

Health Management as a Serious Business Strategy

Dee. W. Edington

**THE UNIVERSITY OF MICHIGAN
HEALTH MANAGEMENT RESEARCH CENTER**





Health Management a Serious Business Strategy

1. **Building an Integrated, Sustainable Business Strategy**
(Next Generation Programs, Champion Companies, Zero Trends) **Six Hours**
2. **Complete Strategy and Next Generation** **Four Hours**
3. **Fundamental Strategy and Next Generation** **Two Hours**
4. **Business Strategy and Next Generation** **90 minutes**
5. **Short Business Strategy and Next Generation** **75 minutes**
6. **Executive Summary of the Business Strategy** **45 minutes**
7. **Executive Summary of Executive Summary** **20 minutes**



Agenda

King County Leadership Forum May 14, 2007

Introductory Comments	10
• Do-Nothing Strategy	10
• Business Case to Build the Strategy	10
• Next Generation Programming, Champion Company, Zero Trend	10

Summary

Slides available via e-mail attachment



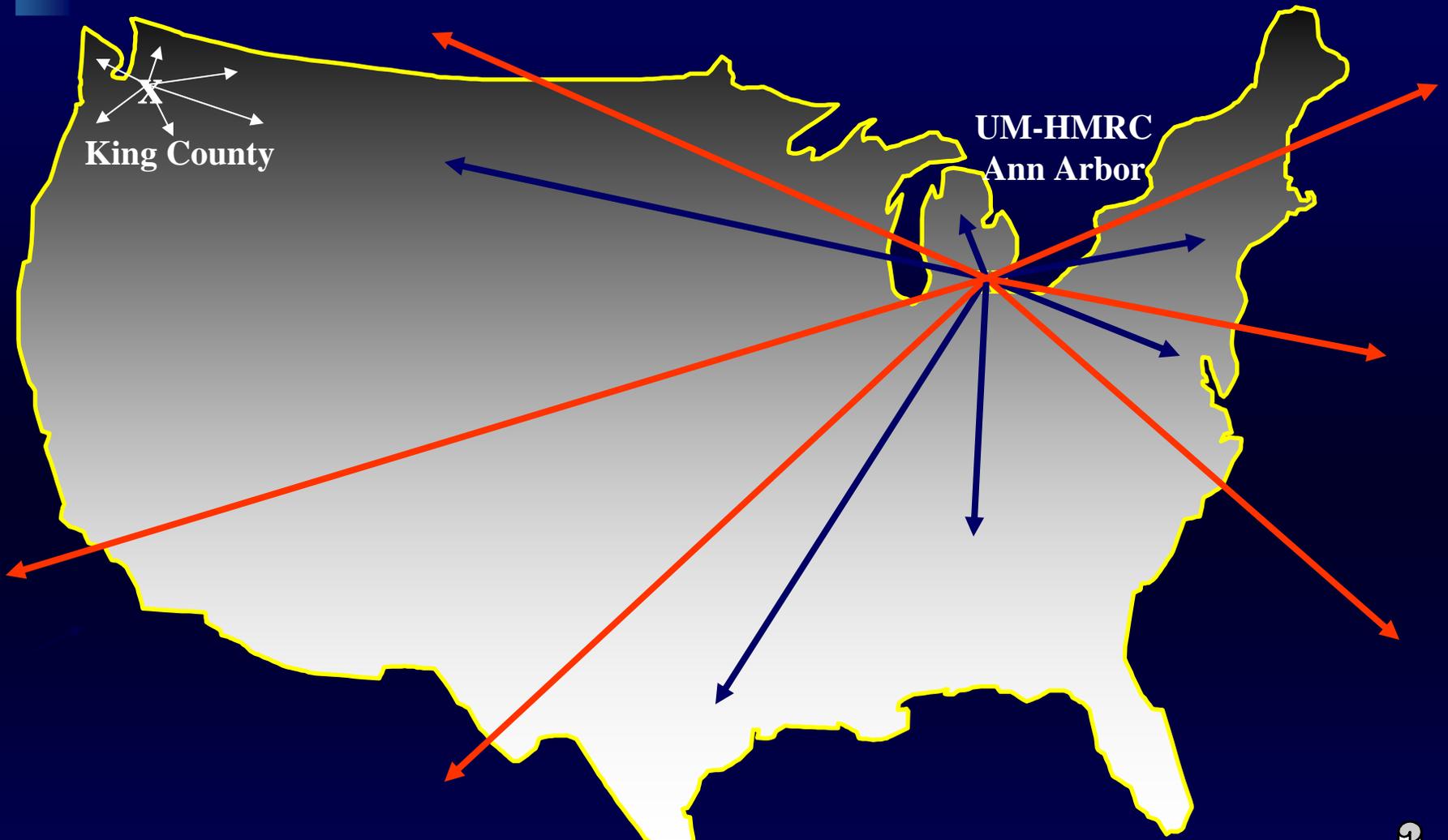
Introductory Comments

- 
- # **UM-HMRC Corporate Consortium**
- ✓ US Steel
 - ✓ Steelcase
 - ✓ Progressive
 - ✓ We Energies
 - ✓ General Motors
 - ✓ Crown Equipment
 - ✓ Foote Health System
 - ✓ Medical Mutual of Ohio
 - ✓ St Luke's Health System
 - ✓ Cuyahoga Community College
 - ✓ International Truck and Engine
 - ✓ United Auto Workers-General Motors
 - ✓ Wisconsin Education Association Trust
 - ✓ Southwest Michigan Healthcare Coalition
 - ✓ Australian Health Management Corporation

- ✓ Kellogg
- ✓ JPM Chase
- ✓ Gulf Power
- ✓ Brush Wellman
- ✓ Delphi Automotive
- ✓ Affinity Health Plan
- ✓ Florida Power & Light

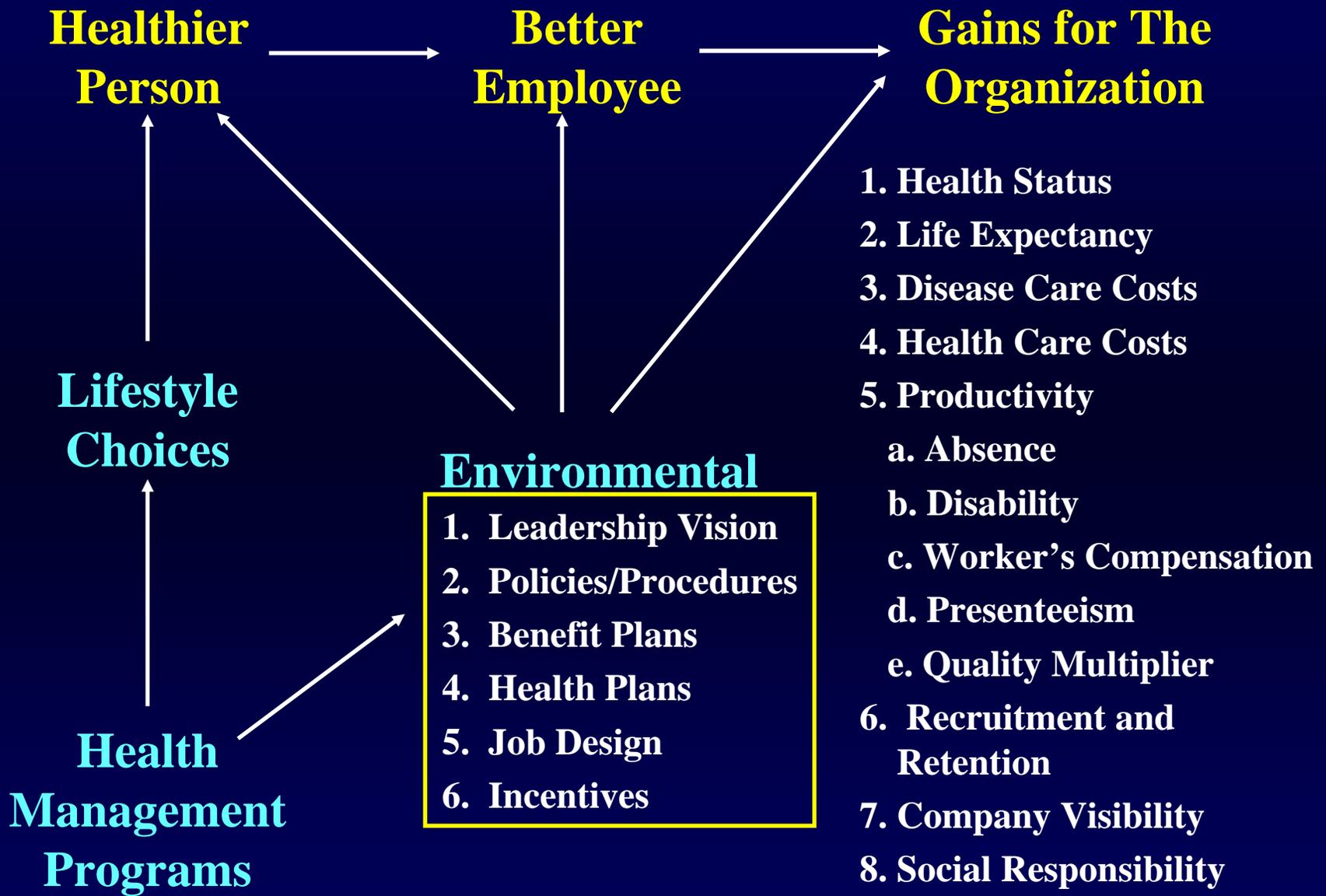
*The consortium members provide health care insurance for over two million Americans. Data are available from eight to 18 years.

Meet on First Wednesday of each December in Ann Arbor



**New way to do Health Management
In the United States and Throughout the World**

Health Management in the Workplace



M Moving the Paradigm From

“The Cost of Healthcare”

(Treating disease) **To**

“The Total Value of Health”

(Managing health status) **To**

“Health is Free”

(Healthcare Costs < Total Benefits) **By**

Adopting the “Quality” Strategy

(Fix the Systems that Lead to the Defects)



University of Michigan Health Management Research Center

Objective

Key Thoughts

Shareholder value from creative and innovative products from healthy and productive people

Strategy

Next Generation Program to drive Objective

Partners: health plans; benefit consultants; primary care physicians; pharmaceutical companies; health enhancement companies

Outcomes to get to Zero Trend

90%-95% participation and 75% to 85% low-risk

Keep the healthy people healthy

Don't get worse



Section I

The Do-Nothing Strategy



Business Case

The Natural Flow of Health Risks and Behaviors



Health Risks and Behaviors

Health Risk Measure

High Risk Criteria

Alcohol

More than 14 drinks/week

Blood Pressure

Systolic >139 or Diastolic >89 mmHg

Body Weight

BMI \geq 27.5

Cholesterol

Greater than 239 mg/dl

Existing Medical Problem

Heart, Cancer, Diabetes, Stroke

HDL

Less than 35 mg/dl

Illness Days

>5 days last year

Life Satisfaction

Partly or not satisfied

Perception of Health

Fair or poor

Physical Activity

Less than one time/week

Safety Belt Usage

Using safety belt less than 100% of time

Smoking

Current smoker

Stress

High

OVERALL RISK LEVELS

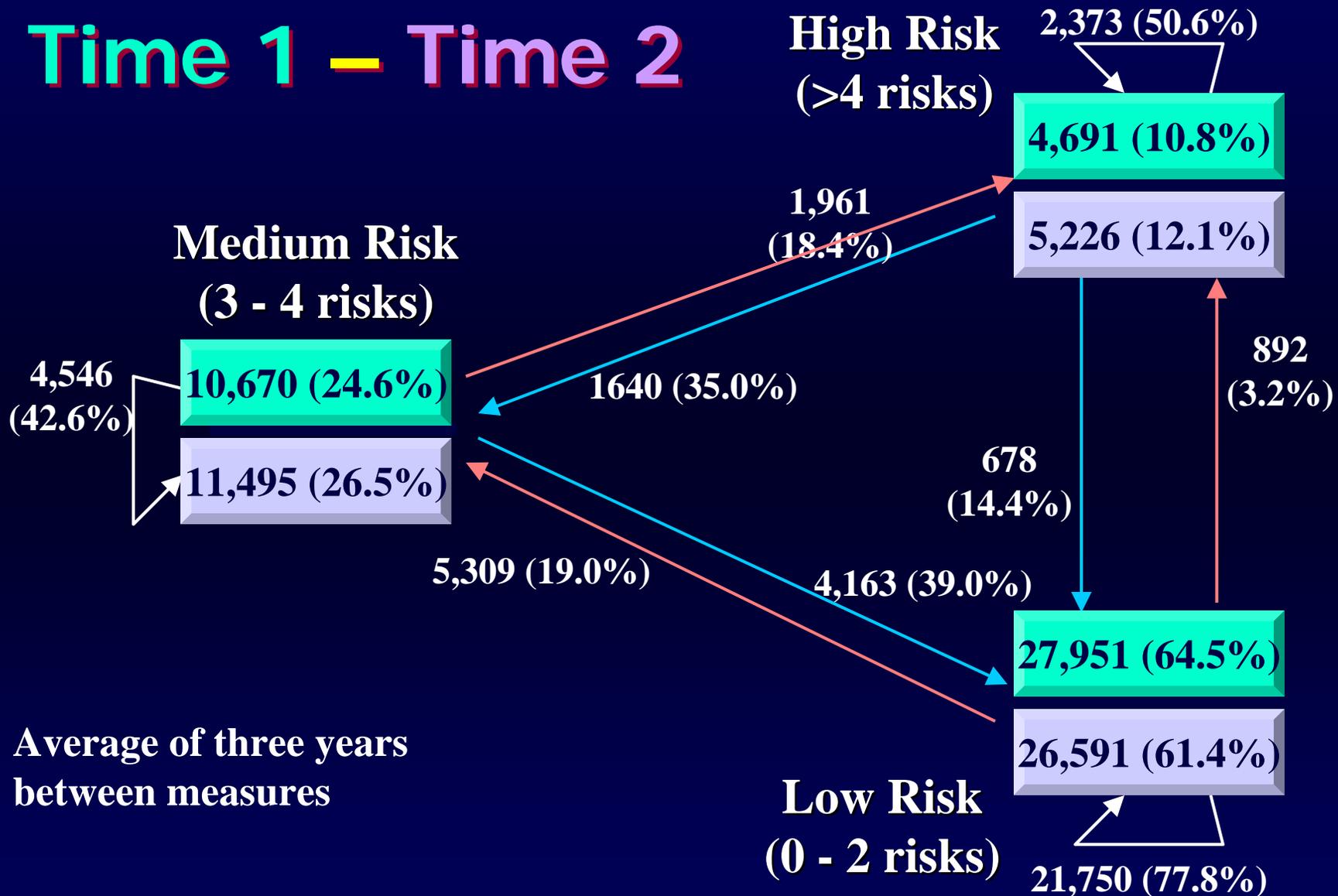
Low Risk **0 to 2 high risks**

Medium Risk **3 to 4 high risk**

High Risk **5 or more high risks**

Risk Transitions

Time 1 – Time 2



Average of three years between measures

Modified from Edington, AJHP. 15(5):341-349, 2001

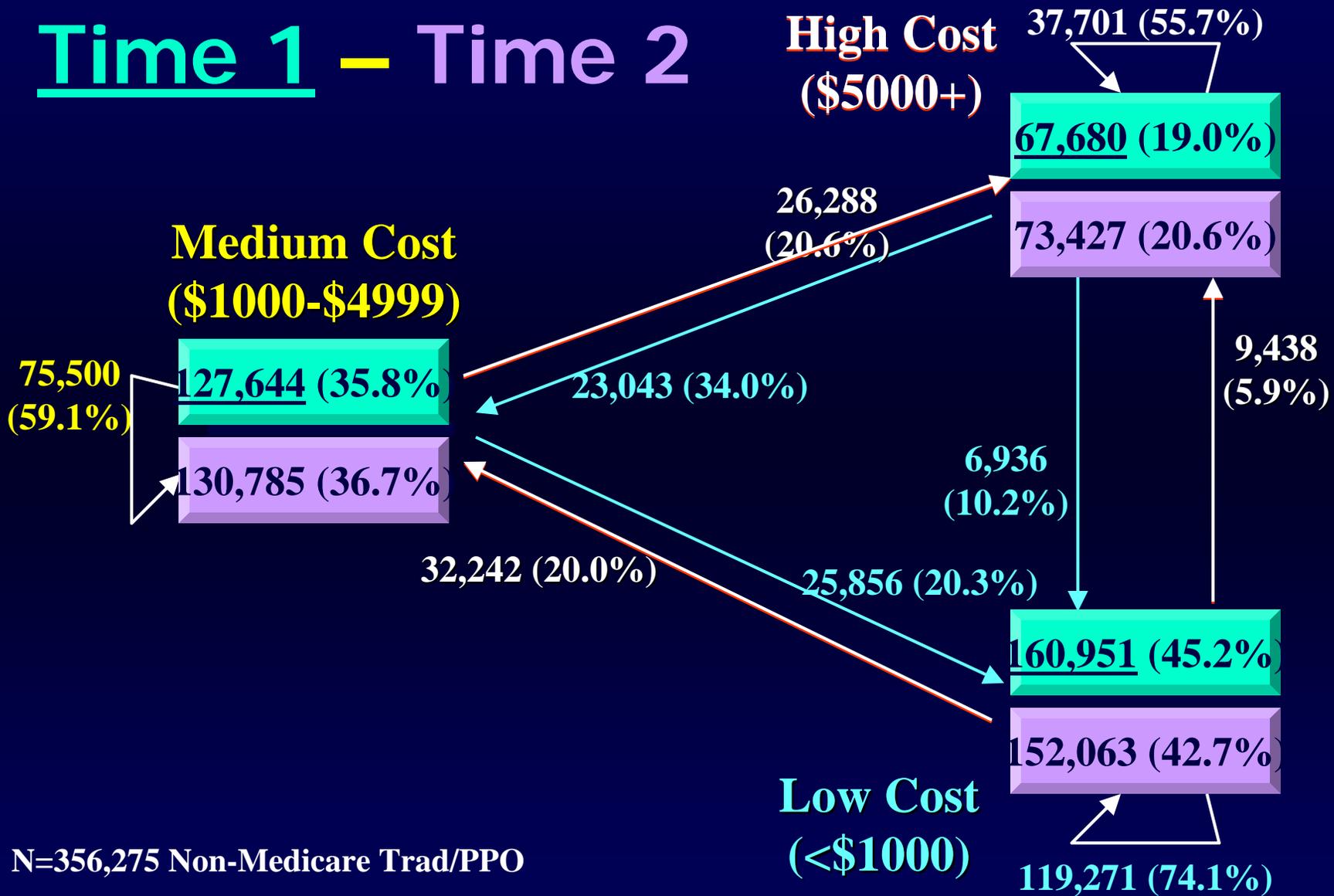


Business Case

The Natural Flow of Health Care Costs

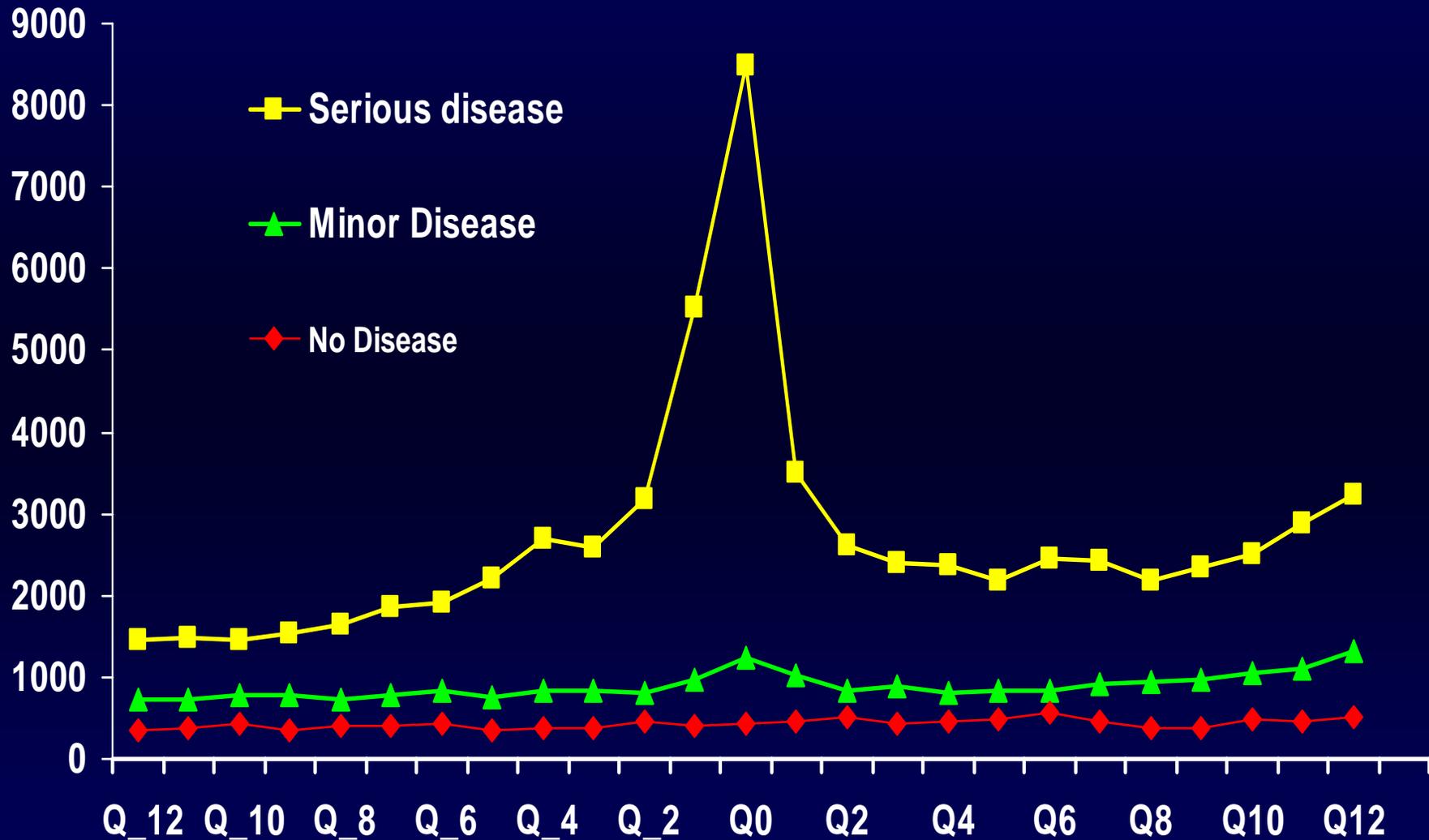
Cost Transitions

Time 1 – Time 2



Modified from Edington, AJHP. 15(5):341-349, 2001

Total Medical and Pharmacy Costs Paid by Quarter for Three Groups



Musich, Schultz, Burton, Edington. DM&HO. 12(5):299-326, 2004



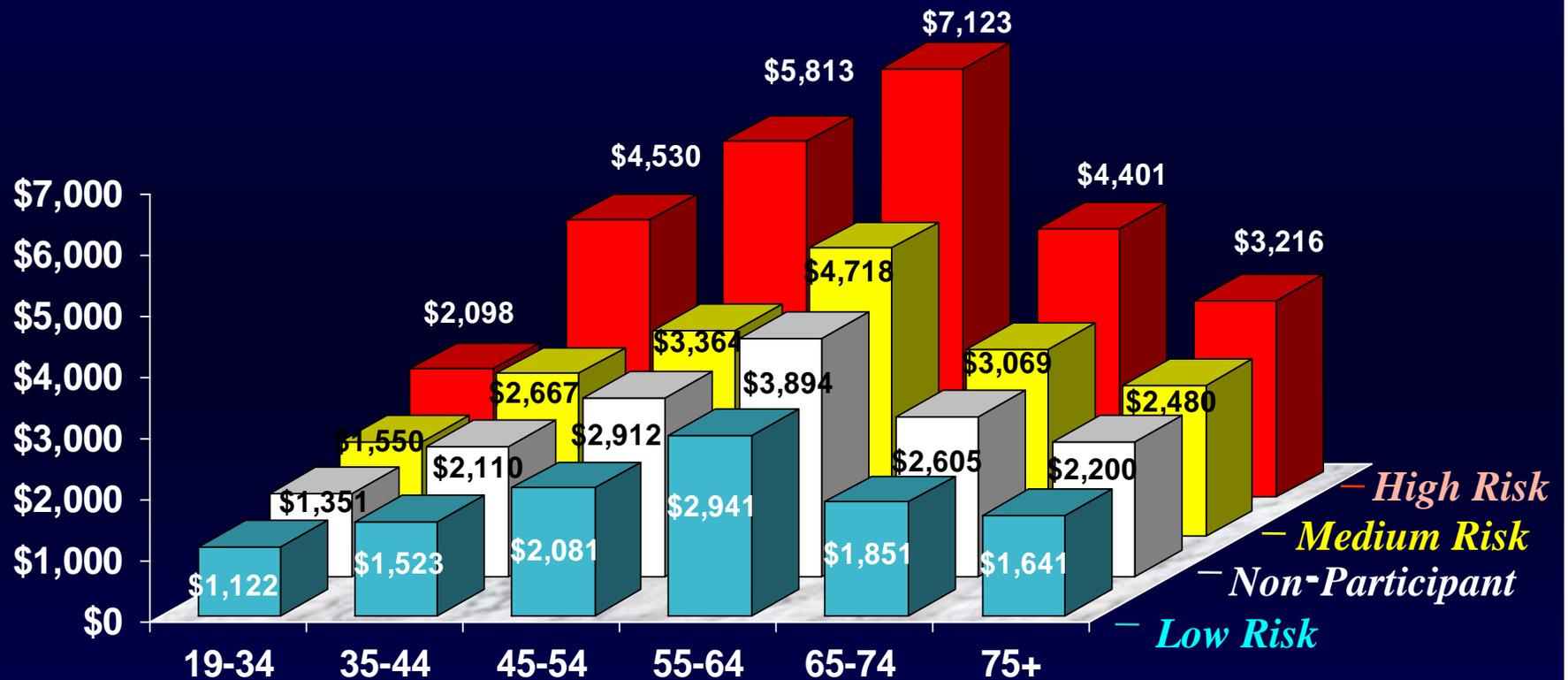
Business Case

The Natural Flow of Risks and Costs



Costs Associated with Risks

Medical Paid Amount x Age x Risk



Edington. AJHP. 15(5):341-349, 2001



Summary of the Do-Nothing Strategy

The flow of Risks is to High-Risk

The flow of Costs is to High-Cost

Costs follow Risks and Age



**This is the Way Americans Have
been Living their Lives for 60
Years**

**Can You Afford the
Economic Consequences of the
Do-Nothing Strategy?**



Section II

Key Business Concepts

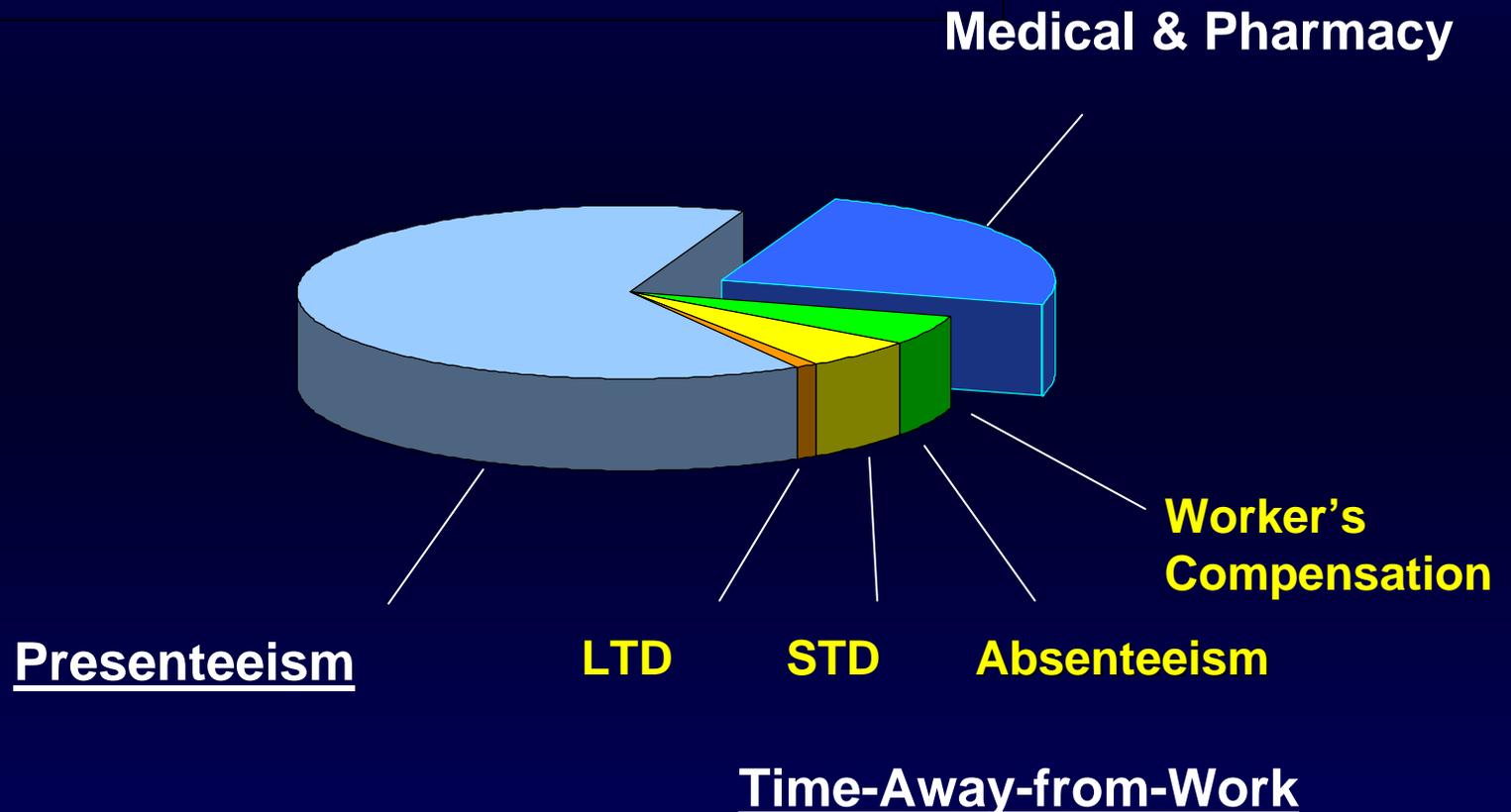
To Build the Business Case



Business Concept

Eliminate “Silo” Thinking
Consider the
Total Value of Health

Relative Value of Health to the Organization: Total Value of Health



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

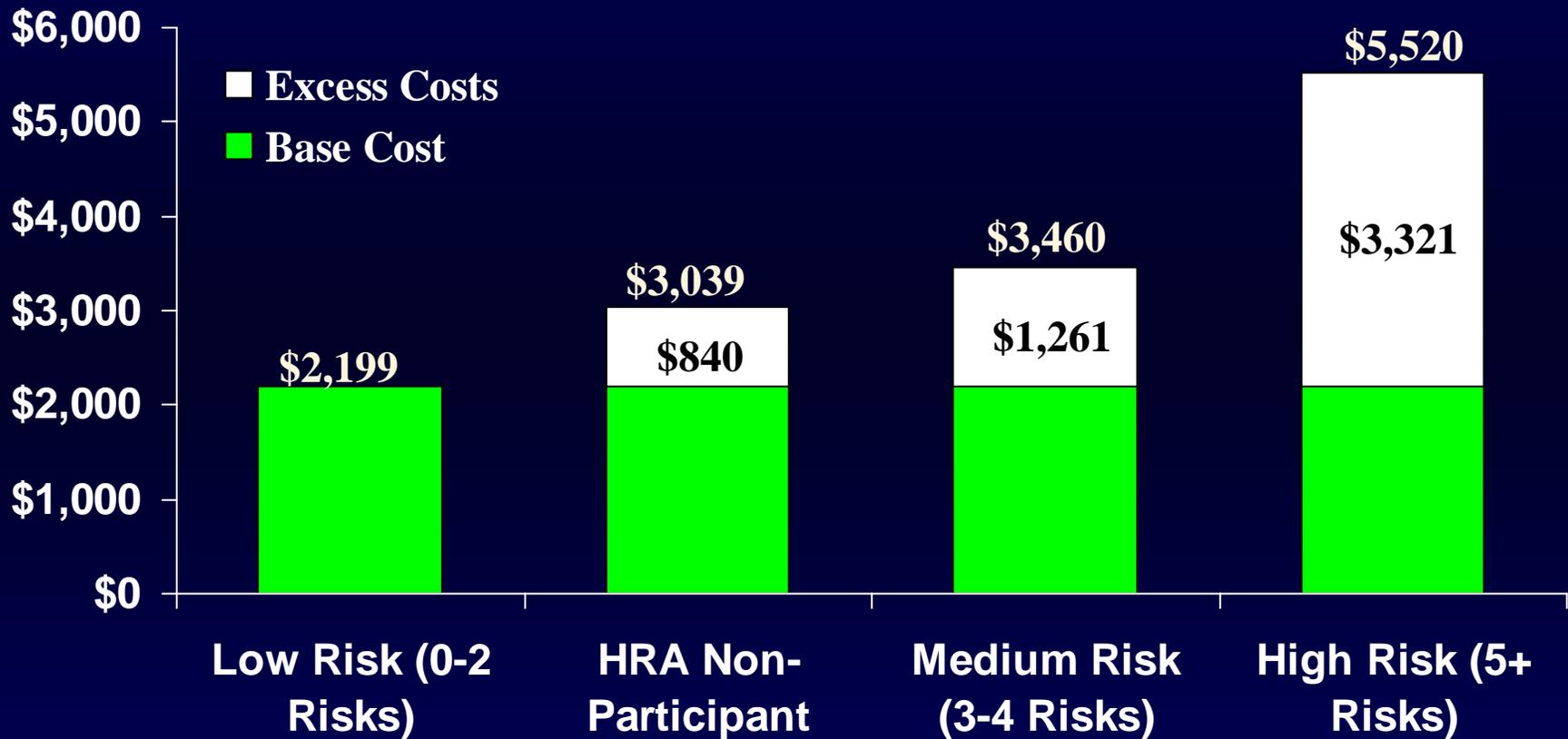


Business Concept

Excess Costs follow Excess Risks



Excess Medical Costs due to Excess Risks



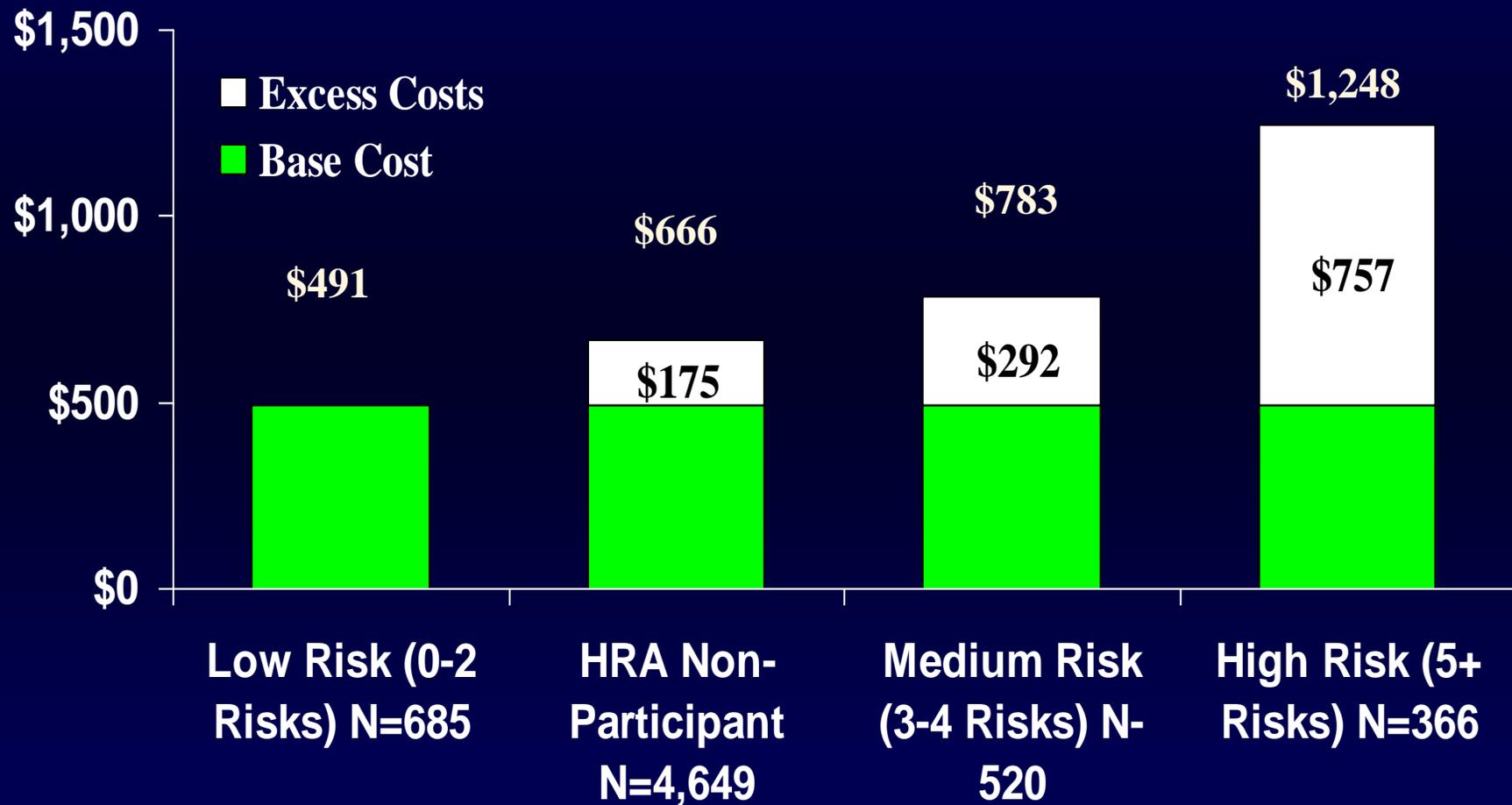
Edington, AJHP. 15(5):341-349, 2001

Excess Pharmaceutical Costs due to Excess Risks



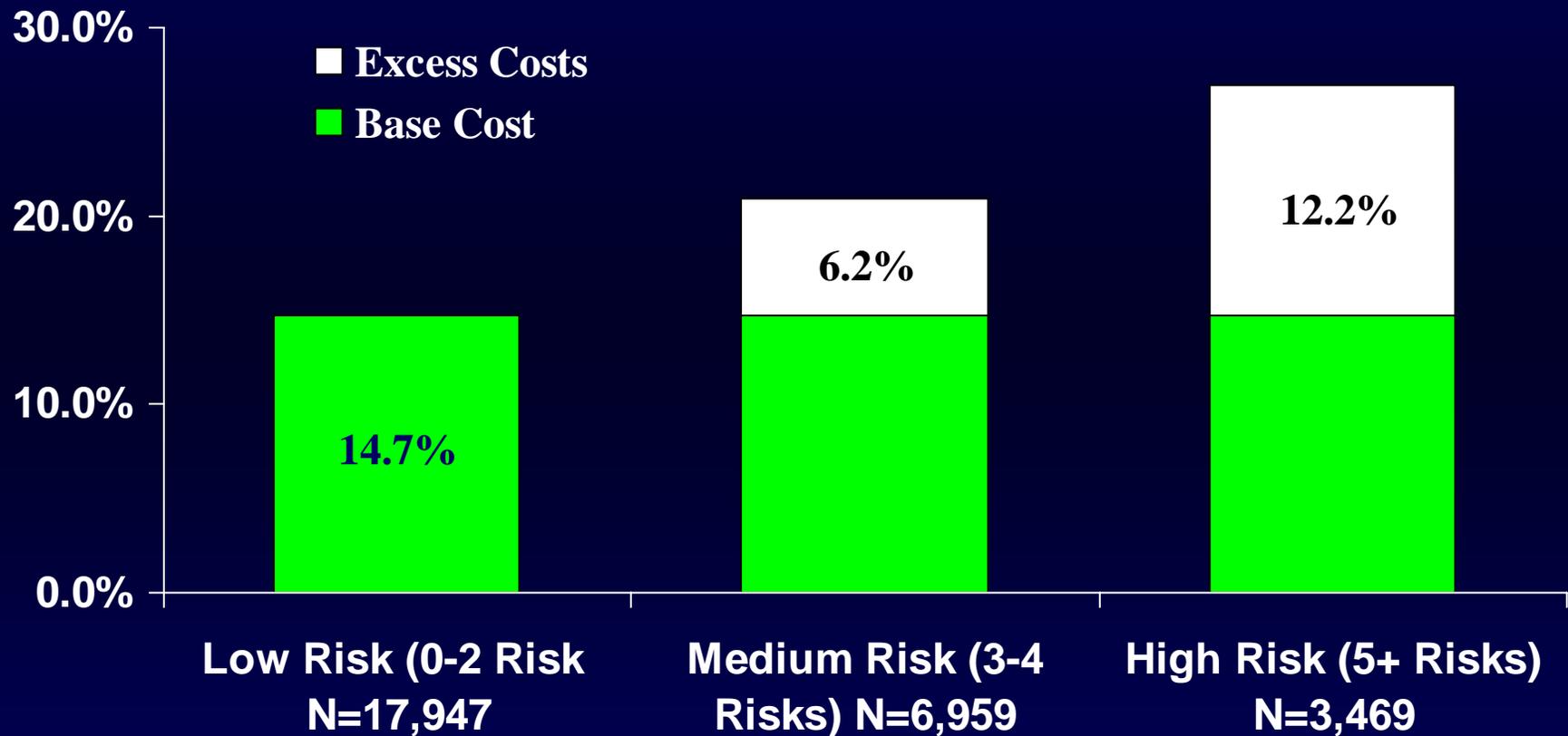
Burton, Chen, Conti, Schultz, Edington. JOEM. 45(8): 793-802. 2003

Excess Disability Costs due to Excess Risks



Wright, Beard, Edington. JOEM. 44(12):1126-1134, 2002

Excess On-The-Job Loss due to Excess Risks



Burton, Chen, Conti, Schultz, Pransky, Edington. JOEM. 47(8):769-777. 2005



Business Concept

Total Value of Health to an Organization



Association of Risk Levels with Corporate Cost Measures

Outcome Measure	Low-Risk (N=671)	Medium-Risk (N=504)	High-Risk (N=396)	Excess Cost Percentage
Short-term Disability	\$ 120	\$ 216	\$ 333	41%
Worker's Compensation	\$ 228	\$ 244	\$ 496	24%
Absence	\$ 245	\$ 341	\$ 527	29%
Medical & Pharmacy	\$1,158	\$1,487	\$3,696	38%
Total	\$1,751	\$2,288	\$5,052	36%

Wright, Beard, Edington. JOEM. 44(12):1126-1134, 2002



Business Concept

Risks Travel in Clusters



Cluster Analysis

Health Measure	Cluster 1: Risk taking (N=6688)	Cluster 2: Low Risk (N=3164)	Cluster 3: Biometrics (N=3100)	Cluster 4: Psychological (N=3927)
Smoking	31%	0%	16%	27%
Alcohol	10%	0%	3%	5%
Physical activity	28%	0 %	19%	26%
Safety belt usage	36%	0 %	22%	31%
Body mass index	27%	25 %	38%	27%
Systolic blood pressure	9%	0 %	81%	23%
Diastolic blood pressure	5%	0 %	61%	20%
Cholesterol	19%	19 %	27%	22%
HDL cholesterol	34%	10 %	33%	24%
Self-perceived health	13%	0 %	9%	28%
Life satisfaction	4%	0 %	2%	73%
Stress	9%	0 %	2%	76%
Illness days	21%	0 %	12%	26%
Overall Risks				
Low risk (0-2 risks)	50.2%	97.6%	26.5%	18.9%
Medium risk (3-4 risks)	35.7%	2.4%	48.9%	35.9%
High risk (5+ risks)	14.1%	0	24.7%	45.2%
Average Number of risks	2.8	0.6	3.6	4.4



Business Concept

**Managed the Person:
Not the Risk or Disease**



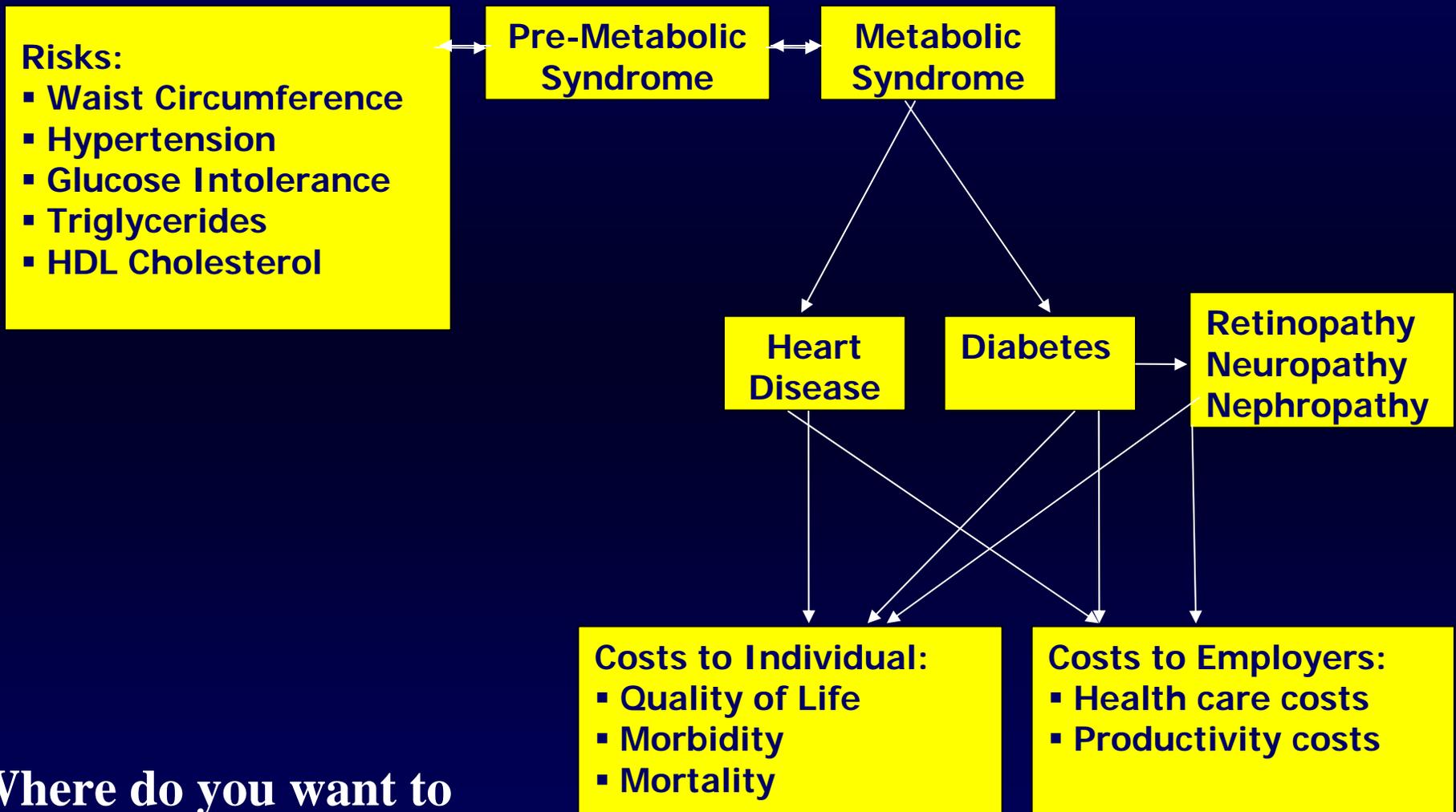
Intervention for Biometric Cluster (Metabolic Syndrome)

Clinical Identification of Metabolic Syndrome

Any three of the following:

<u>Risk Factor</u>	<u>Defining Level</u>
1. Waist Size Men Women	>40 in (>102 cm) >35 in (>88 cm)
2. Triglycerides	≥150 mg/dL
3. HDL-C Men Women	<40 mg/dL <50 mg/dL
4. Blood pressure	≥130/85 mmHg
5. Fasting glucose	≥110 mg/dL

Development and Consequences of Metabolic Syndrome

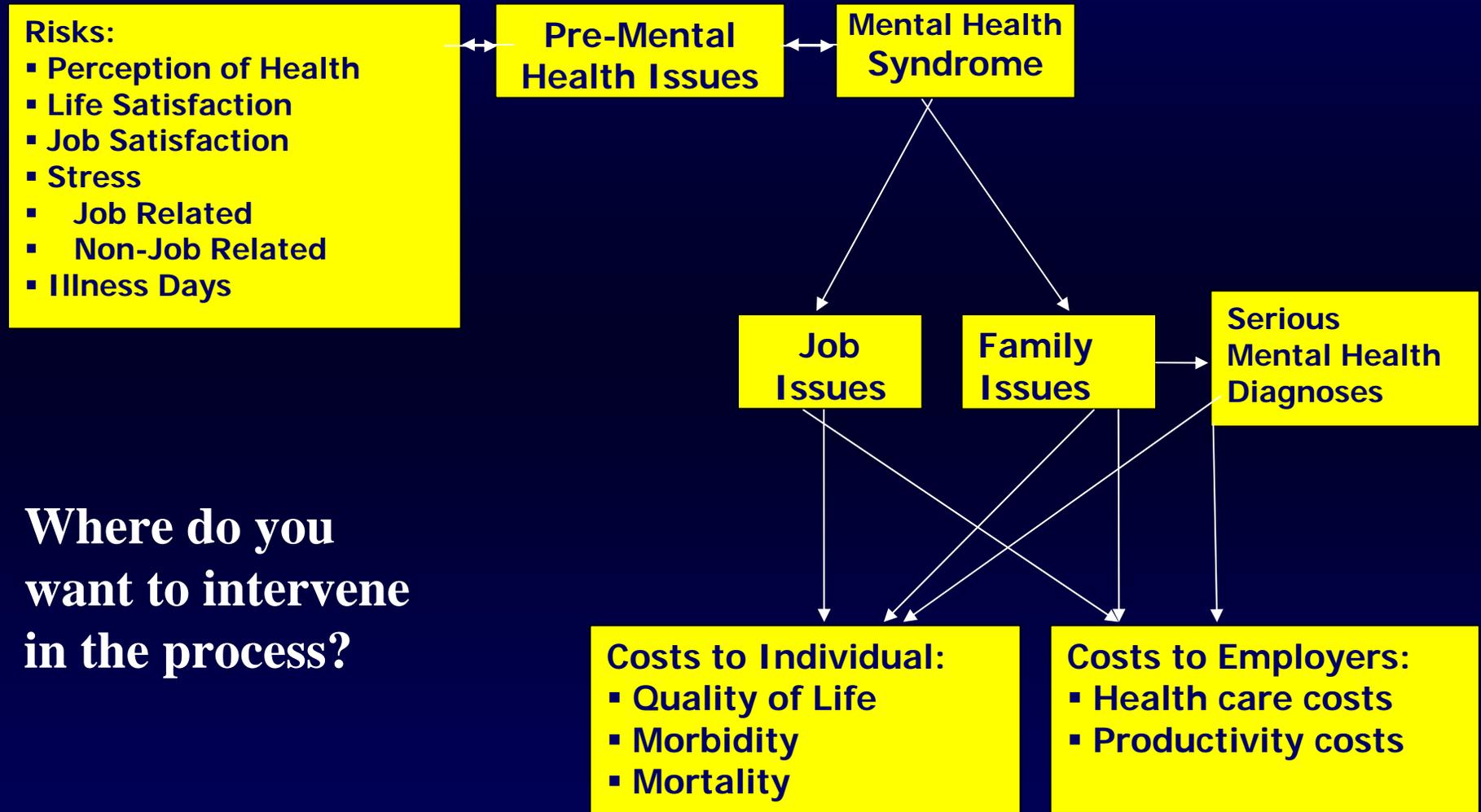


Where do you want to intervene in the process?



Intervention for Psychological Cluster

Development and Consequences of Mental Health Issues (DRAFT)

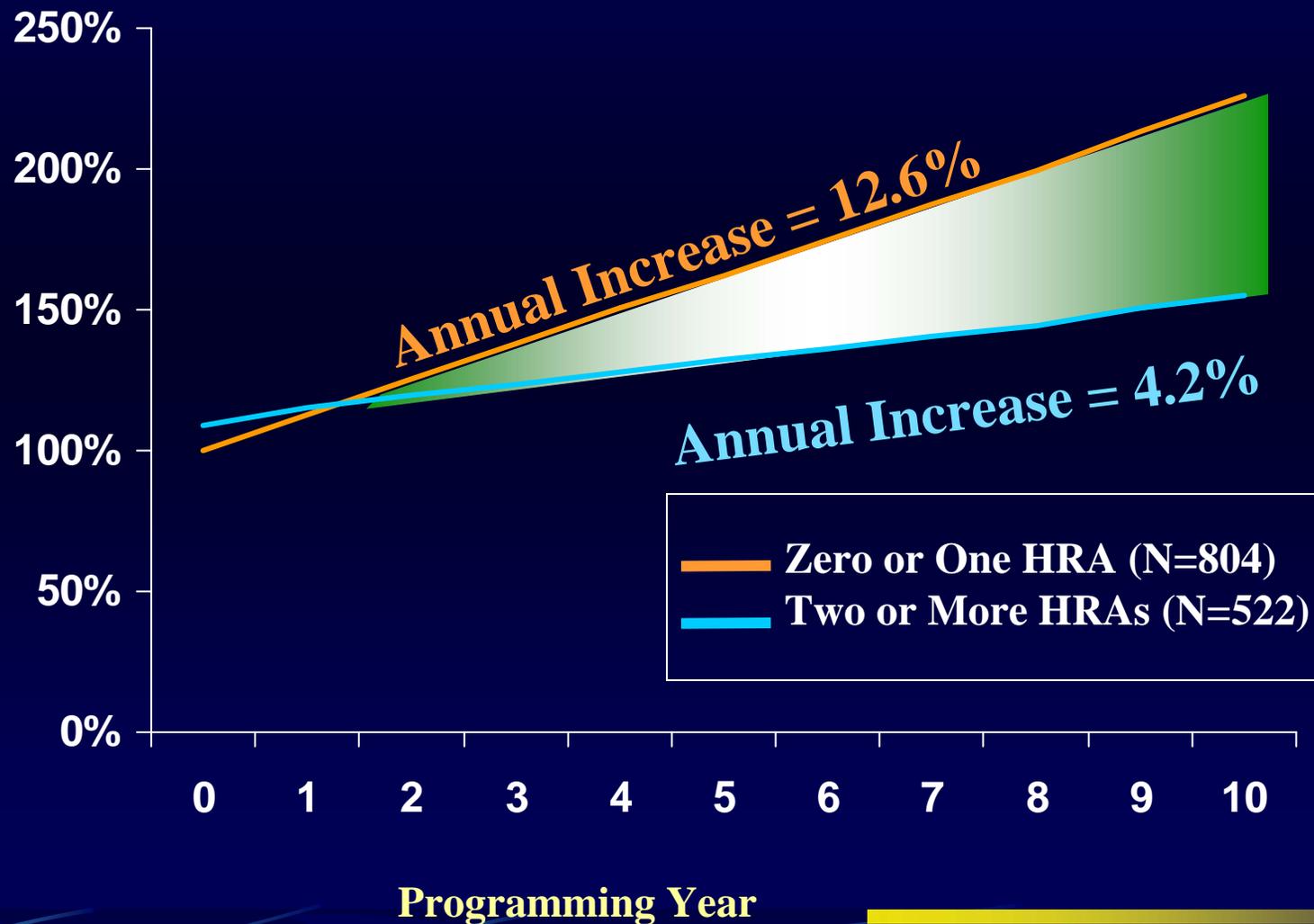


Where do you want to intervene in the process?

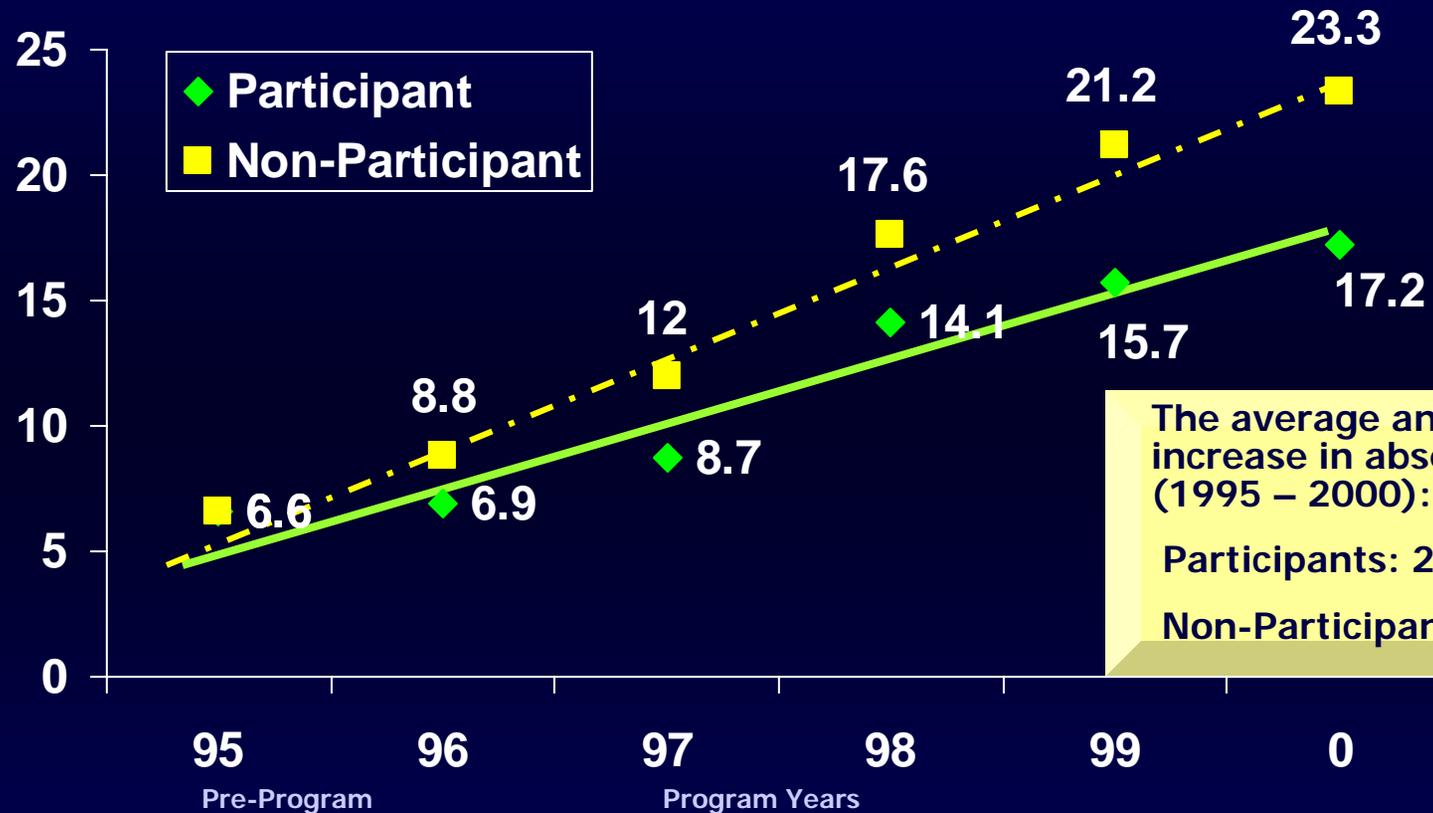


Business Concept
Change in Costs
Follow Engagement

Cost Savings Associated with Program Involvement from 1985 to 1995



Yearly Average Disability Absence Days by Participation



Schultz, Musich,
 McDonald,
 Hirschland, Edington.
 JOEM 44(8):776-780,
 2002

$$\frac{\$200}{\text{Work Day}} \times \frac{1.2 \text{ Work Days}}{\text{Participant Year}} \times 2,596 \text{ participants} = \frac{\$623,040}{\text{Year}}$$

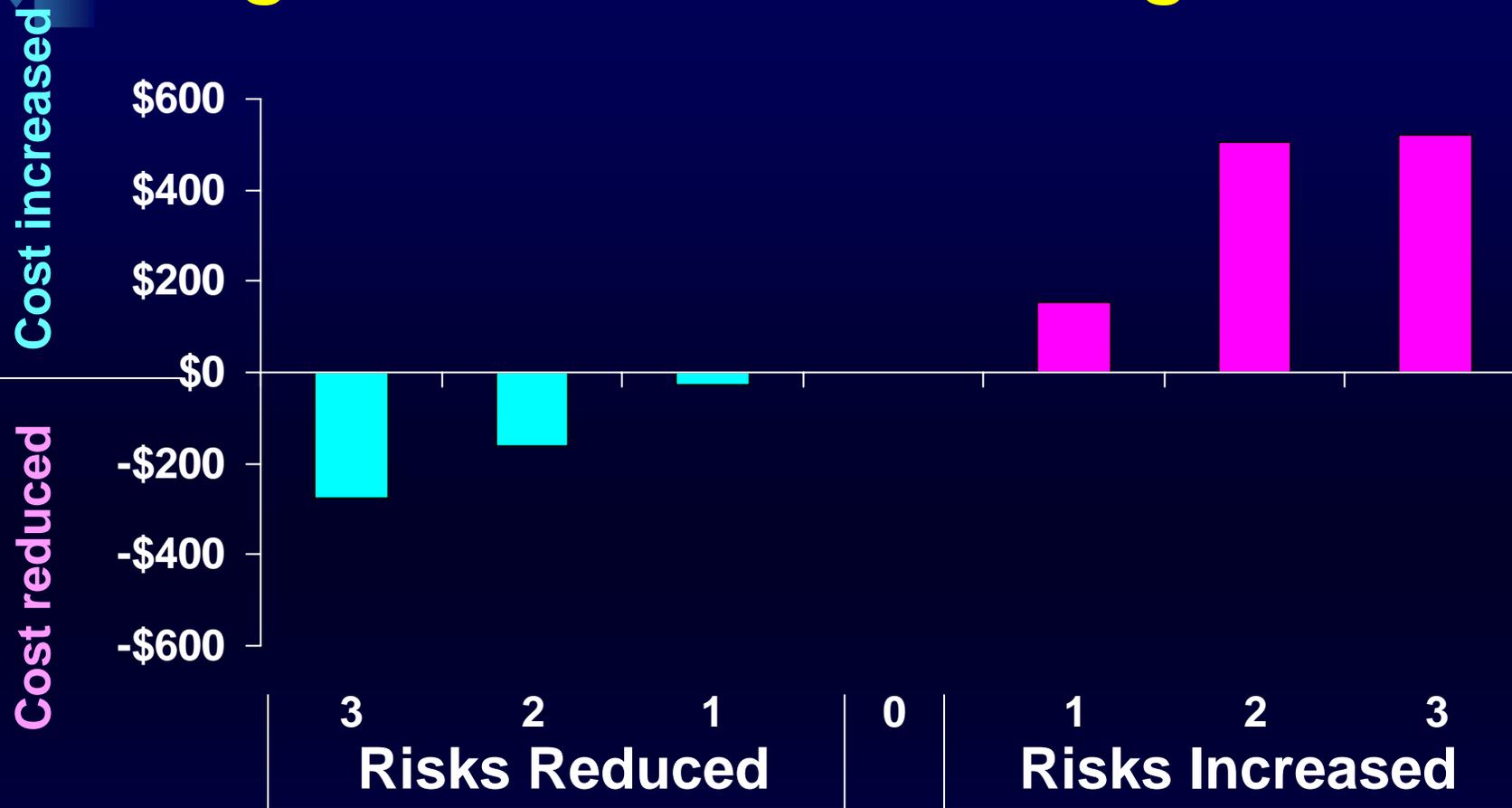


Business Concept

Change in Costs

Follow Change in Risks

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

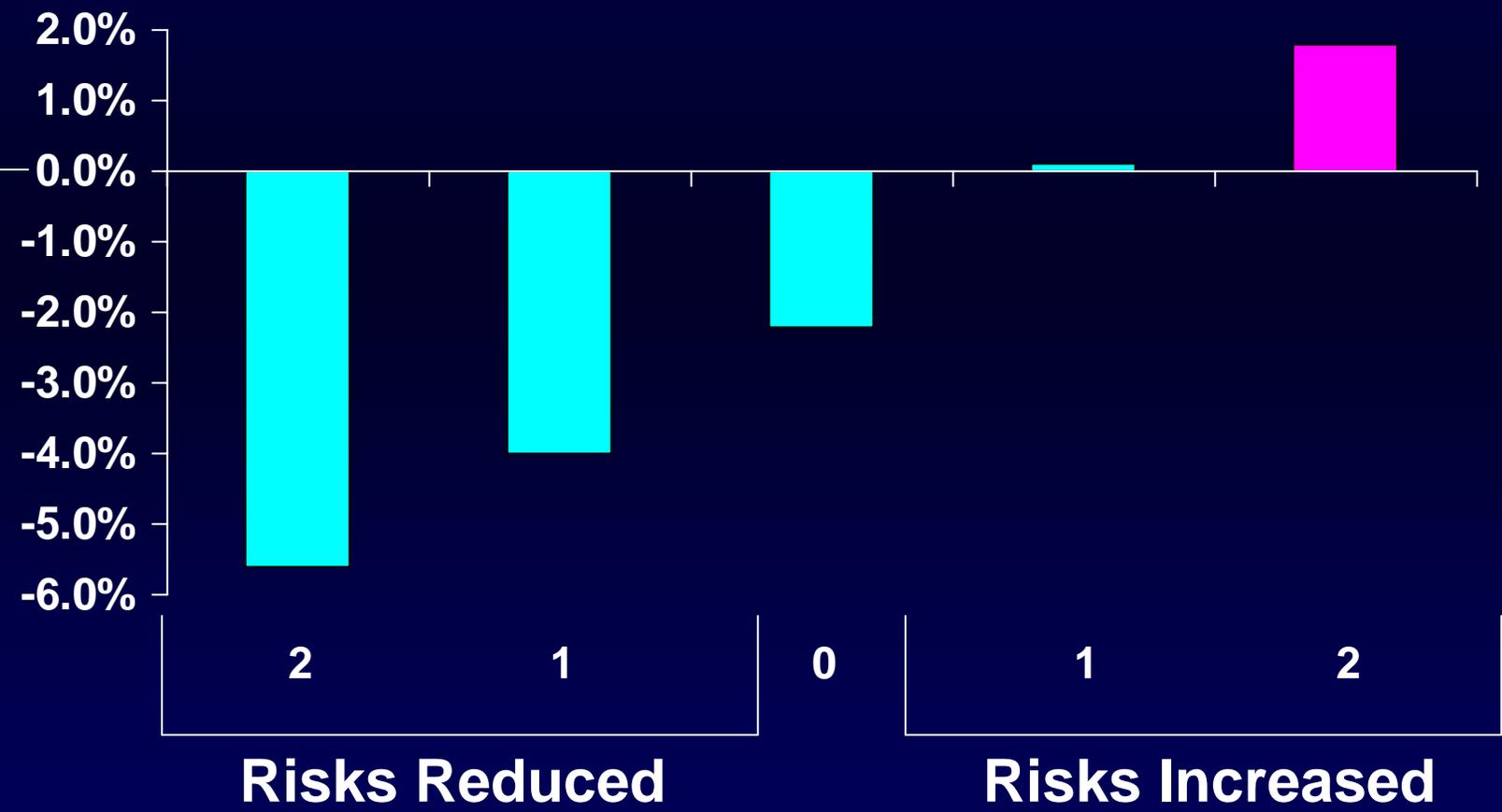
Retirees<65: Cost per risk reduced: \$192; Cost per risk avoided: \$621

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

Change in Presenteeism follows Change in Risks

percent increased

Percent reduced





Business Concept

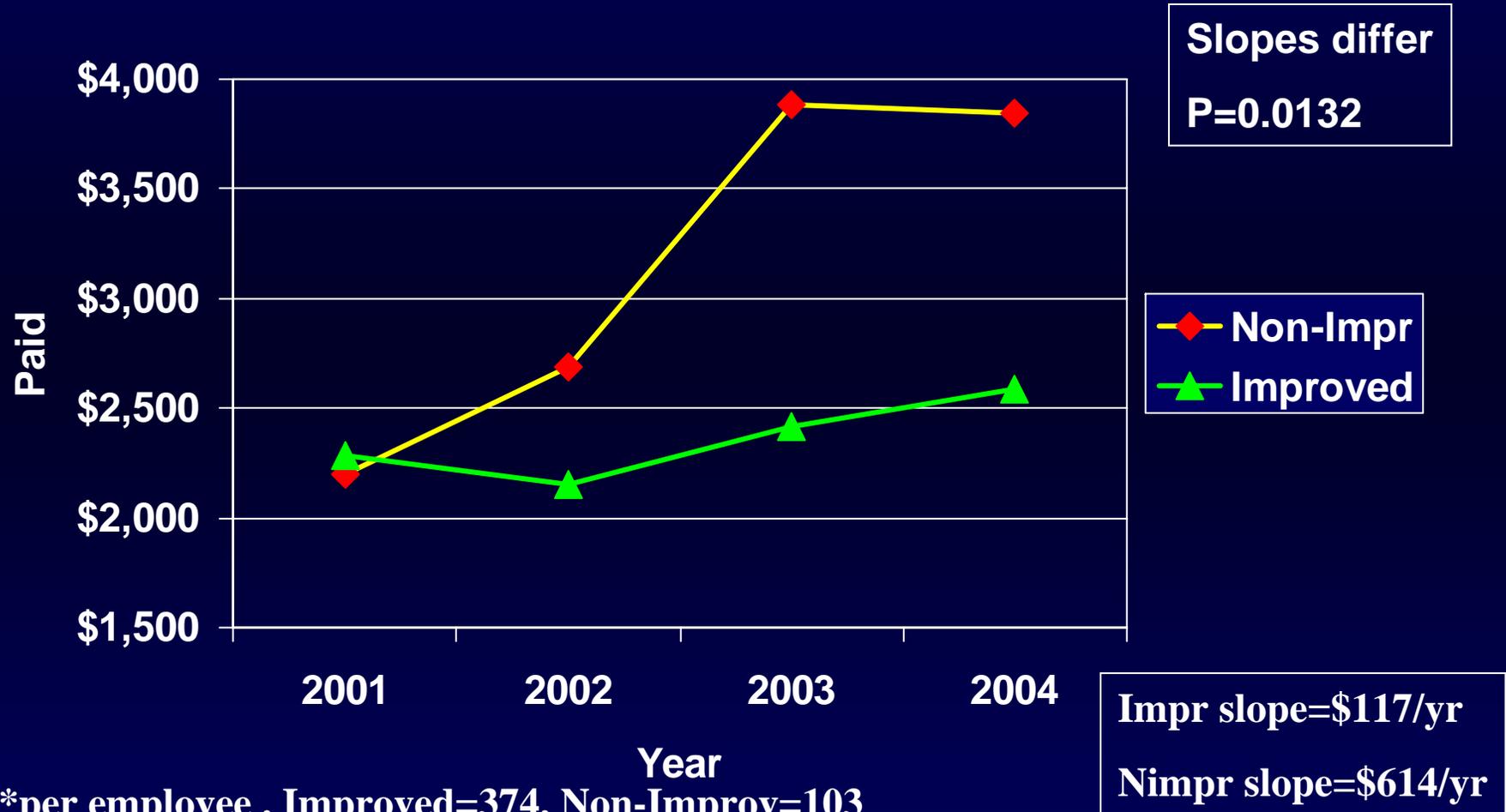
Change in Costs

follow

“Don’t Get Worse”



Medical and Drug Cost (Paid)*



*per employee , Improved=374, Non-Improv=103
HRA in 2002 and 2004

Improved=Same or lowered risks

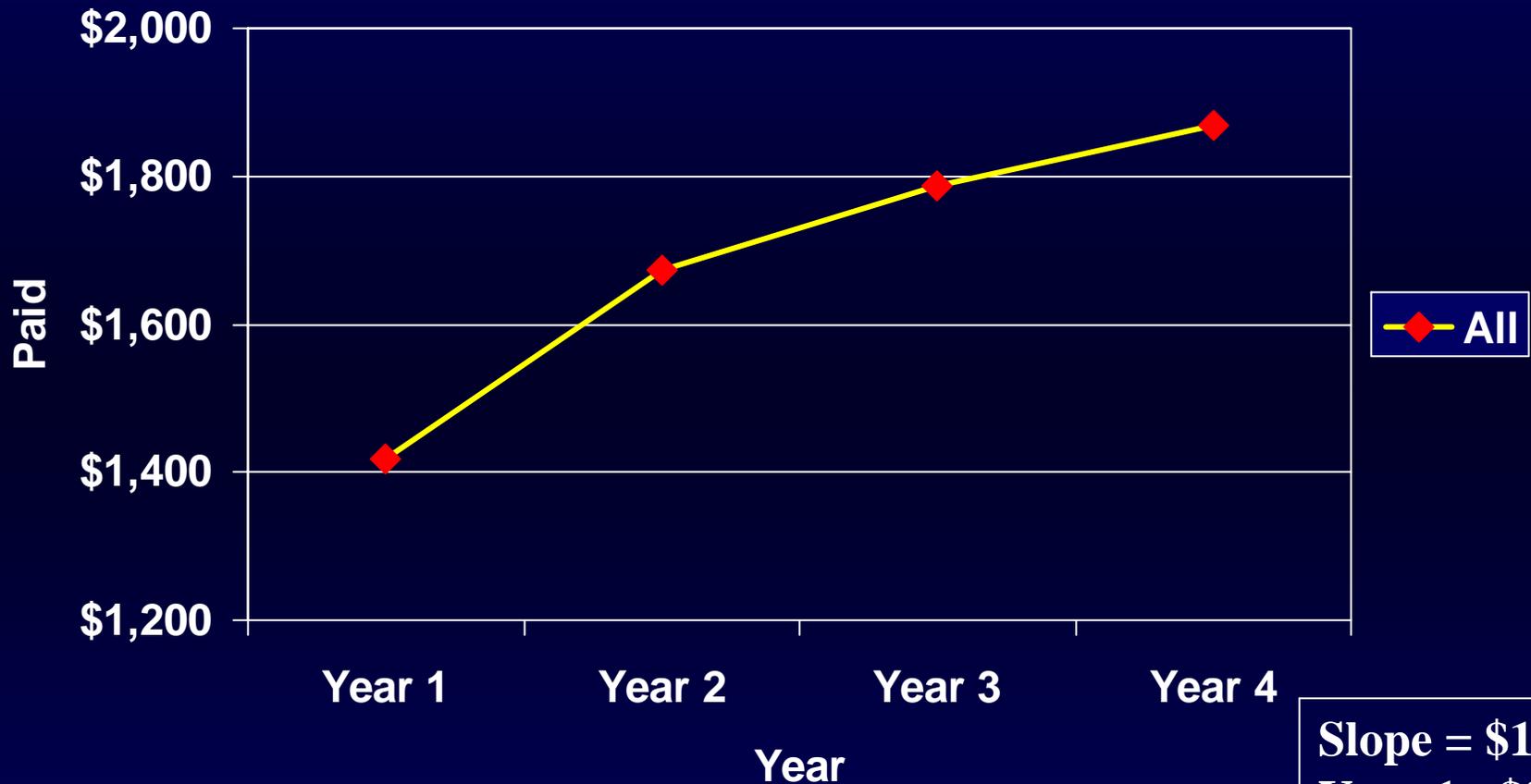
*Medical and Drug, not adjusted for inflation



Business Concept

“Bend the Trend”

Financial Services (Healthcare Spend)



*per employee

Slope = \$150/yr
Year 1= \$255
Year 2= \$118
Year 3= \$82

GOOD, but too slow!!



Summary

Business Case for Health Management

Excess Costs are related to Excess Risks

Costs follow Engagement and Risks

Controlling Risks leads to Zero Trend



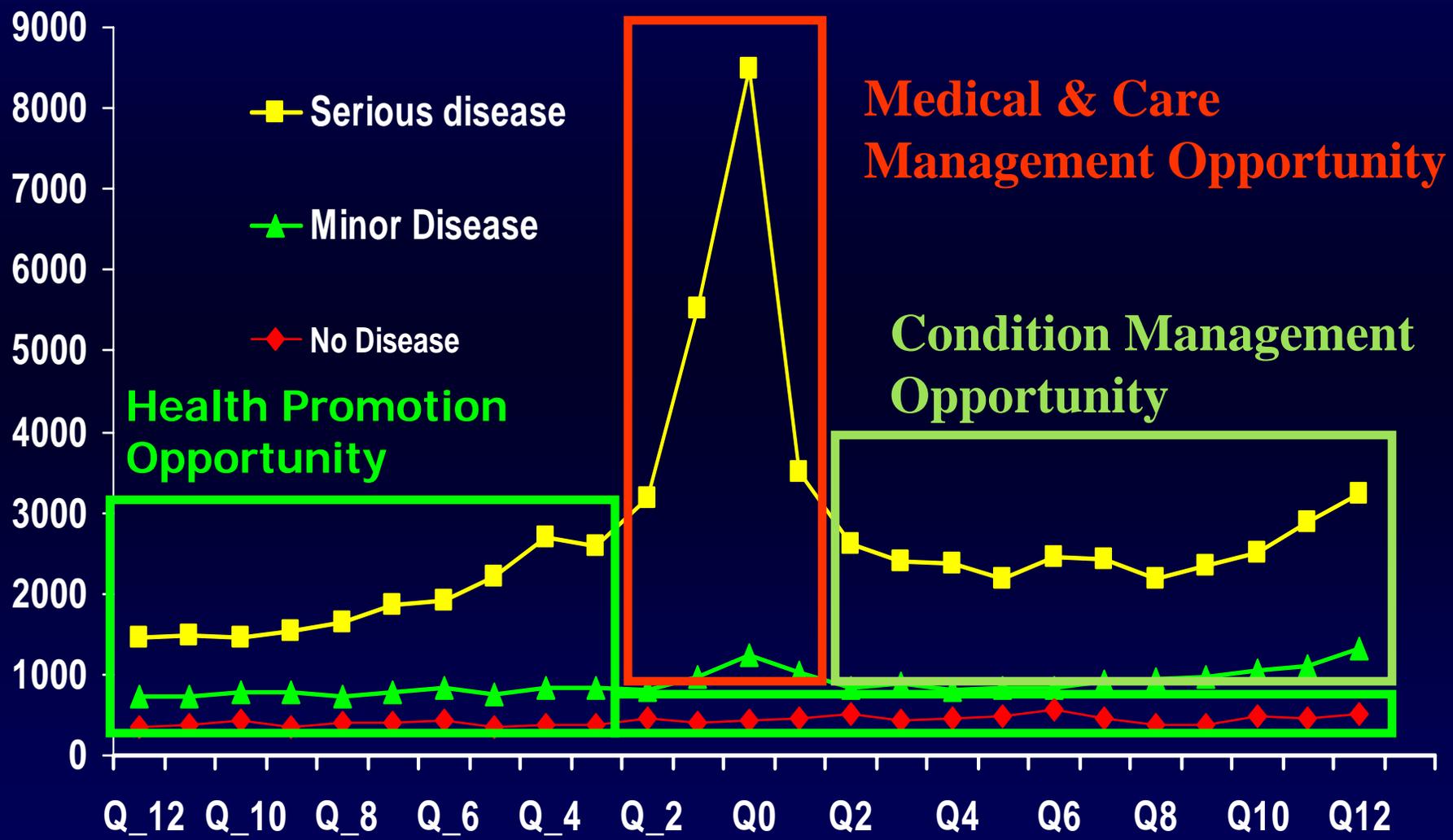
Section III

Health Management:

Next Generation Programming
Champion Companies
Zero Trend

The Question is: “How can we do it?”

Where are the Opportunities for Population Health Management?



Medical and Drug Costs only



Business Concept

Necessary Partners to get to Next Generation Programs

- Company (Private or Public or non-Profit)

 - ↳ Management
Union

Health Systems???

- Health Plan

- Benefit Consultant

- Primary Care Physicians

- Pharmaceutical Company

- Health Enhancement Company



Business Concept

**Next Generation Programming for
Champion Companies to
Achieve Zero Trend**

Integration and Sustainability

Next Generation Health Management Program

1. Vision from Senior Leadership
2. Worksite Environment

4. Population Programs

Website
Low-Risk Maintenance
Know Your Numbers
Physical Activity
Nutrition Awareness
Wellness Modules

3a. Health Risk Appraisals

3b. Individual Stratification

Coaching Sessions
-unlimited contacts
Health Advocate
Triage to Resources
Develop Self-Leaders

5. Incentives

6. Measurement



Next Generation

1. Senior Leadership Vision



Vision from the Senior Leadership

- **Clear Vision within Leadership**
- **Vision Connected with Company Strategy**
- **Vision Shared with Employees**
- **Accountability and Responsibility Assigned to Operations Leadership**



Next Generation

2. Environmental Strategies



Environment Interventions

- **Management and Leadership of the Company and Unions**
- **Mission and Values Aligned with a Healthy and Productive Culture**
- **Policies and Procedures Aligned with Healthy and Productive Culture**
 - Vending Machines
 - Cafeteria
 - Stairwells
 - Other
 - Job Design
 - Flexible Working Hours
 - Smoking Policies
 - Benefit Design

Next Generation Benefit Design to Promote Consumerism

- **Move from Entitlement to Consumer**
 - Incentives follow Actionable Behaviors
- **Provide Transparency**
 - Appropriate Physicians
 - Appropriate Health Systems
 - Appropriate Pharmaceutical Solutions
- **Promote Maintenance of Health Status**



Next Generation

3a. Health Risk Appraisals



Health Risk Appraisals

Comprehensive and Lifestyle Oriented

Tested for Reliability and Validity

Evidence-Based

Tailored Profile returned to Individual

Recommendations connected to Local
Resources

Counseling



Components of a HRA Participation

Health Risk Appraisals

Plus

Screening for Biometrics and Counseling

Plus

Coaching for Everyone



Next Generation

3b. Individual Based Programs

M Coaching Strategies for Individual Intervention

Contact each individual (at least three times)

Unlimited contacts by level of probability of being high cost within the next two to three years

Pay attention to cluster and prioritized risks

Use variety of contacts (one on one, telephone and web) for sustainable engagement

Use situational and whole person approach

Engage individual in positive actions. Ask but don't tell. Use triage, health advocate strategies, develop **Self-Leaders** and use all available resources

Frequent evaluation of coach/client participation and satisfaction



Next Generation

4. Population Based Programs



Population-Based Programs

Population Programs Orientation

Pedometers, know your numbers, no weight gain

Human Resource Orientation

People skills/Communications

Health Communications

Written materials, Online portal, etc

Environmental Orientation

Stairwells/Vending, Food Services, Other

Wellness Programming for Individuals

Wellness Modules

High-Risk Reduction

Smoking cessation

Weight Loss

Stress Management

Physical Activity

Condition Management

Blood pressure

Cholesterol

Diseases

Other

Ergonomics

Low-Risk Maintenance

Population based

Business Specific Modules

Communications

Career development

Special Promotions

Not A Stand Alone Program



Next Generation

5. Incentives



Incentives

Annual Incentive

Benefit Options (Co-pays, Deductibles, HSA contributions, ...)

**Premium Reductions/Premium Plan
(\$600 to \$2000)**

Throughout the Year

Hats and T-Shirts

**Cash, debit cards
(\$25 to \$200)**



Next Generation

6. Measurement, Evaluation and Decision Support



Scorecard

Percent Participation: Over a rolling three years HRA + Three Coaching sessions + Two other sessions	80% to 95%
Percent Low-Risk: Percent of the eligible population	70% to 85%
Estimated Cost of Program: Dollars per Eligible employee Excluding major incentive	\$400
Estimated Savings: Dollars per Eligible Employee	\$800



Summary

Objective

Key Thoughts

Shareholder value from creative and innovative products from healthy and productive people

Strategy

Next Generation Program to drive Objective

Partners: health plans; benefit consultants; primary care physicians; pharmaceutical companies; health enhancement companies

Outcomes to get to Zero Trend

90%-95% participation and 75% to 85% low-risk

Keep the healthy people healthy

Don't get worse

Sound Bites from the Presentation

1. The **“Do Nothing”** strategy is unsustainable.
2. **“Total Population Management”** is the effective healthcare strategy and to capture the **“Total Value of Health”**
3. We need to refocus the definition of health from **“Absence of Disease to High Level Vitality.”**
4. The business case for Health Management indicates that the critical strategy is to **“Keep the Healthy People Healthy”** (“keep the low-risk people low-risk”).
5. The first step is, **“Don’t Get Worse”** and **“Let’s Create Winners, One Step at a Time.”**



What's the Point?



Thank you for your attention.

Please contact us if you have any questions.

Phone: (734) 763 – 2462

Fax: (734) 763 – 2206

Email: dwe@umich.edu

Website: www.hmrc.umich.edu

Dee W. Edington, Ph.D. , Director
Health Management Research Center
University of Michigan
1027 E. Huron St.
Ann Arbor MI 48104-1688