



Improving the Healthcare Investment

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Caterpillar Inc

HEALTHY BALANCE[®]



CATERPILLAR[®]

Caterpillar Inc

- Self-Insured
- 150,000 covered lives in US
 - Employees and retirees
 - Spouses and dependents
 - 30,000 union retirees
- \$650M annual spend on health care
- Average age of EE – 41
- Average turnover <10%
- Long term approach to health care strategy

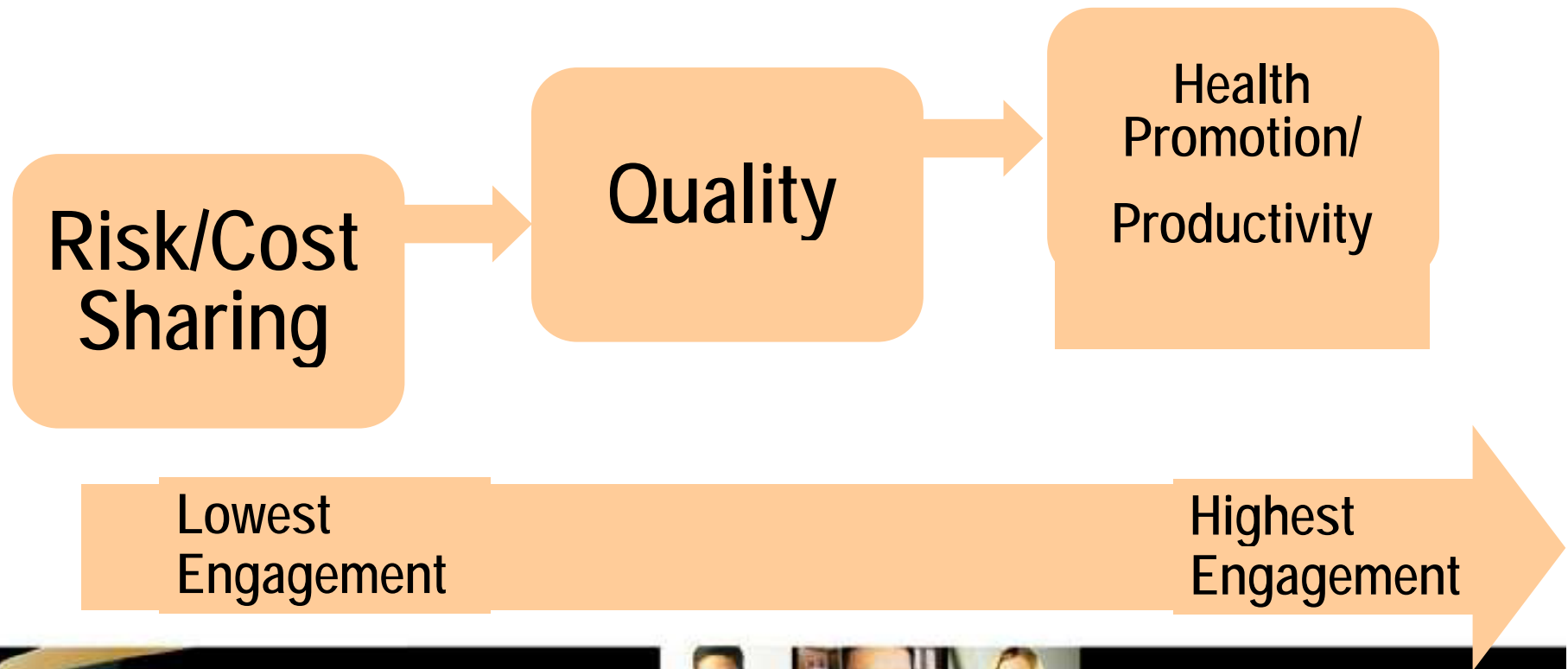


Productivity as a Business Advantage

Minimal Return

Better Return

Best Return

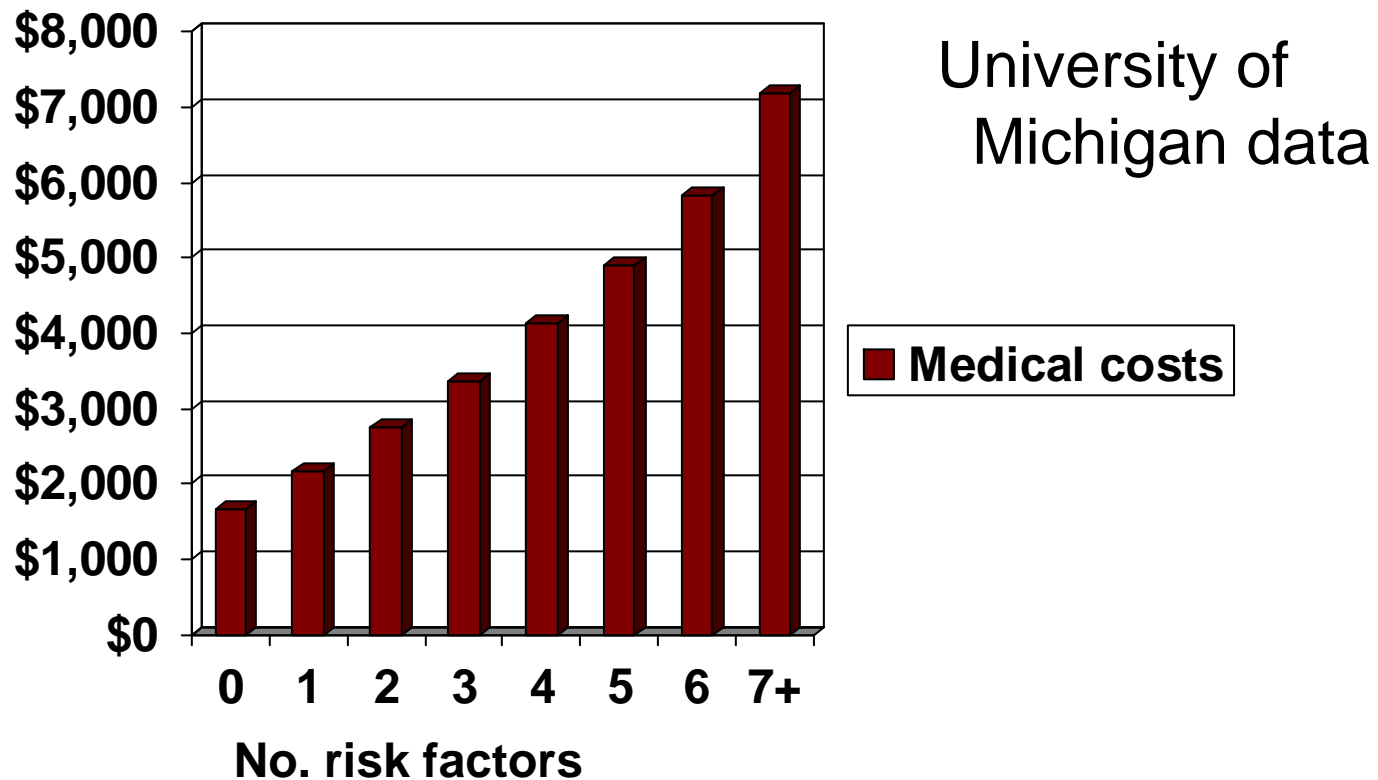


Improving Population Health

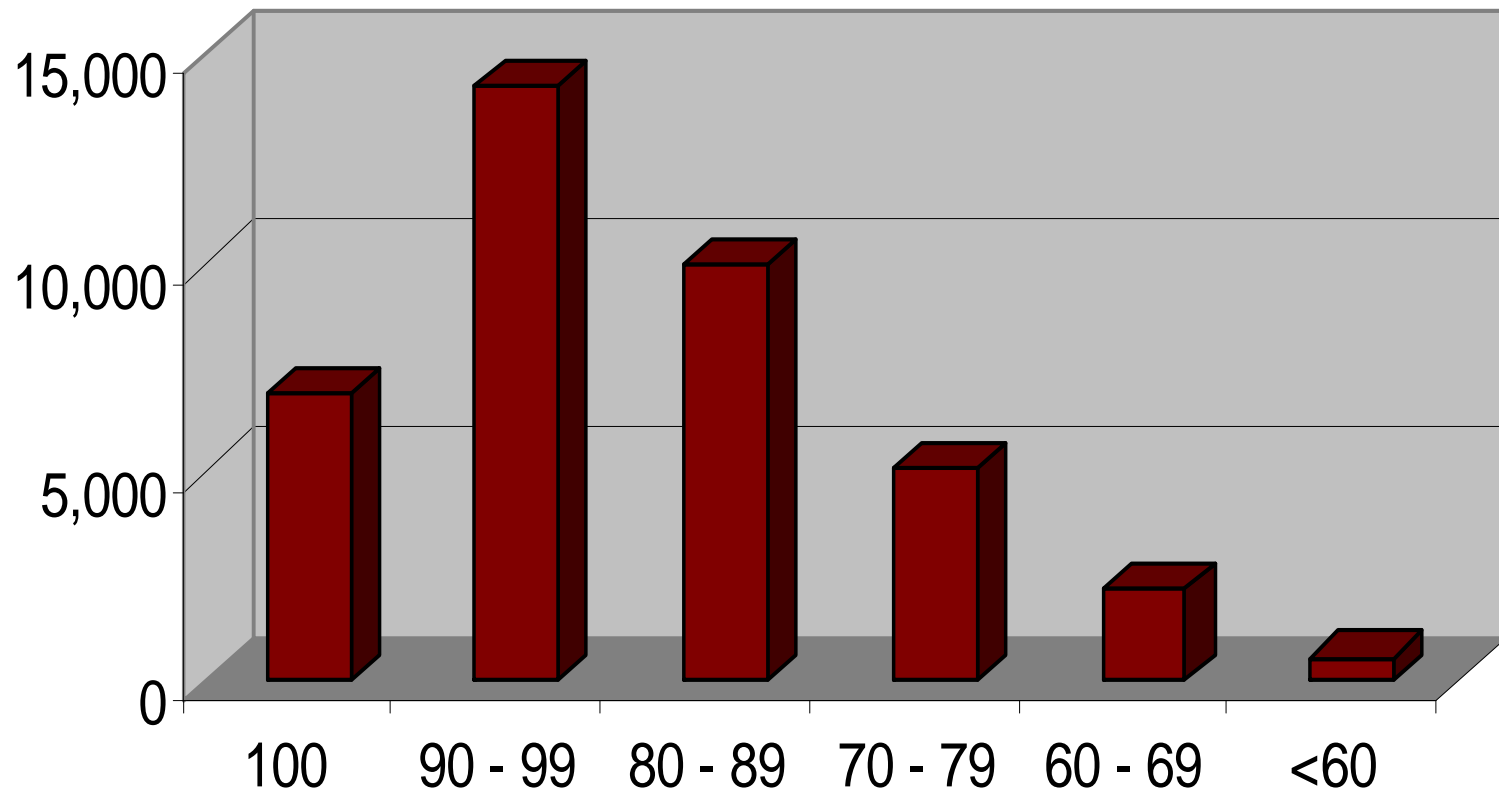
- University of Michigan Health Management Research Center
- Leader is population health risk analysis
- Years of research documents the importance of understanding and managing risk levels



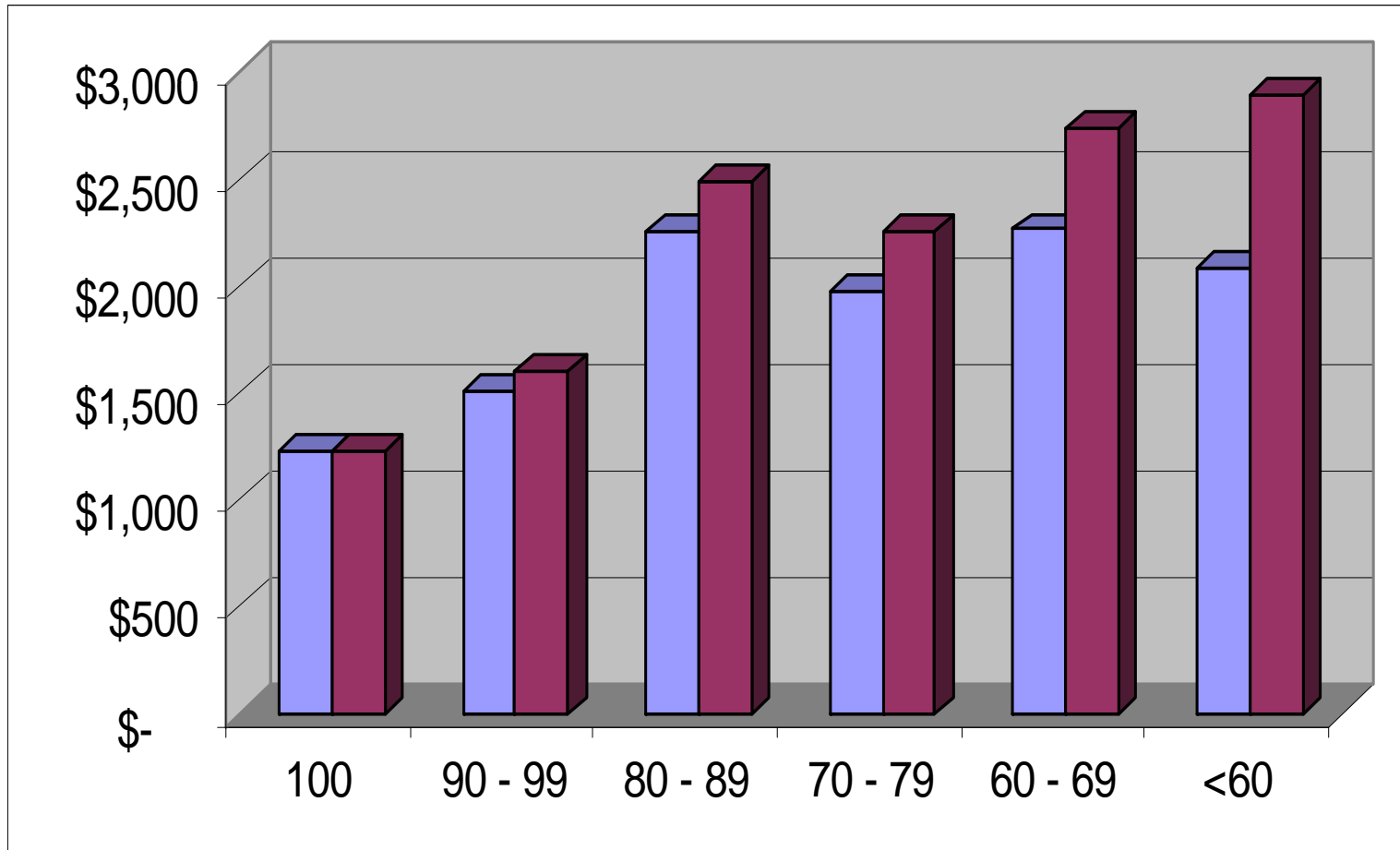
Excess Medical Costs due to Excess risks



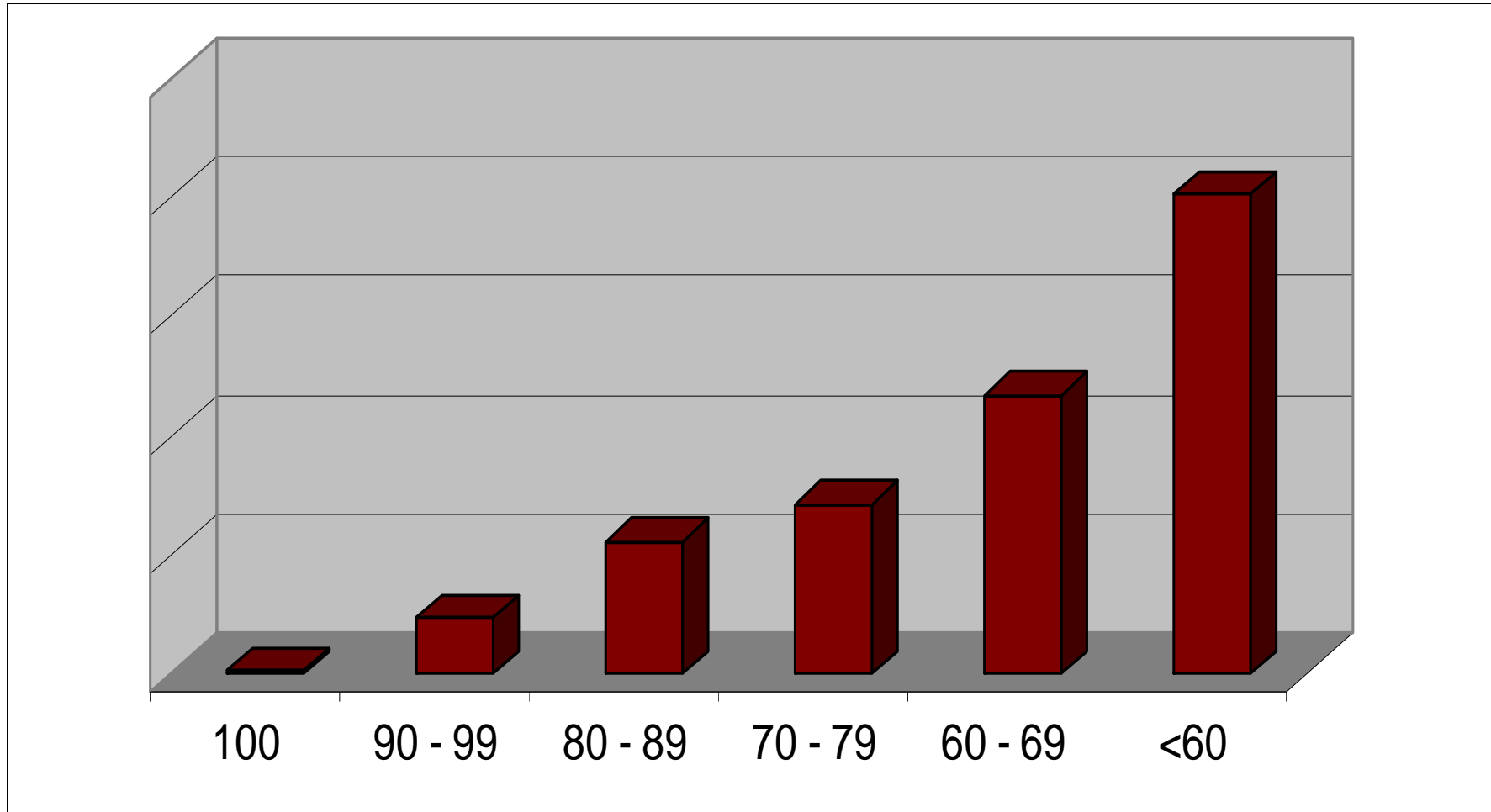
Risk score distribution



Claims cost 2007-2008

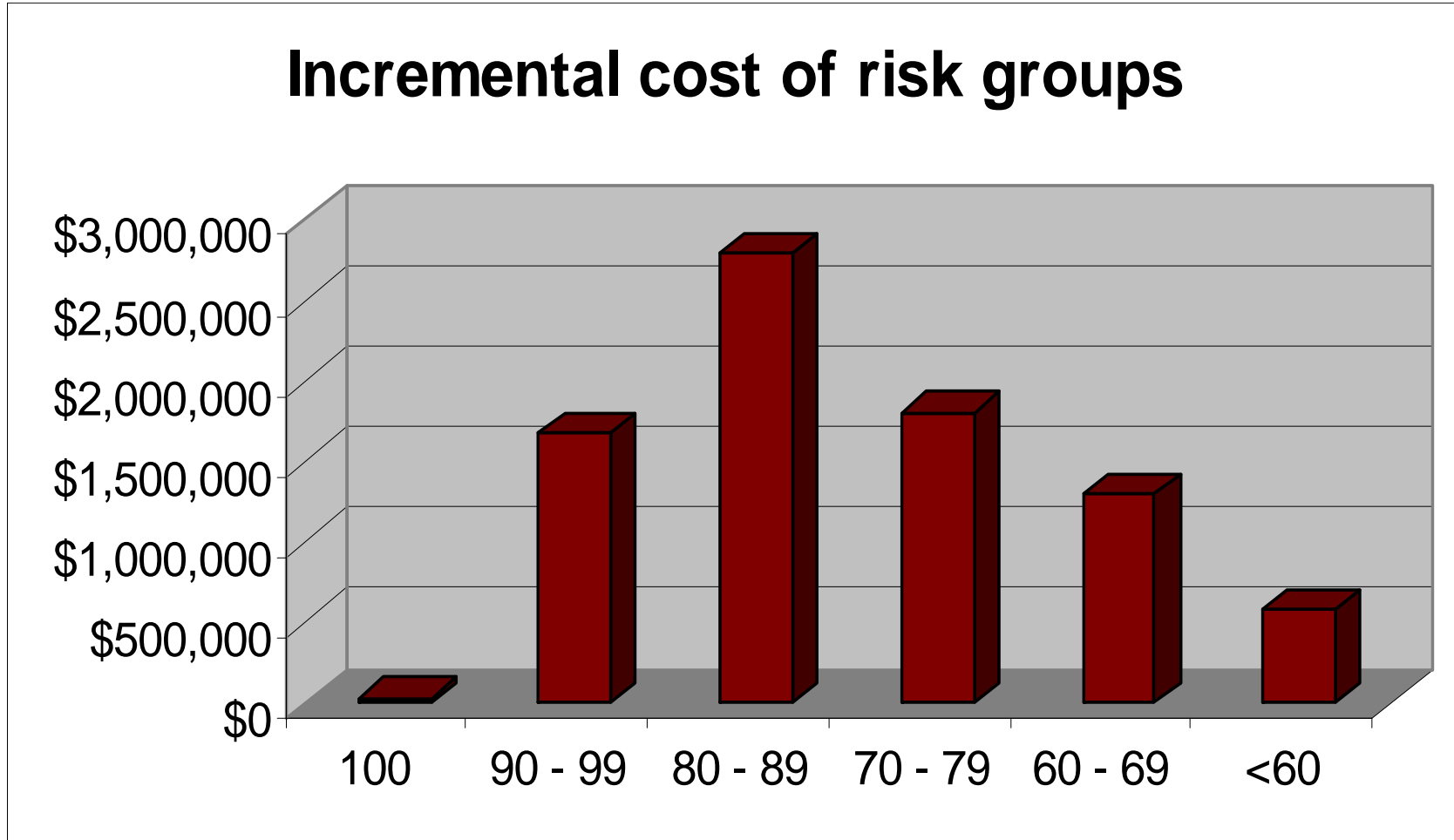


The “Delta” 2007-2008

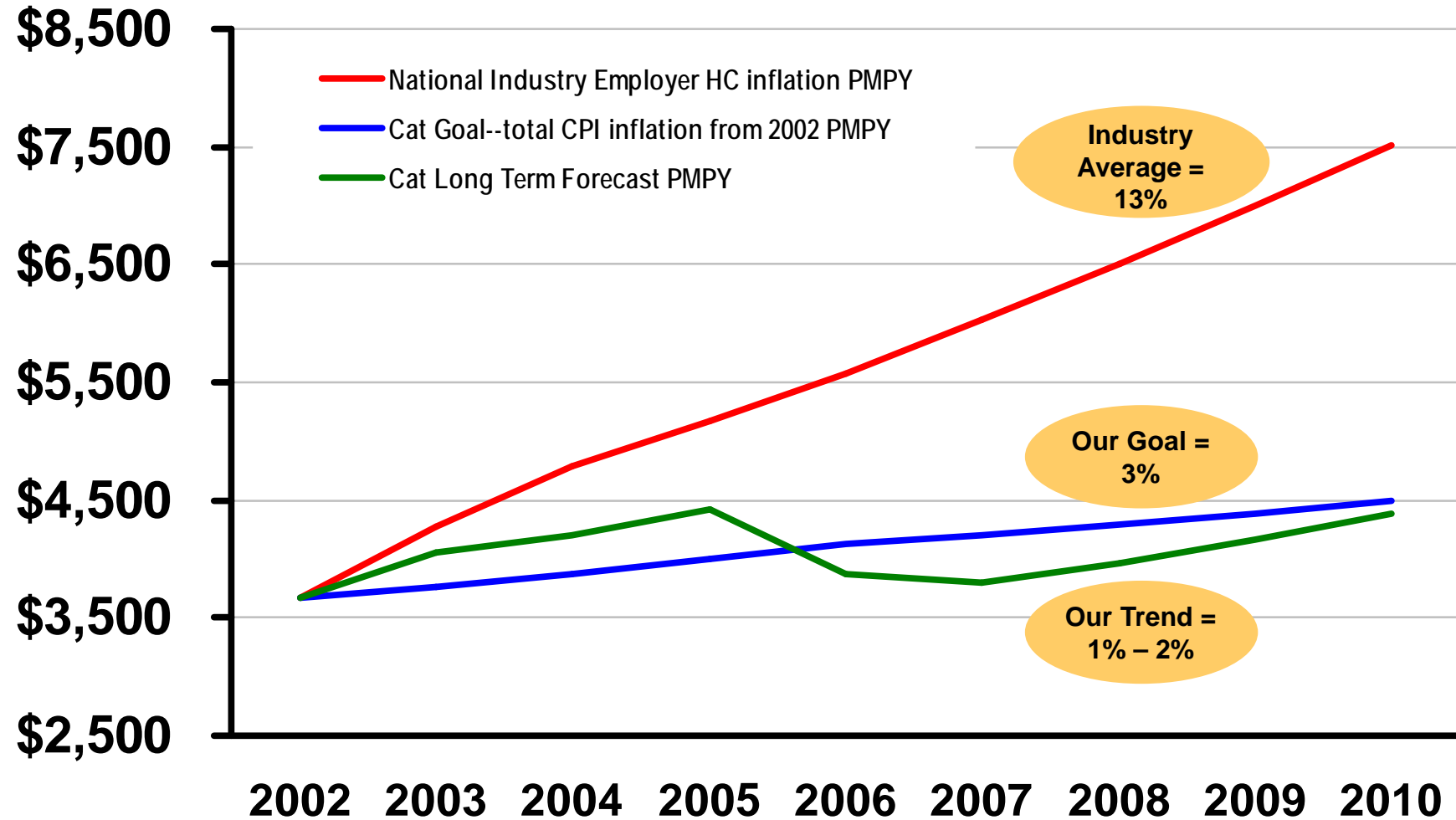


Caterpillar Inc

Incremental cost of risk groups



Caterpillar's Health Care Costs





Health Promotion

- Health risk assessment
- Healthy Balance News
- Online tools on CatHealthBenefits.com
- Work.Life.Solutions.
- Health Promotion Exams*
- Food Service Management*
- Tobacco cessation*
- Lifestyles for Health™ --DM*



Health Promotion Exam

- Physical exam starting at age 35
- Identify health risks and make recommendations to decrease health risks
- Data drives programs
- Available to all US work payrolls and locations
- 60% of exams lead to MD referral



Healthy Balance

- Food Services
 - Healthy Balance team partnering with Eurest
 - Labeling nutritional content of food
 - Healthy snack choices in vending machines
 - Lower fat options in dining centers
 - Working together to provide healthier eating choices
 - More nutritional education in dining centers
 - Differential food pricing



Tobacco Cessation Program

Phase 1- Offer a cessation program- 2002

Phase 2- Smoking ban in all US facilities- 2006

Phase 3- Global no smoking ban- 2007

Phase 4- Campus wide ban in US- 2008

Phase 5- Global campus-wide ban- 2009

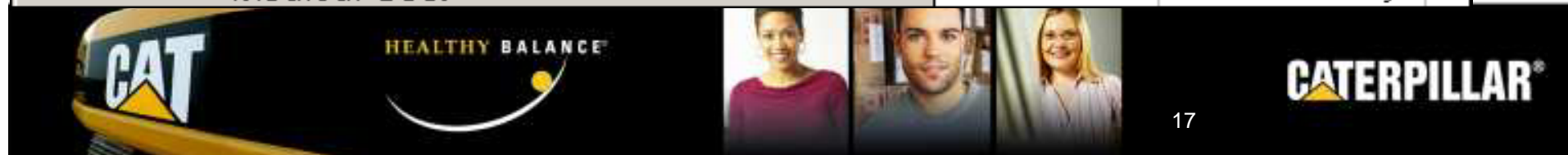


Free and Clear

- Healthy Balance tobacco cessation program
 - Smoking
 - Chewing tobacco
- 12 month telephone-based program
 - Any Caterpillar employee, retiree or spouse who is actively participating in Healthy Balance is eligible
 - 35% 6 year quit rate (>3200 participants)

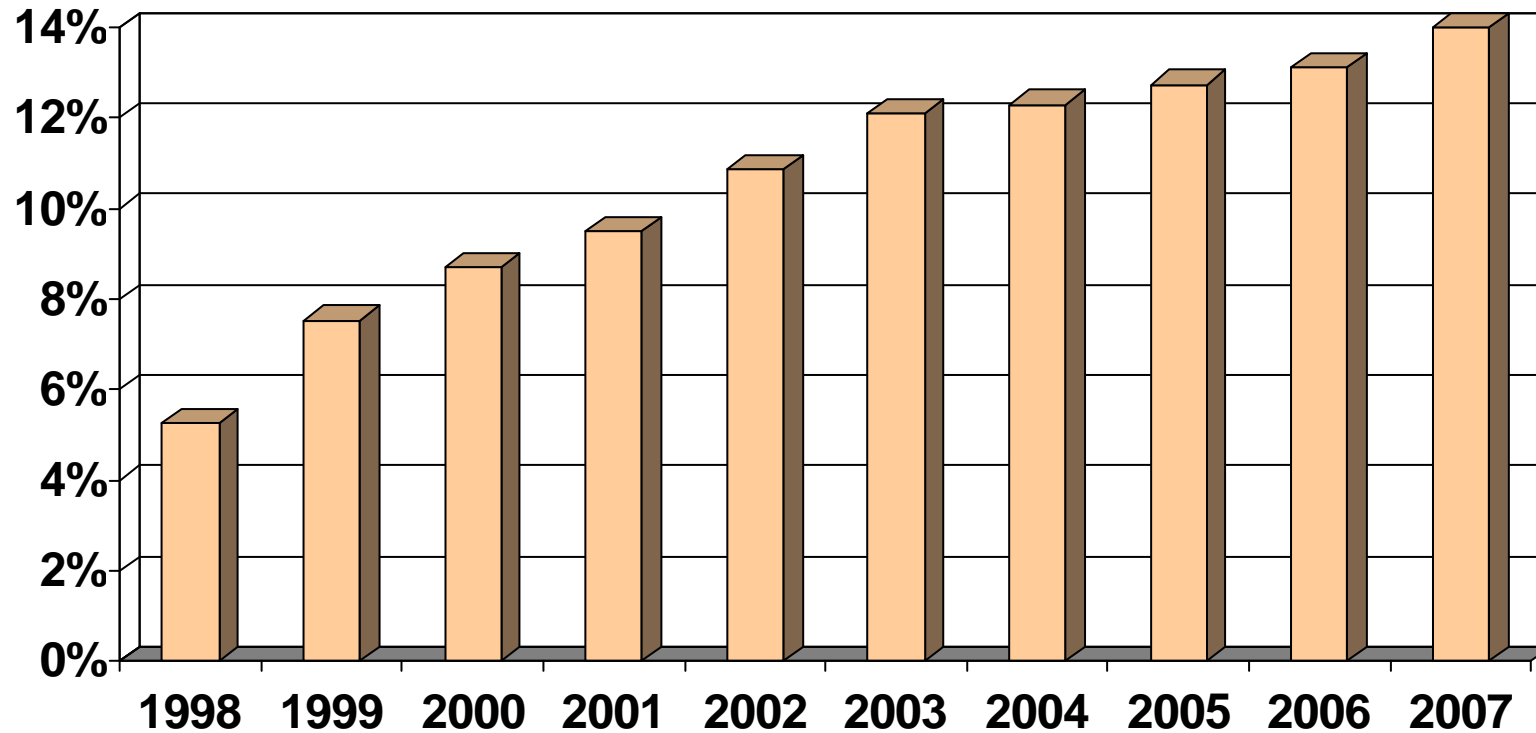


	Caterpillar		AUR	
SELF-REPORTED DATA				
<i>Healthy Balance Eligible Employees</i>				
Male	32546		2775	
Female	9532		425	
Average Age	42		41	
Participation Rate	86	%	83	%
<i>Self-Reported Blood Pressure</i>				
High	17	%	16	%
BP Unknown	19	%	21	%
<i>Body Mass Index</i>				
Normal	26	%	24	%
Overweight	40	%	42	%
Obese	31	%	31	%
Smoking Rate	14	%	16	%
Physically Inactive (leisure time)	32	%	30	%
High Fat Diet	28	%	29	%
DISEASE SPECIFIC DATA (2007)				
<i>Avg EE Medical Cost</i>				
	2403	\$	Data Privacy	\$
<i>Diabetes Prevalence</i>				
	6	%	Data Privacy	%
<i>Medical Cost</i>				
	7523	\$	Data Privacy	\$
<i>Coronary Artery Disease Prevalence</i>				
	4	%	Data Privacy	%
<i>Medical Cost</i>				
	10164	\$	Data Privacy	\$



Diabetes at Caterpillar

150% Increased Prevalence Over 9 Years



■ Percent of Employees with Diabetes



Eligibility Criteria

- Diabetes
 - A1c $\geq 9\%$
 - Blood Pressure $\geq 140/90$ mm/Hg
 - LDL Cholesterol ≥ 130 mg/dl
 - BMI ≥ 30
- High Risk
 - Fasting Glucose ≥ 100 mg/dl
 - Insulin Resistance Ratio $> 4\%$
- Depression
 - Initial Screen PHQ2 Score = 3-6
 - Second Screen
 - PHQ9 Score – 5 or greater
 - PHQ9 Score under 5 plus treatment in past year



Diabetes/High Risk Data Collection Points

- **Biometrics:**
 - BP
 - A1c
 - Total Cholesterol
 - LDL
 - HDL
 - Triglycerides (incl TG/HDL ratio)
 - Fasting Blood Glucose
- **General Parameters:**
 - Height/Weight – BMI
 - Physical Activity – minutes per week
 - Healthy Eating
 - Alcohol Use
 - Abdominal Circumference
 - Smoking
- **Medications**
 - Blood Sugar
 - Statins
 - ACEs/ARBs
 - Beta Blockers
 - Aspirin
 - Other
- **Diabetes Process Standards**
 - Self/MD Foot Exam
 - Eye Exam
 - A1c Frequency
 - Microalbumin Urine Testing
 - Flu and Pneumonia Vaccines
- **PHQ2, Presenteeism, Absenteeism**
- **MI risk**



Diabetes Program 2010 Standards of Care

The guidelines below are used by Lifestyles for Health staff. The standards of care are minimum recommendations and are not intended to replace the clinical judgment of your doctor. We encourage you to talk to your doctor to see if program guidelines are appropriate for your specific medical condition. ***It is our goal to help you and your doctor manage your blood pressure, LDL cholesterol, and blood glucose (sugar) through lifestyle behavior changes.***

LIFESTYLE BEHAVIORS RECOMMENDATIONS	NO SMOKING	Congratulations if you are a non-smoker! If you do smoke, Healthy Balance [®] offers Free & Clear [®] , a free smoking cessation program. Your Health Coach can provide additional information about this service.
	PHYSICAL ACTIVITY	<ul style="list-style-type: none"> ▪ 150 minutes or more of moderate-intensity level aerobic physical activity a week. ▪ 3 days of resistance training a week. <p>Please consult with your doctor before beginning or significantly changing your exercise routine.</p>
	HEALTHY EATING	<p>Your Lifestyles for Health registered dietitian and Health Coach will provide nutrition education and support.</p> <p>For a list of topics, see the Healthy Eating tab in your binder.</p>
	WEIGHT MANAGEMENT	Body Mass Index (BMI) greater than 18.5 but less than 25.
MEDICATION RECOMMENDATIONS	ASPIRIN THERAPY	<p>Low dose (75-162 mg per day) aspirin therapy for individuals with diabetes and one of the following conditions:</p> <ul style="list-style-type: none"> ▪ Known heart disease ▪ Increased cardiovascular risk <p>Your Health Coach will assist you in determining your cardiovascular risk.</p> <p>Consult with your doctor to determine if aspirin therapy is appropriate for you.</p>
	ACE INHIBITOR THERAPY	<p>ACE Inhibitor therapy for individuals with diabetes and one of the following conditions:</p> <ul style="list-style-type: none"> ▪ High blood pressure ▪ Known heart disease ▪ Presence of microalbuminuria (early stages of kidney disease) <p>If ACE inhibitors are not well tolerated, an Angiotensin II Receptor Blocker (ARB) medication may be substituted.</p>
	STATIN THERAPY	<p>Statin therapy for individuals with diabetes and one of the following conditions:</p> <ul style="list-style-type: none"> ▪ Without heart disease, over the age of 40, and at least one risk factor for heart disease ▪ Known heart disease <p>Your Health Coach will assist you in determining your cardiovascular risk.</p>
	BETA BLOCKER THERAPY	Beta Blocker therapy for individuals with diabetes for a least two years following a heart attack.





LIFESTYLES for HEALTH™

BIOMETRIC GOALS	BLOOD TEST	FREQUENCY	GOAL
	FASTING LIPID PROFILE	Tested annually	Total Cholesterol < 200 mg/dl LDL < 100 mg/dl HDL > 40 mg/dl (men) HDL > 50 mg/dl (women) Triglycerides < 150 mg/dl
	A1C	Tested at least every 6 months	<7%
	MICROALBUMIN URINE TEST	Tested annually	
	BLOOD PRESSURE	Personalized	<130/<80 mm/Hg
	DILATED EYE EXAM	Tested annually	
	MD FOOT EXAM	At least yearly	
	SELF-FOOT EXAM	Daily	
	FLU VACCINE	Annually	
	PNEUMONIA VACCINE	At least one lifetime	

Program recommendations are based on the most current evidence available:

American Diabetes Association 2010 Clinical Practice Recommendations.

Lifestyles for Health is intended to be a program designed to improve your health and manage your diabetes through positive lifestyle changes. Lifestyles for Health standards of care are based on the best available medical recommendations from studies and experts. As a general rule, the recommendations made do not imply a covered benefit. Refer to your personal Summary Plan Design to verify your covered benefits.



A Behavioral Approach

Motivation

Primary Focus

Stages of Change

+ Fidelity to the Model

= Successful Behavior Change



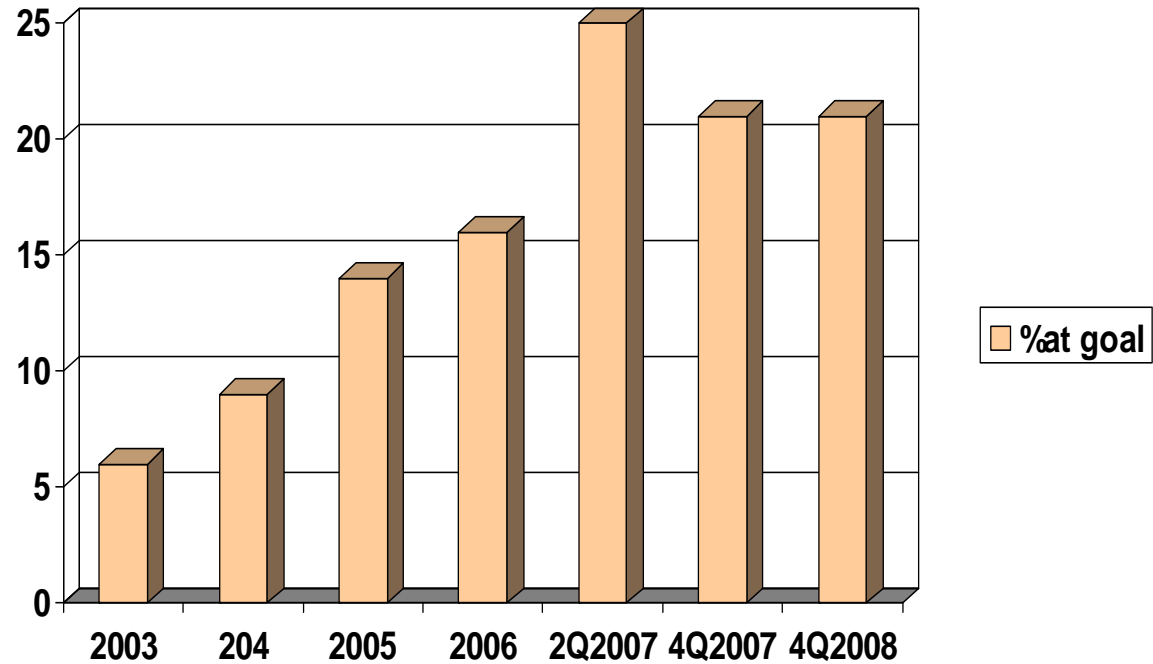
Lifestyles for Health

- “Composite” Score
- At goal for
 - HbA1c <7%
 - BP <130/<80
 - LDL cholesterol <100 mg/dl
 - Smoking non-smoker



Lifestyles for Health

- “Composite” Score
- At goal for
 - HbA1c
 - BP
 - LDL cholesterol
 - Smoking



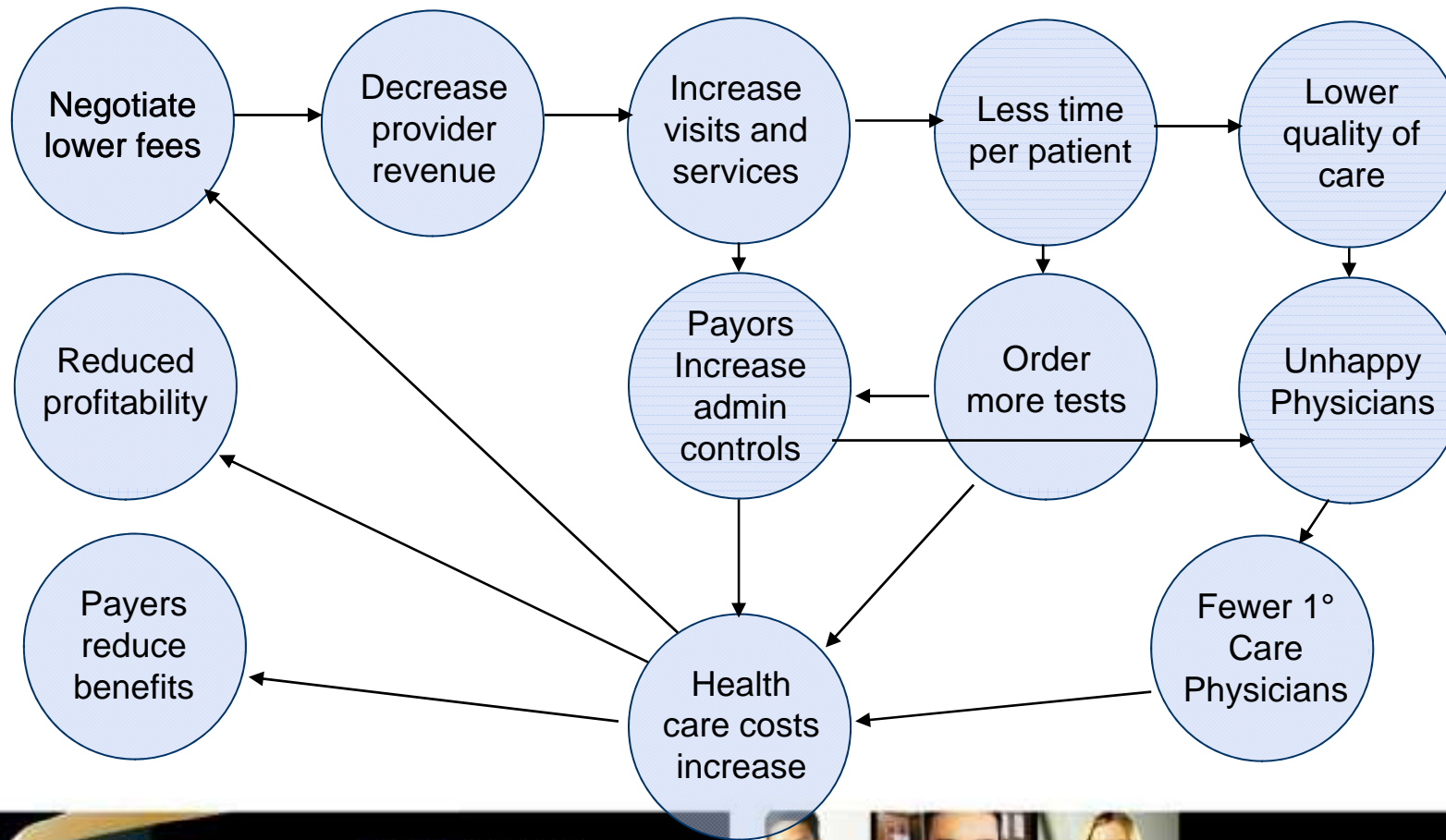
Health Promotion at Caterpillar

Questions?



Short-term focus increases health care costs

Lower Value Over Time

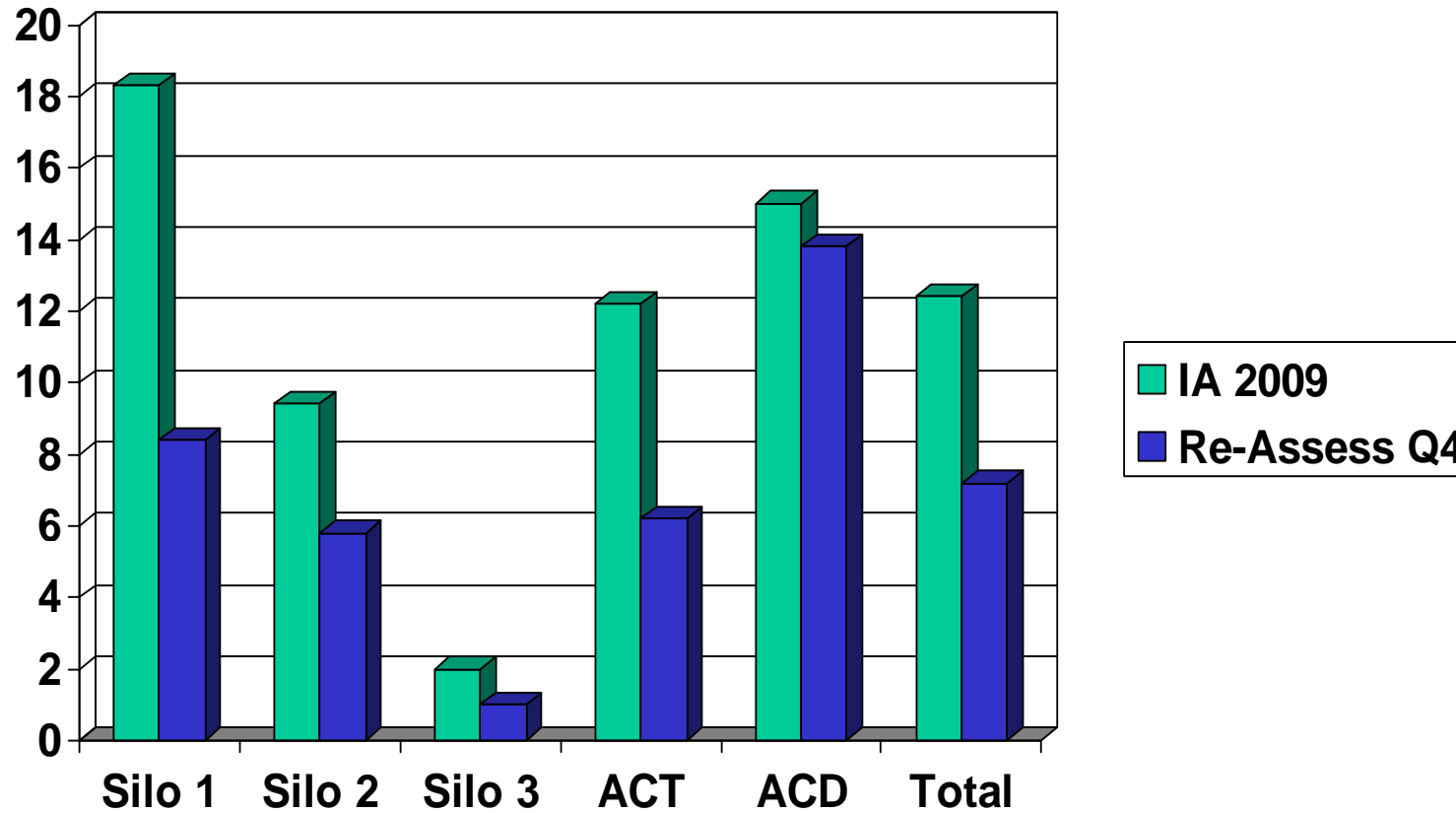


Depression Data Collection Points

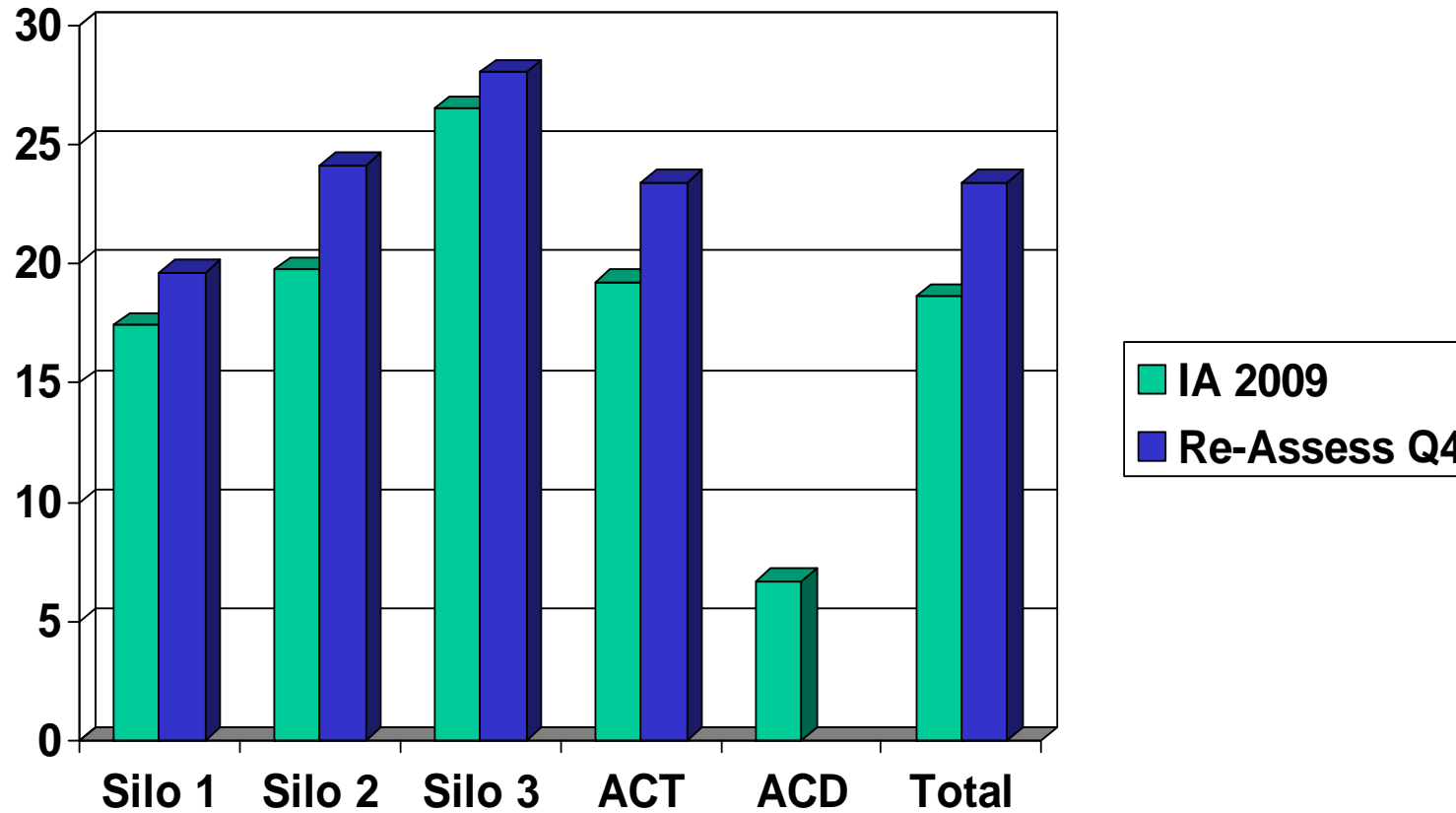
- Medication Compliance
- Counseling Compliance
- Hospitalizations/Re-admissions
- Follow-up Visits
- PHQ-9 – Symptom Severity
- Stanford Presenteeism
- Absenteeism
- Self Report Symptom Prioritization
- Supportive Factors:
 - Social Support
 - Physical Activity
 - Stress Management
 - Work Performance
- Smoking/Alcohol Use
- Healthy Eating



PHQ-9 Re-Assessment



Stanford Presenteeism Re-Assessment



Number of Full Days Absent (per month) (Non-Disability Participants Only)

