

1.1 What is Health and Productivity Management?

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Objectives

- Define Health & Productivity Management (HPM)
- History of HPM
- Basic Principles of HPM

Definition of HPM

- HPM is a **systematic approach** designed to **quantify, evaluate** and **optimize** a company's investment in its workforce
- Employee health is an investment rather than a cost of doing business
- Total Worker Health : Integration of health, safety and wellbeing (U.S. National Institutes for Occupational Safety and Health)

What is health & productivity ?

- The integrated management of health and injury risks, chronic illness, acute illness and disability to reduce employer's total health-related costs, including medical expenditures, unnecessary absence from work and decreased on the job productivity.

HISTORY OF HPM



The maladies that afflict the clerks afore said arise from three causes: First, constant sitting, secondly the incessant movement of the hand and always in the same direction, thirdly the strain on the mind from the effort not to disfigure the books by errors or cause loss to their employers when they add, subtract or do other sums of arithmetic..... In a word, they lack the benefits of moderate exercise.....

Bernardo Ramazzini
Diseases of Scribes and Notaries, 1700

Early attempts to document worker health impact on productivity

- 1970: Absenteeism and "Presenteeism" in Industry (Arch Environ Health)
 - First mention of "presenteeism" – "the state of being present"
- 1979: Iron deficiency and productivity in Indonesia rubber plantation workers
- 1979: Iron deficiency and productivity in tea pickers in Sri Lanka
- 1997: Anemia and productivity in jute factory workers in Indonesia

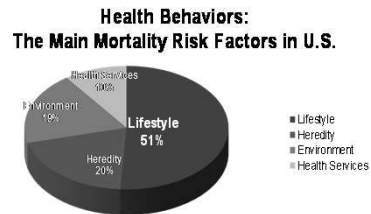
Why HPM ?

- Increasing medical costs globally
- Role of Prevention in managing direct and indirect costs
- Linkage of health and safety

Why HPM Strategies Emerged

- Rise in Health Care Costs
 - 1/3 healthcare costs in the US not needed
- Prevention Opportunities
 - 30%-50% of illness drive by avoidable lifestyle
- Healthcare Safety and Quality of Care issues
 - >100,000 deaths in US associated with errors
- Business Value of Health as a Corporate Priority
 - Linkages between worker health and business profits

Personal Health Behaviors are the main Causes of Death



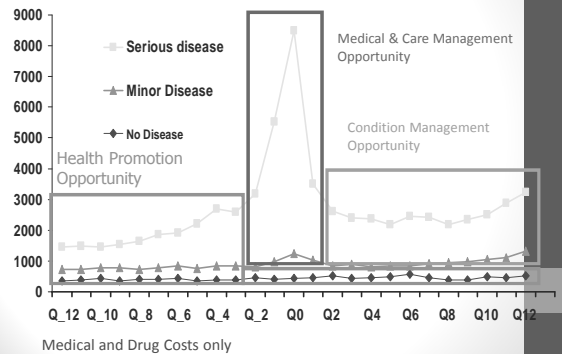
Mokdad AH, et al. Actual Causes of death in the United States, 2000. JAMA. 2004; 291:1238-1245.

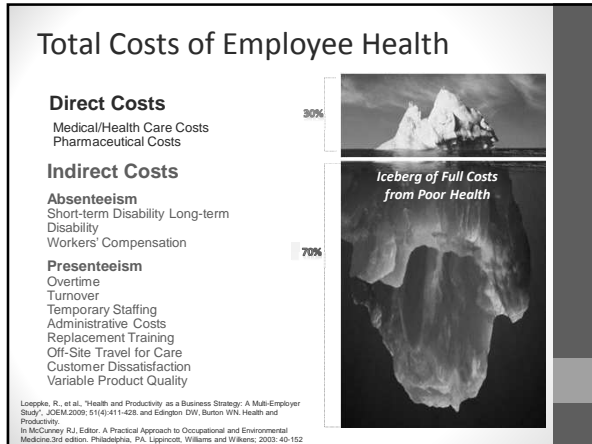
8 Risk Behaviors Drive 15 Chronic Conditions Accounting for 80% of Total Costs of Chronic Illnesses Worldwide



2010 World Economic Forum

Where are the Opportunities for Population Health Management?





Indirect Costs (Lost Productivity)

Absenteeism

- Leads to
- Substitute/temp workers
- Overtime
- Co-worker challenges

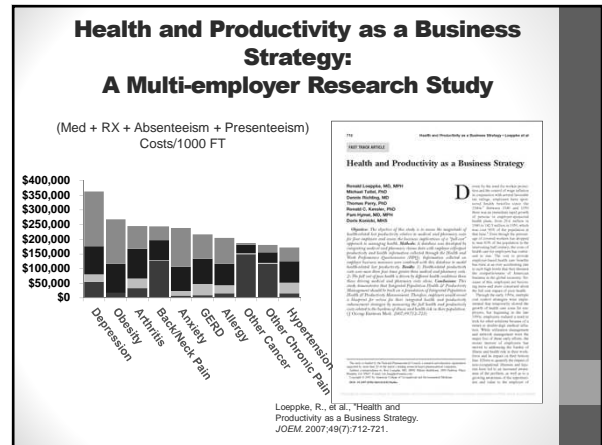
Presenteeism

- Sub-optimal on-the-job performance
- Employee turnover
- Team morale

Drivers of HPM

- Increasing healthcare costs
- Chronic diseases (eg diabetes, etc.)
- Health risks (eg metabolic syndrome, smoking, etc.)
- Aging workforce in many countries
- Linkage between employee health and safety : Total Worker Health

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Employees with chronic diseases

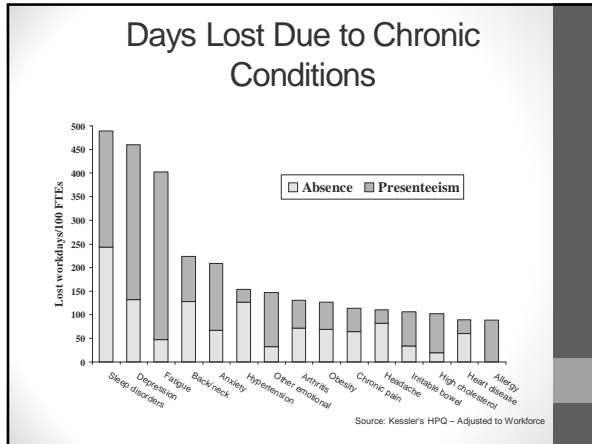
- Account for 75% of US healthcare costs
- Majority of Americans have at least 1 chronic disease
- Lack of investment in lifestyle health risk factors which lead to chronic disease (eg obesity leading to diabetes/ metabolic syndrome)

Costliest Chronic Diseases

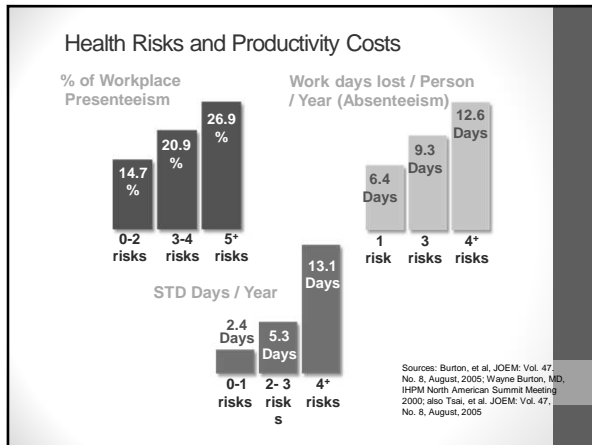
10 Costliest Diseases 2016

HEALTH CONDITION	COSTS
1.Heart Disease	\$193.4 billion
2.Diabetes	\$176 billion
3.Dementia	\$159 billion
4.Cancer	\$157 billion
5.Obesity	\$147 billion
6.COPD & Asthma	\$ 79.6 billion
7.Arthritis	\$ 74.4 billion
8.Mental Disorders	\$ 57.5 billion
9.Kidney Disease	\$ 38.1 billion
10.Hyperlipedemia	\$ 34.5 billion
11.HIV/AIDS	\$ 24 billion

http://www.msn.com/en-us/money/healthcare/11-costliest-diseases-in-the-us-to-2016/2016/04/2016; accessed 6/9/2016.



- ### 5 Factors that can mitigate chronic disease
- 1) Physical Activity : moderate: 150 minutes / week (30 minutes/day)
 - 2) Healthy eating
 - 3) Smoking cessation
 - 4) Drinking alcohol in moderation
 - 5) Weight Loss (eg 5-10%); waist size less than half of your height.
- If 75% of Americans had these health factors up to \$1 Billion could be saved per year in healthcare and disability costs.



Aging Workforce: Graying Tsumani

(22)

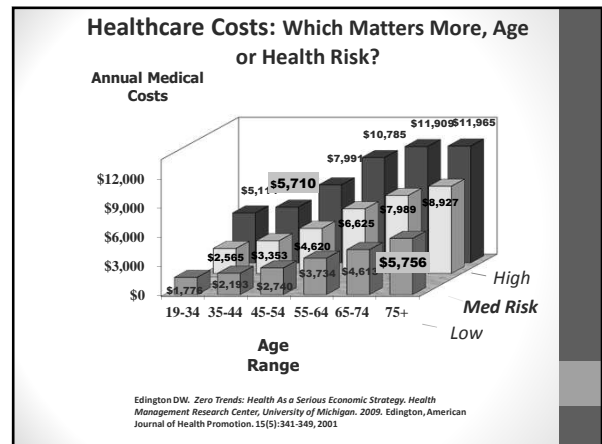
Aging Workforce: Health Promotion & Safety

Advancing Workplace Health Protection and Promotion for an Aging Workforce

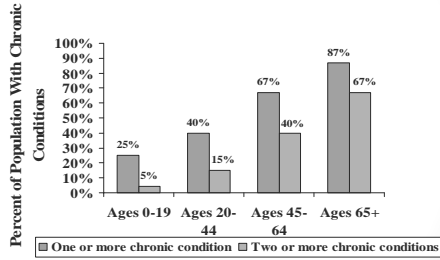
Aging Workforce:

- More chronic conditions
- More disabling conditions
- Higher risk of on the job injury
- More difficult and costly to treat

Loepke RR, et al. Advancing Workplace Health Protection and Promotion for an Aging Workforce. J Occup Environ Med. 2013;55(5):500-506.



Increasing chronic diseases with aging



Johns Hopkins University, Partnership for Solutions

Source: Medical Expenditure Panel Survey, 2001

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Summary

- **Health risks can be improved** through workplace health programs
- **Reductions of health risks can lead to reductions in health costs**
- **The workplace offers a unique advantage** for implementing HPM

Discussion

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