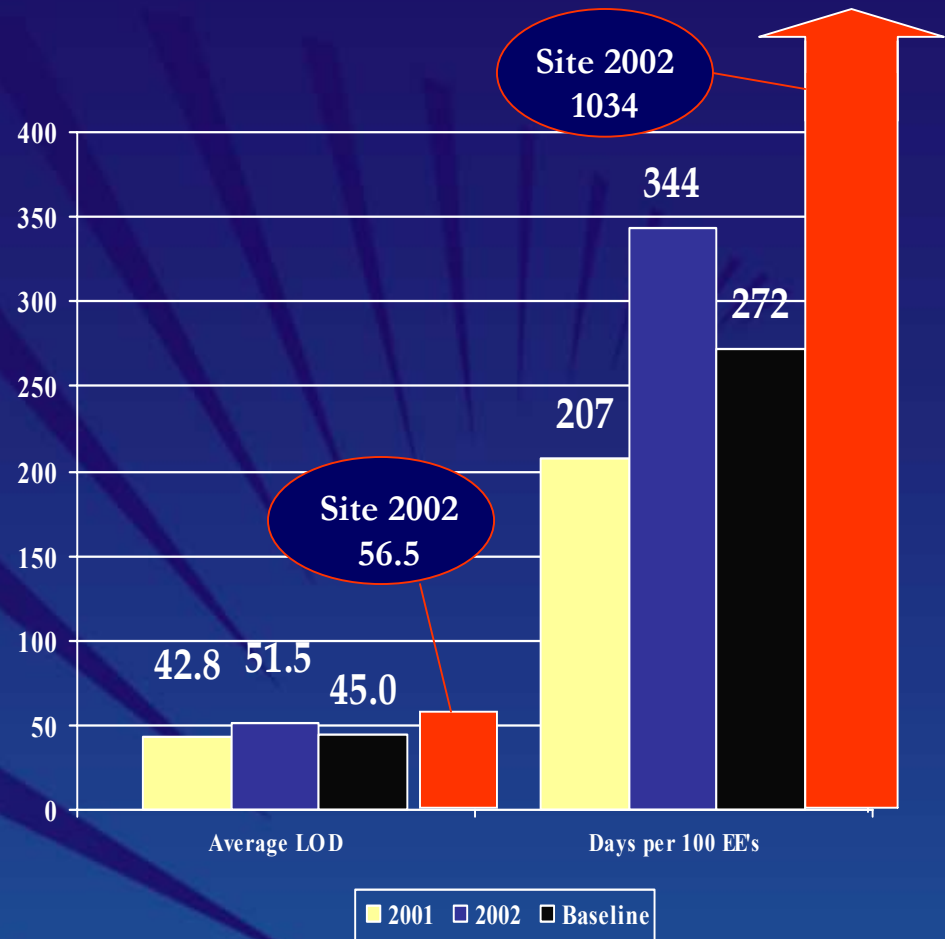
Corporate Wide vs Site Prevalence of Claims by Medical Condition

	Company Wide	Boise
Back Pain	2.8%	5.0%
Headaches/ Migraines	2.0%	4.8%
Diabetes	1.4%	2.8
Asthma	1.9%	2.6%
Fetal Immaturity	.07%	1.4%

Company-wide vs. Boise Site Disability Experience

Average Length of
Disability and Days
per 100 Employees

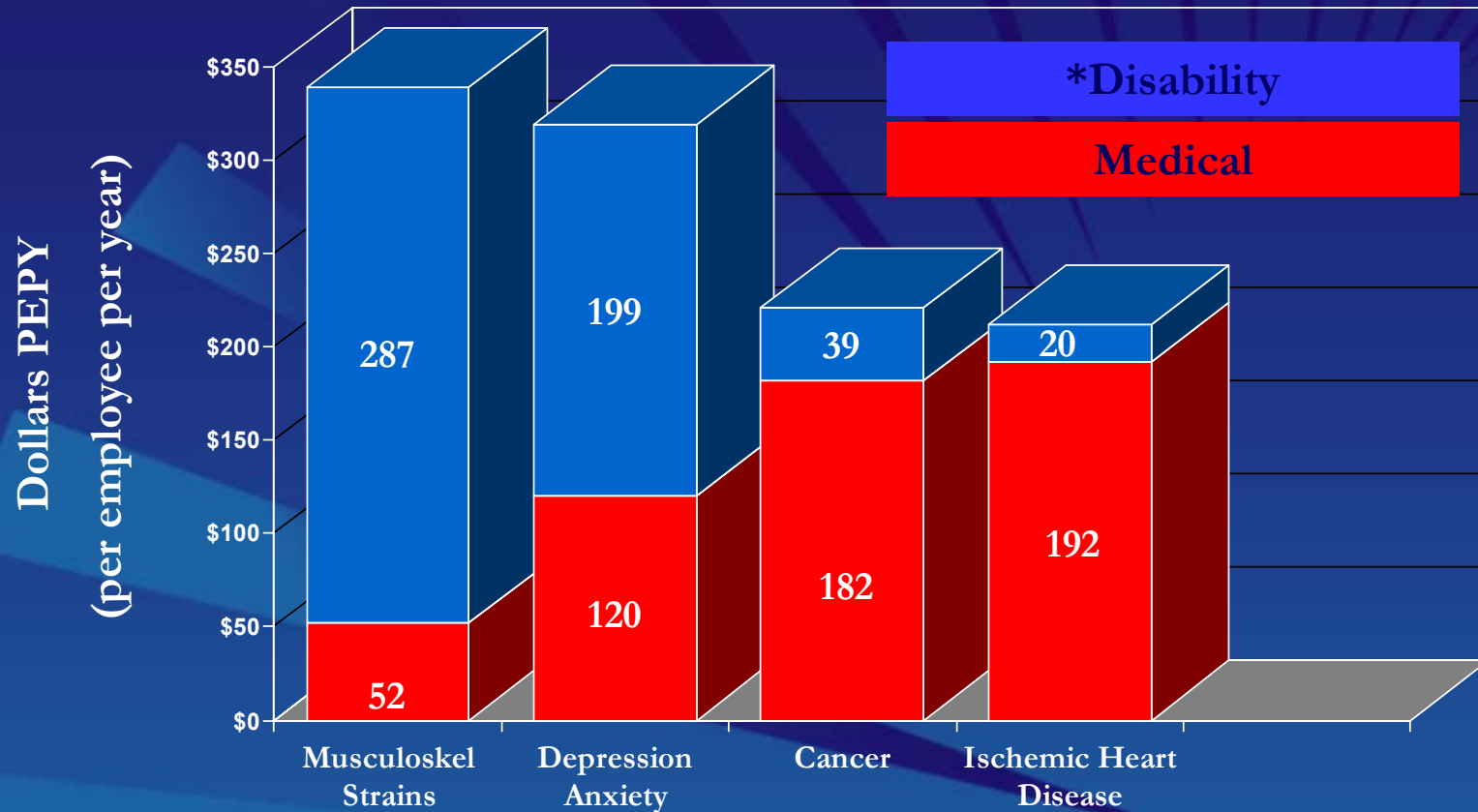
- **ALOD = Average Days Absent - from date of disability to claim end date**
- **Baseline = 1999 Full Year Results**
- **Data has been annualized**
- **STD closed claims only**
- **2002 ALOD is 14% higher than baseline**
- **Days per 100 employees is 26% higher than baseline**



Claims Closed: 01/01/2001 to 09/30/2001
01/01/2002 to 09/30/2002

Medical *and* Disability Costs* Related to Medical Conditions

* Includes direct disability costs, but does not include related absenteeism, presenteeism and productivity costs/losses



Aligning Incentives

Increased Participation from 22% to 65%

On-site Biometric Screening and Health Risk Assessment

Incentives:

- Initial = \$15 Gift Certificate
- \$300 off next year's annual health plan premiums

To receive the ultimate incentives, the member:

- If moderate or high risk, must participate in Lifestyle Management program
- Engage in quality EBM initiatives with their physicians for better Care Management of current medical conditions
- Or in Low Risk category

HRA Risk Stratification of DIRECTV Population Corporate vs. Boise

Health Risk Factors	Corporate (Excluding Site) (276 High Risk EEs out of 1281 EEs taking HRA)		Site (445 High Risk EEs out of 817 EEs taking HRA)	
	#High Risk	% of Population High Risk	#High Risk	% of Population High Risk
Blood pressure (>150/90)	61	5%	117	14%
Pre-diabetes (FBS > 110)	5	<1%	7	<1%
Cholesterol (>240; >190; >40)	134	10%	172	21%
Stress management	5	<1%	26	3%
Smoking	63	5%	178	22%
Weight management (M-BMI >36; F-BMI >35)	54	4%	153	19%

Health & Productivity

Survey Results Corporate Wide

			Average Per Ill Worker/Year		Total for all 1,864 Workers/Year	
Medical Condition	Prevalence	% in Treatment	Total Days Lost	Total Dollars Lost	Total Days Lost	Total Dollars Lost
Allergies	38.5%	30%	4	\$1,275	3,151	\$916,161
Obesity	7.0%	36%	20	\$5330	2,496	\$703,840
Depression	10.4%	34%	10	\$2,473	1,875	\$479,675
Pain	8.6%	35%	10	\$2,879	1,626	\$466,544

Health and Productivity HPQ Survey

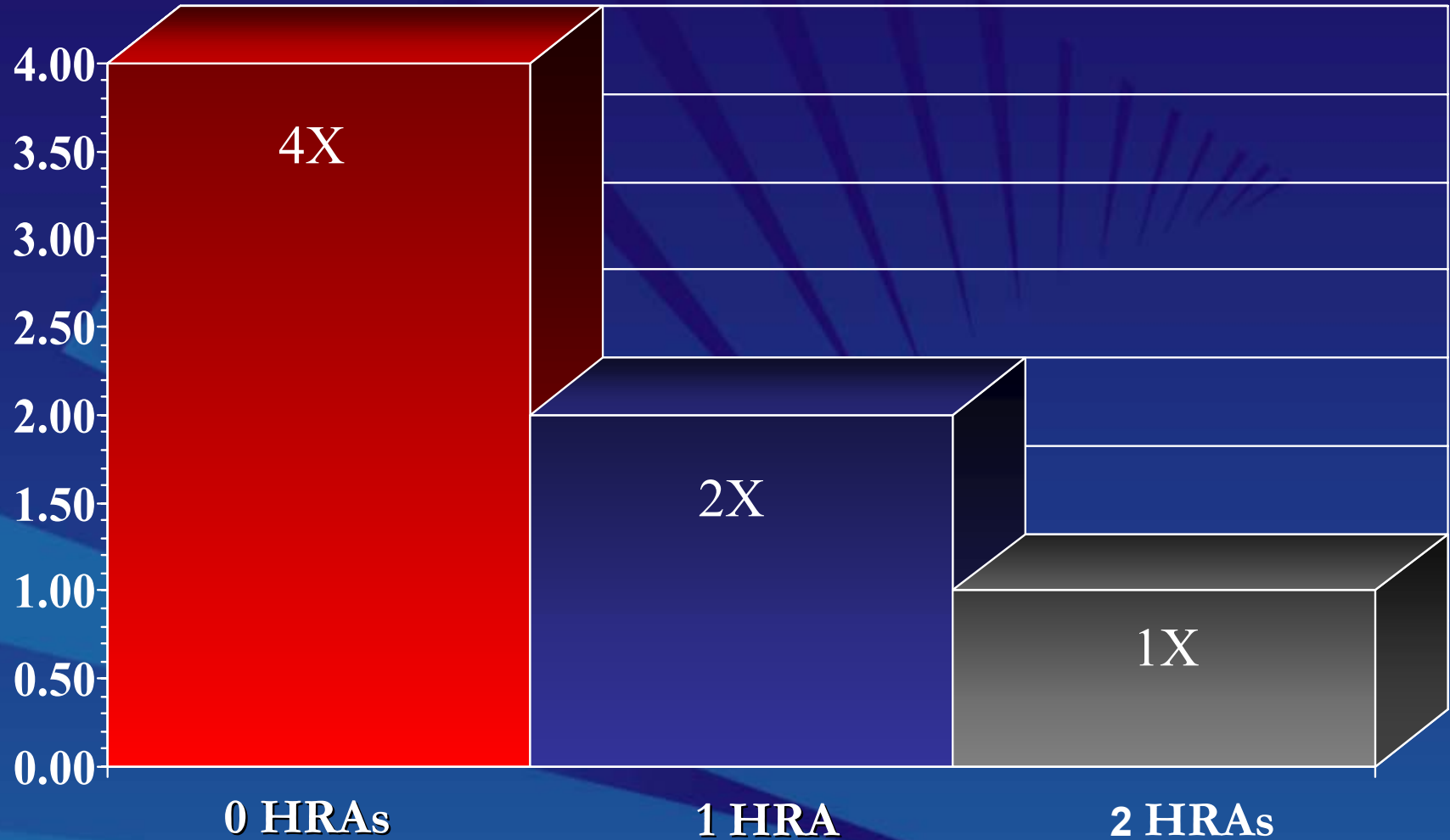
Survey Results

- Data cross-matched with objective supervisor performance data from workplace
- Results showed:
 - *HPQ presenteeism scale significantly predicts supervisor ratings of performance
 - About 10% of workforce has complex co-morbidity issues driving significant productivity losses due to presenteeism
 - Multiple conditions correlated to lower productivity

Source: Kessler, Hymel, Loeppke, etal. JOEM. Vol 46 (6). June, 2004.

HRA related to Cost Trends

Relative Increase in Medical/Pharmacy Costs in 2005



Integrated Health & Productivity Enhancement In the Workplace

Centers for Disease Control (CDC) Grant

- Three year research study by CorSolutions and Cornell University to develop and implement new method of valuing an employer's investment in the health of its workers
- Determine whether DM and health risk reduction programs generate substantial ROI by reducing spending and absence, improving productivity
- Job-specific presenteeism/absenteeism multipliers

The Bottom Line

Good Health
is
Good Business

