

Promoting Workforce Health and Productivity

Health & Productivity Management: Making Health an Economic Asset

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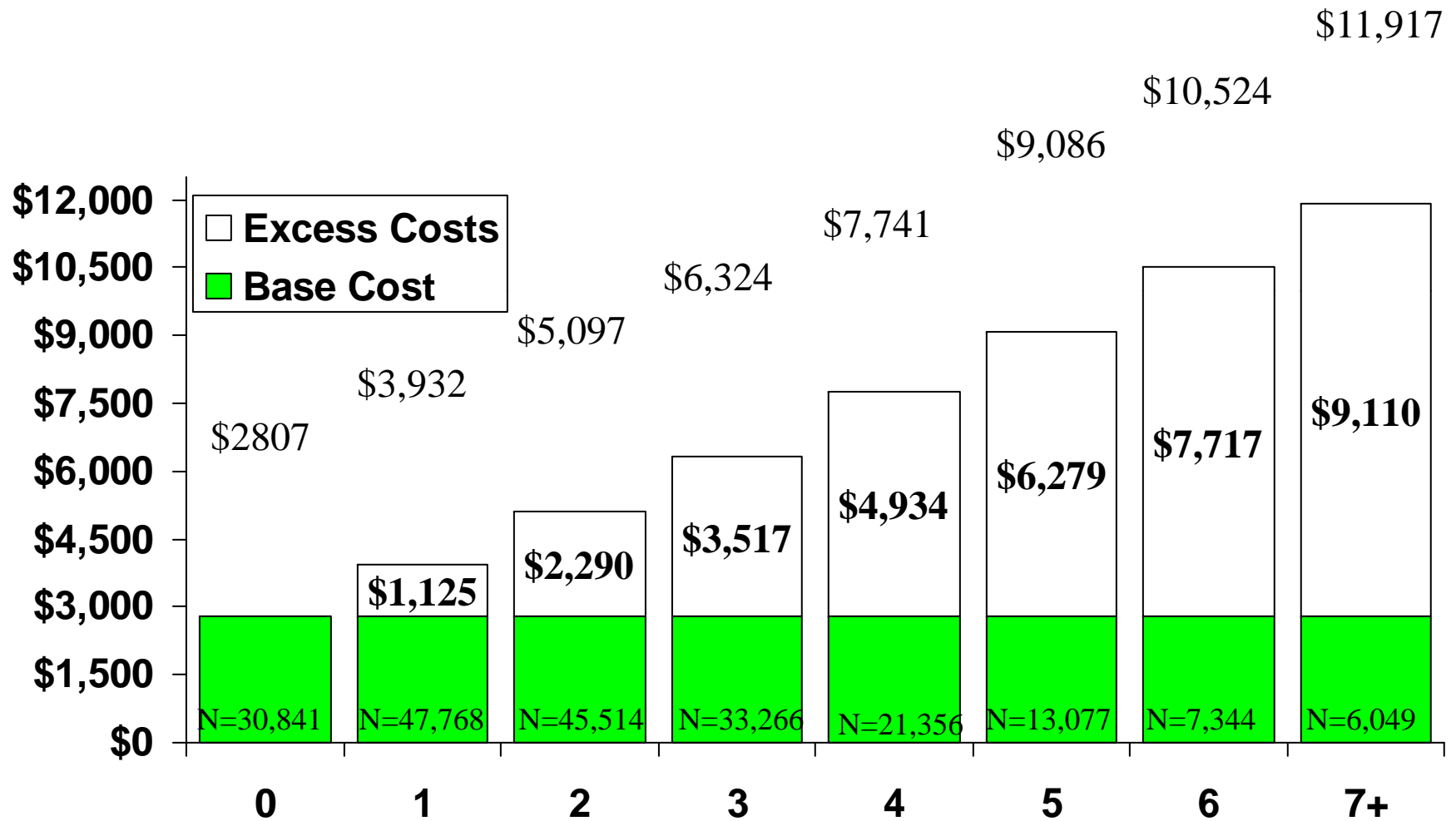
Employee Health is "Human Capital"

- Progressive employers now taking a new view of employee health
 - Health and functional capacity are components of “human capital”
 - Just like knowledge and skills
 - Dollars “spent” to improve employee health and functionality are investments in human capital
 - Just like the “cost” of education and training

The Real Cost of Health

- “Cost” of health has been seen as dollars spent on medical care in the U.S. – as a business expense
 - An “inside-the-box” view of health as merely the absence of disease
- Have to get “outside the box” -- the medical view of health -- to see its true cost
 - Question is *not* “what does it cost to keep people healthy?”
 - Answer already is “too much!”
 - Question is “what do unhealthy people really cost”
 - Answer is “much more!”

Excess Medical Costs due to Excess Risks



Edington, PhD, University of Michigan Health Management Research Center

Reducing the Real Cost of Health

- Human capital – just like machinery – needs “preventive maintenance”
 - Companies know it costs much less to keep machinery from breaking down than it costs to fix it when it does break
 - This larger cost includes “down time” and its resulting lost production or replacement cost
 - Andrew Liveris, CEO of Dow Chemical, is quoted as saying that “if we oiled and greased our people the way we do our machines they would break down less often and cost us less in medical care, disability, and lost production.”

The Real Cost of Health

- Absenteeism and “presenteeism” -- the total cost of health-related functional impairment at work, measured by reduced productivity
 - Absenteeism still significant in the older “production-line” economy and reducing it has a big payoff
 - Presenteeism is two-to-three times greater than medical spending and absenteeism *combined* for the majority of workers in the modern “knowledge-based” economy
 - Now being measured using self-reported data from psychometrically designed and validated survey instruments

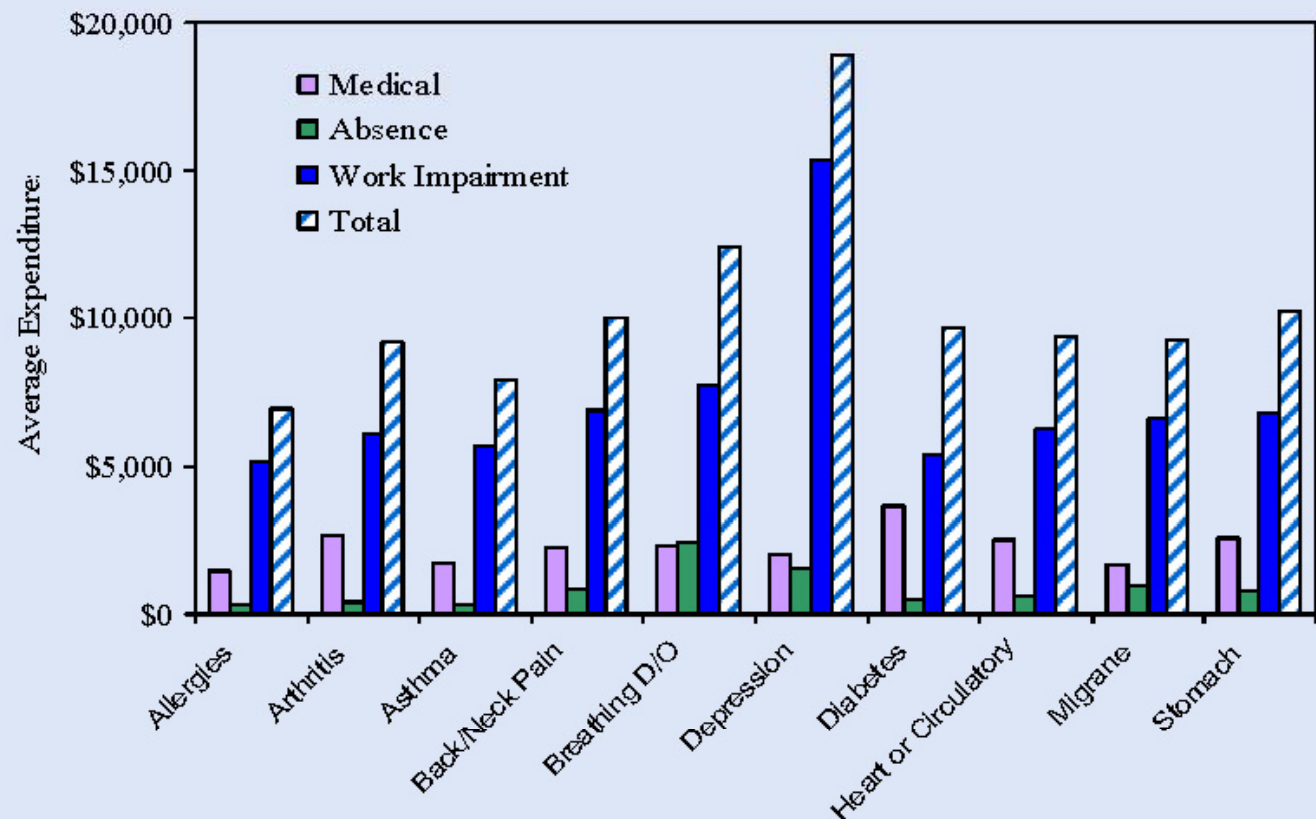
Measuring Health & Productivity

- Business acceptance of health and productivity management depends on measurement
 - “You can’t manage what you can’t measure”
Peter Drucker
- IHPM led in promoting and gaining acceptance of self-reported measures of productivity loss at work for health-related reasons
 - Key concept is “presenteeism” – the cost of which is now established in the published research as being several times greater than absence or direct medical expense

Measuring Productivity Loss at Work

- Not yet found in corporate databases
 - Data created by administering “scientific” self-report survey instruments
 - Self-report data validated where “objective” productivity data exist (e.g., call centers)
- Measuring the dimensions of on-the-job productivity loss from health problems
 - How health is affecting feeling and acting
 - Physically
 - Cognitively
 - Psychosocially

Total Cost of Chronic Health Conditions at Dow Chemical



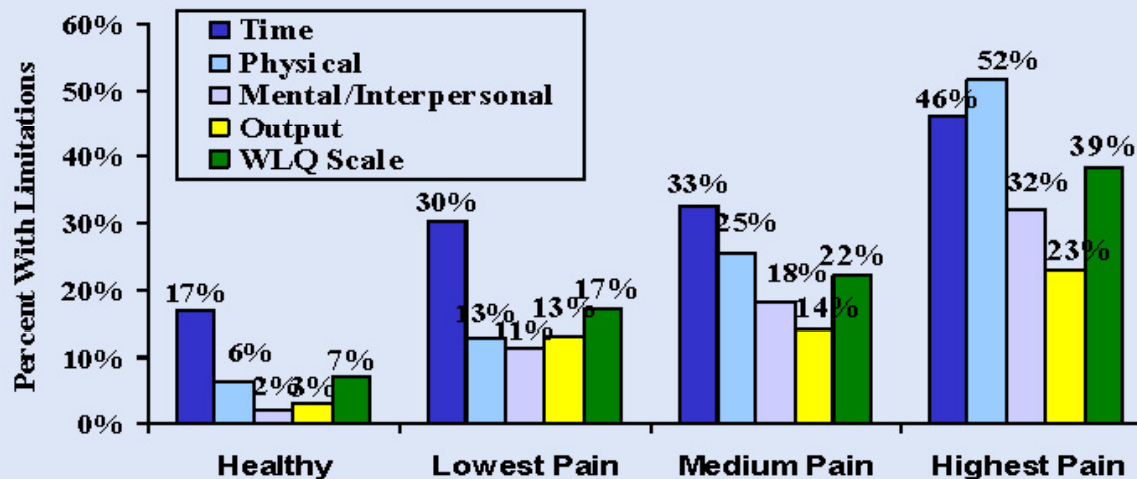
Medical, absence and work impairment costs associated with self-reported "primary" chronic conditions among Dow employees

Total Cost of Chronic Health Conditions at Dow Chemical

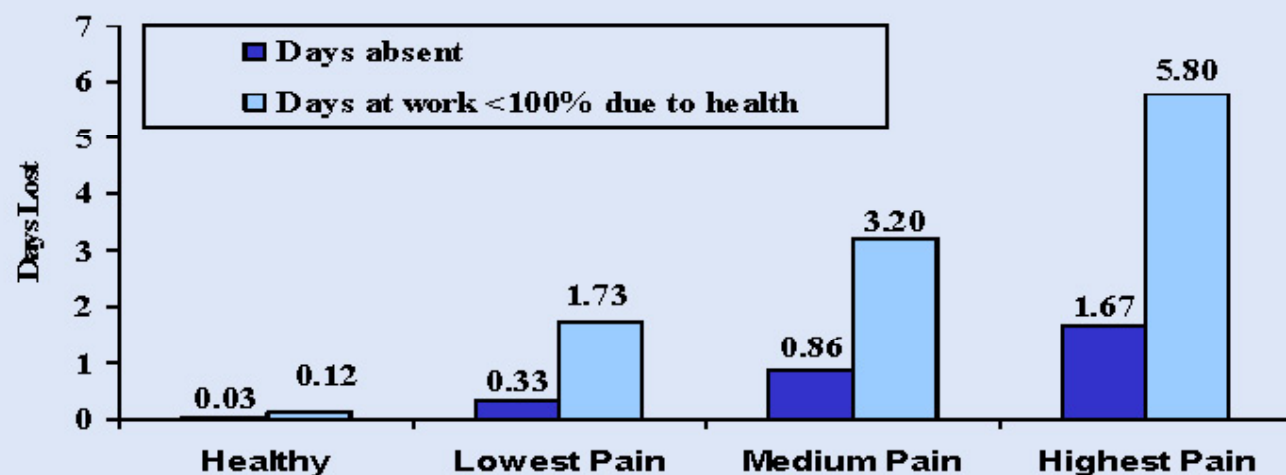
- Total cost of 10 leading chronic conditions was 10.7 % of *total labor costs*
 - 6.8 % -- nearly two-thirds – of it attributable to presenteeism
 - Presenteeism more than 3 times combined cost of absence and medical care for 9 of 10 diseases
- Average dollarized cost of \$9660 per employee annually -- \$6721 in presenteeism

The prevalence of pain and its impact on those with specific medical conditions provide an area of opportunity for improving workforce health and productivity

Productivity by Pain Status: Work Limitations



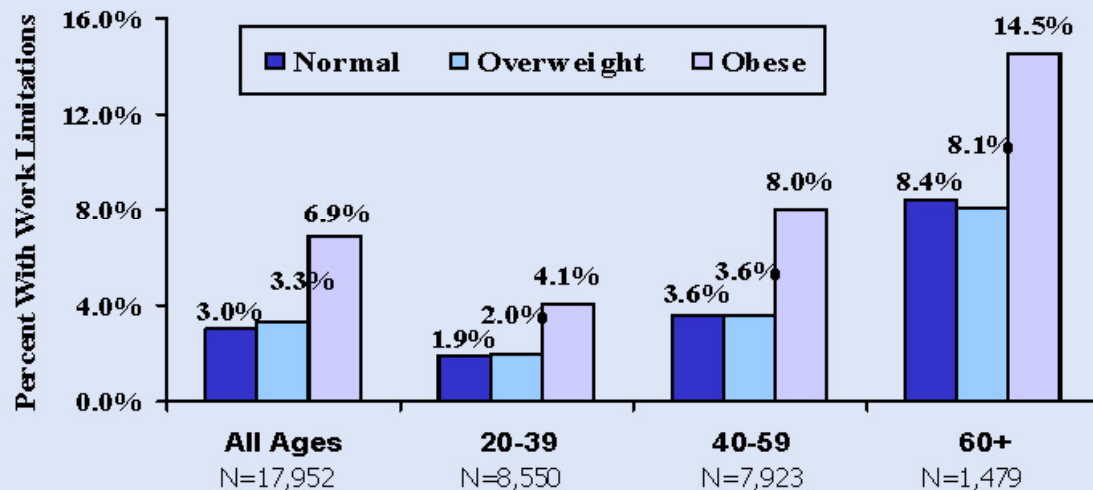
Productivity by Pain Status: Days Lost—Last Four Weeks



The Burden of Pain on Employee Health & Productivity

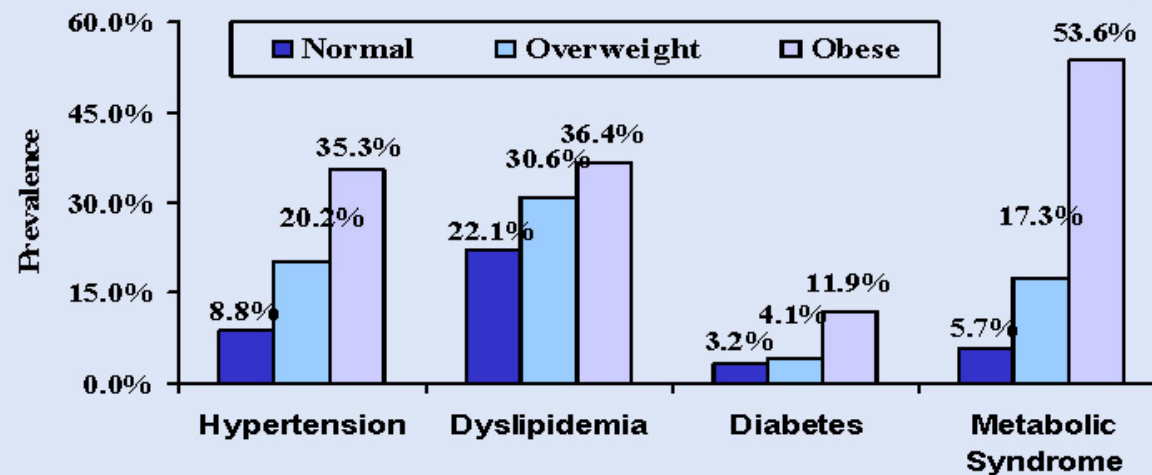
- Prevalence of pain and its high impact on functional capacity at work make it an area of opportunity for employers
 - Workers with most severe pain suffer a fivefold increase in health-induced work limitations
 - Pain sufferers lose nearly four days of productivity in a month
 - Pain control is worst for those with the most severe pain
 - Musculoskeletal pain is the best starting point for interventions

Prevalence of Work Limitations by BMI And Age Group Categories



Obese workers experience work limitations and cardiovascular risk factors similar to workers as much as 20 years older

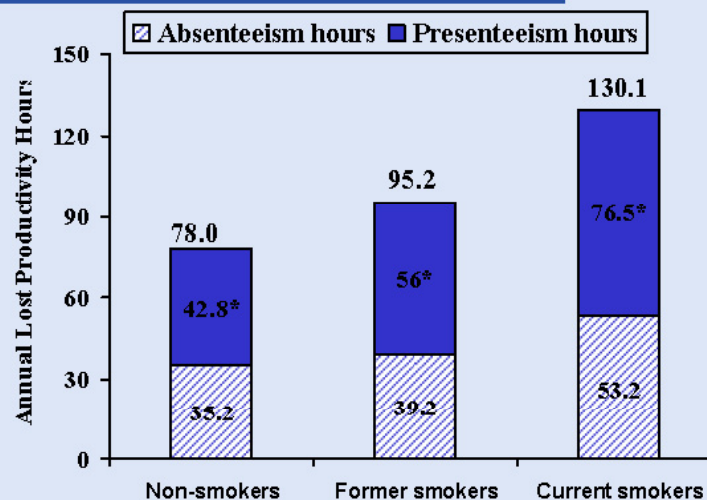
Prevalence of Cardiovascular Risk Factors by BMI Category (N=2,381)



The Impact of Obesity on Work Limitations and Related Health Risk Factors

- Obese workers have much greater work limitations and higher rates of cardiovascular and metabolic health risks
 - Hypertension = 4x
 - Dyslipidemias = 1.65x
 - Diabetes = 3.7x
 - Metabolic syndrome = 9.4x
 - Work limitations = 2.3x
- Obesity can be like as much as 20 yrs. of aging in its impact on work limitations and health risks

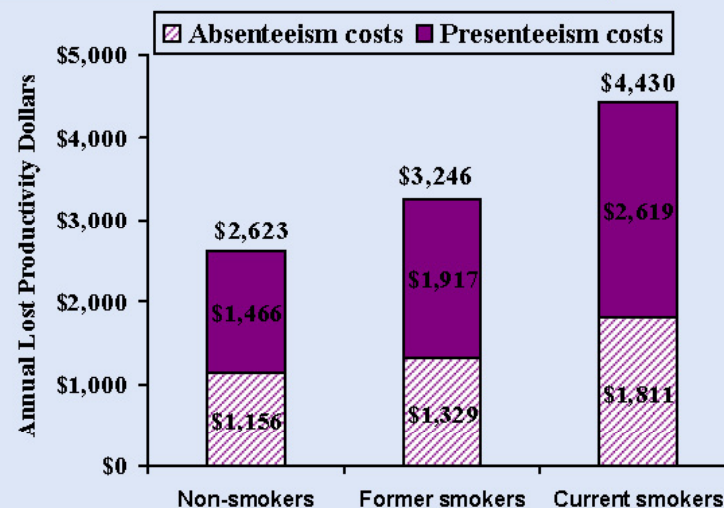
Annual Lost Hours Due to Absenteeism and Presenteeism by Smoking Status



*Smoking status groups significantly different; $p < .001$

Current smokers incurred the highest productivity losses (absenteeism and presenteeism) compared to former and non-smokers

Annual Lost Dollars* Due to Absenteeism and Presenteeism by Smoking Status

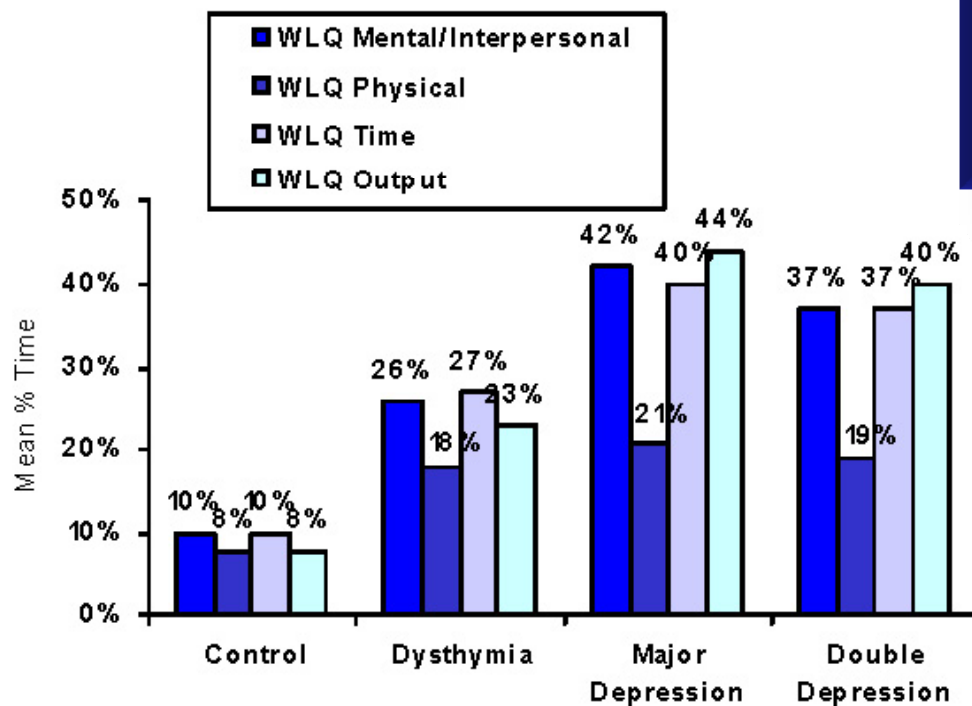


*Estimated based on a salary plus benefits cost of \$34.25/hour

Effect of Smoking Status on Productivity Loss

- Current smokers incur more lost productivity than former smokers or non-smokers
 - Across 11 health conditions
- Average cost of lost productivity for the three populations.
 - Current smokers = \$4430
 - Former smokers = \$3246
 - Non-smokers = \$2623

Mean % Time Health Interfered with Performing Job Demands (WLQ Scales)



The Clinical and Occupational Correlates of Work Productivity Loss Among Employed Patients With Depression

Occupational requirements are associated with productivity loss among employees with depression

Work Productivity Loss Among Employed Patients With Depression

- Productivity loss is associated with occupational requirements for depressed workers
 - Losses increased for jobs requiring decision-making, communications, or frequent customer contact
 - WLQ, by identifying employees with the most productivity losses, can help prioritize productivity improvement opportunities

Unrecognized Risk Factors in Phoenix Employees

Condition	Known	<u>New</u>	<u>Pre-</u>
Elevated FBS	73	82	165
Increased BP	187	116	232
Reduced HDL	57	145	n/a
Elevated Trig	124	157	n/a
Increased WC	477	3	n/a
Total	918	503	397

900 cases previously unrecognized / 1818 total cases
1/2 or 49.5% of total cases unrecognized before MHI

Eliminated Risk Factors – City of Phoenix

- **328 completed**

- 212 (65%) people ***eliminated*** at least 1 risk factor
 - 83 eliminated only 1 risk factor
 - 62 eliminated 2 risk factors
 - 41 eliminated 3 risk factors
 - 21 eliminated 4 risk factors
 - 4 eliminated 5 risk factors
 - 1 eliminated 6 risk factors
- 440 risk factors ***eliminated*** in 212 participants

- **2.08 risk factors eliminated per participant who eliminated at least one risk factor**

- **Does not include risk factors improved but still above target**

Improved Risk Factors – City of Phoenix

Risk factors improved but still above target

- **328 completed**

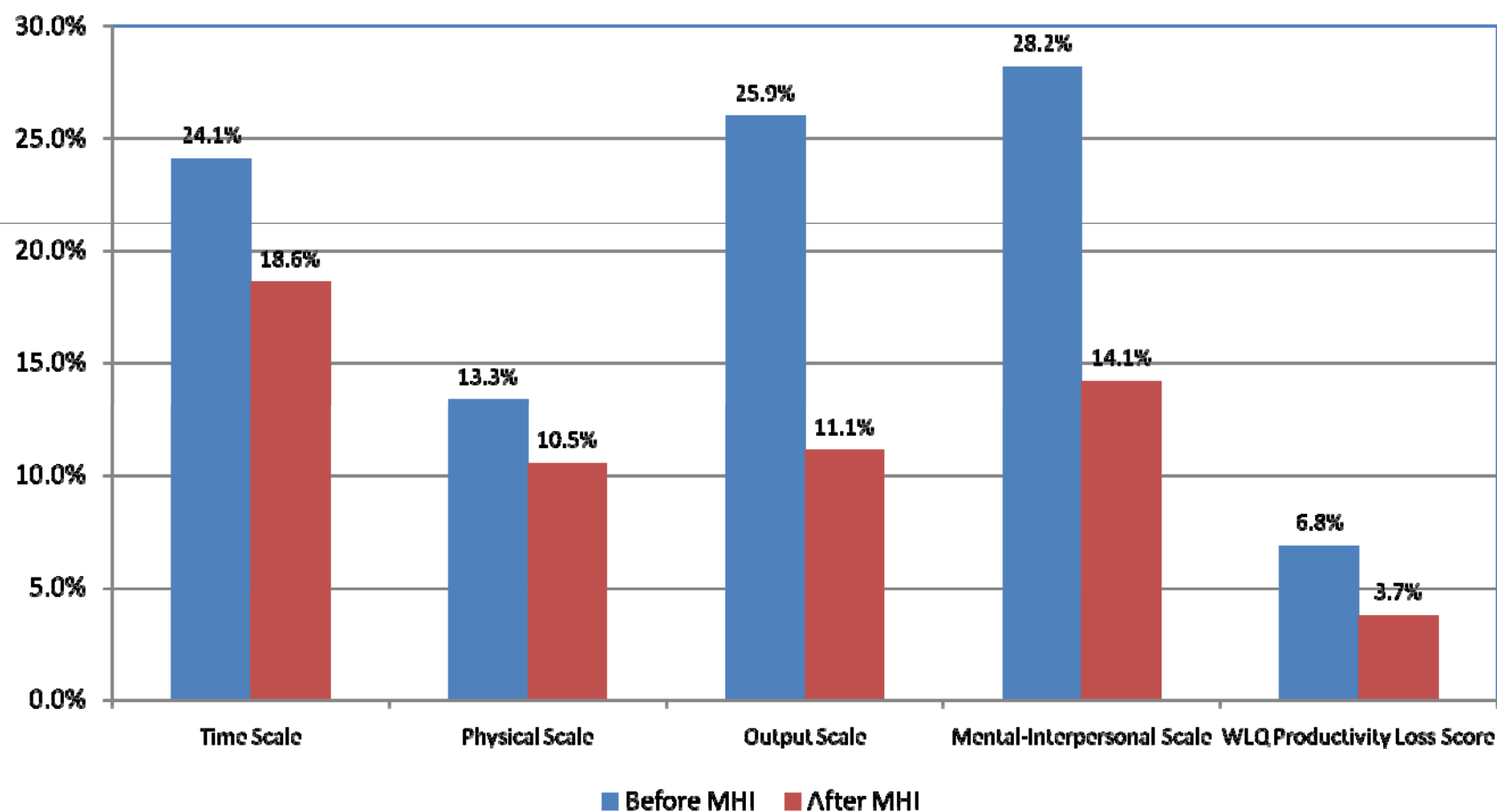
- 212 people ***eliminated*** at least 1 risk factor
- 116 people ***did not eliminate*** at least 1 risk factor
- 107 / 116 (32%) people ***improved*** in at least 1 risk factor
 - 13 people improved in 1 risk factor
 - 12 people improved in 2 risk factors
 - 25 people improved in 3 risk factors
 - 14 people improved in 4 risk factors
 - 25 people improved in 5 risk factors
 - 11 people improved in 6 risk factors
 - 4 people improved in 7 risk factors
 - 3 people improved in 8 risk factors

411 risk factors ***improved*** in 107 participants

- **3.84 risk factors improved per participant who improved at least one risk factor**

Changes in Productivity – City of Phoenix

All Valid Participants Who Took Both WLQ Surveys, regardless of Risk Factor Changes



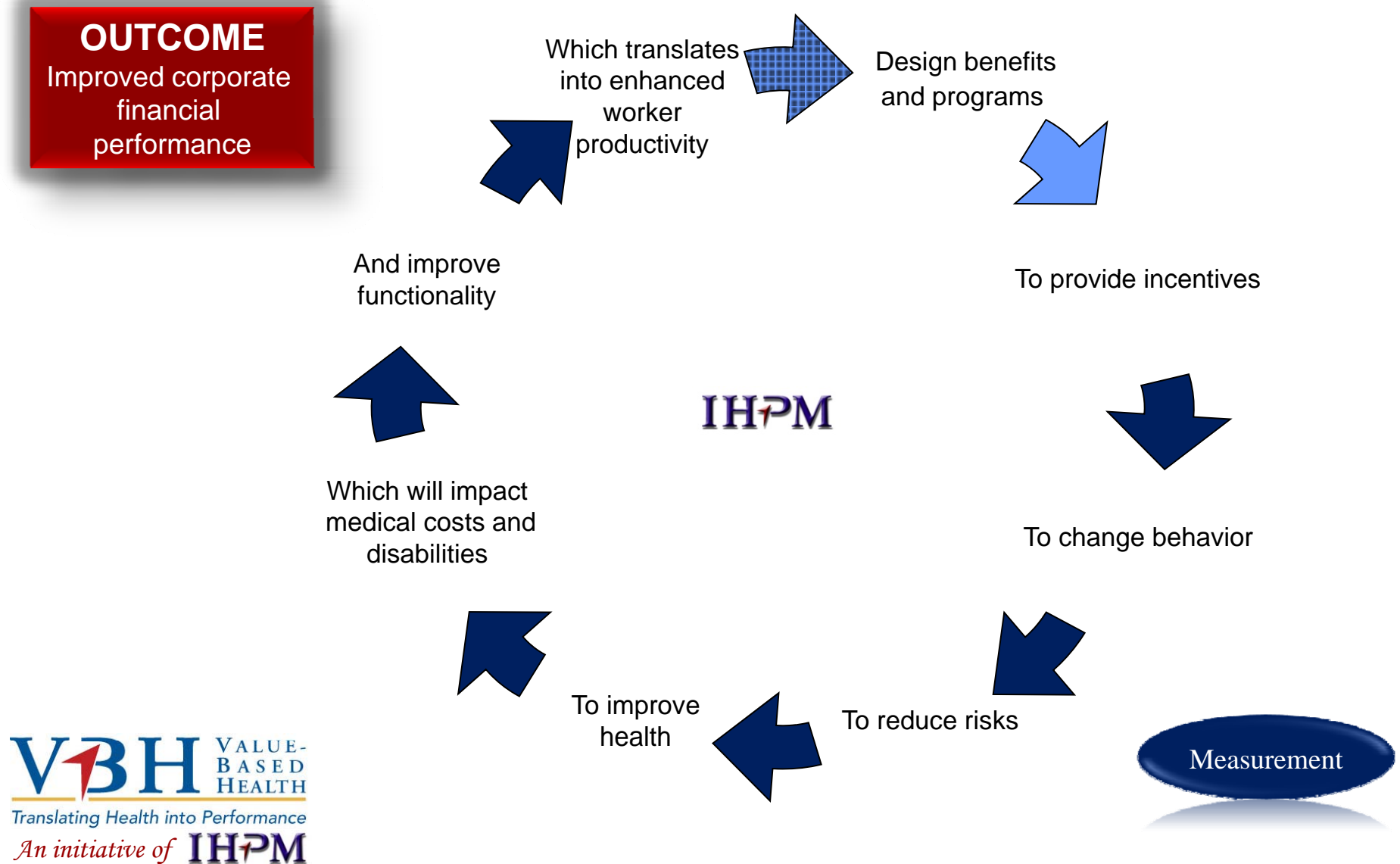
Employee Health Redefined as an Asset – not a Cost

- The real “cost” is having unhealthy workers who cannot perform
 - Improving health reduces this huge cost of lost performance – which is 2 to 3 times the cost of health care
- Dollars “spent” on improving health are an investment in individual and organizational performance that reduces this real cost
 - The return on this investment is measured by the reduction in total health-related costs including lost performance
- Investing in health this way improves the value of the company’s human capital assets

The New Value Model: Health and Productivity Management

- The new model views employee health as the outcome of an integrated system of:
 - Population health management
 - Keeping the population mostly healthy most of the time to avoid all the direct and indirect costs of illness
 - Targeted disease management
 - Managing increasingly prevalent chronic conditions in the workforce to optimize health and functionality
 - Disability prevention/management
 - Keeping people in the work force
 - Demand management
 - Engaging employees in managing their own health

The HPM Value Chain™





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