HEALTH, WORKPLACE, AND ENVIRONMENT: CULTIVATING CONNECTIONS
October 17, 2013

Featured Speakers

Dr. John Howard, Director, National Institute for Occupational Safety and Health
Ms. Rosalyn Cama, President, Cama Inc.
Dr. Michele Gelfand, Professor, University of Maryland
Martin Cherniack, Professor, UConn Health Center

The afternoon speakers are grantees of the CPH-NEW Pilot Grant Program. The RFA for the request for applications can be found on the CPH-NEW website. Deadlines for letters of intent is October 15, 2013.
Worker Health = Economic Health

Health, Workplace, and Environment: Cultivating Connections Conference

University of Connecticut Storrs Campus
17 October 2013

John Howard
National Institute for Occupational Safety and Health
U.S. Department of Health and Human Services
Washington, D.C.
Overview

• Economic Health
• Worker Health
• Social Costs
• Wellness Wars
• TWH™
Occupational Safety & Health Act
29 U.S.C. 651(b)

• Congress declares it to be its purpose and policy
  – To assure as far as possible every working man and woman in the Nation safe and healthful working conditions and

  – To preserve our human resources:
    (5) By providing for research in the field of occupational safety and health, including the psychological factors involved, and by developing innovative methods, techniques, and approaches for dealing with occupational safety and health problems.
Who is responsible for health of the workforce?

- Workers?
- Employers?
- Food Producers and Food Purveyors?
- Healthcare providers?
- Healthcare insurers?
- Workers’ compensation insurers?
- Government?
- Nobody?
- Everybody?
“Brevity is the Soul of Wit”

The Reduced Shakespeare Company

All 37 plays in 97 minutes!
Future of Work and Workforce

- **Workplace Risks**
  - Persistent
  - Emerging
  - Employer Protections

- **Employment**
  - Flexible (Precarious)
  - Part-time & Independent
  - Virtual

- **Workforce**
  - Demographics
  - Chronic Medical Conditions
  - Cost of Social Benefits
What Makes Countries Rich?

• Long run economic growth determines our standard of living

• Long run economic growth hinges on a country’s productive potential.

Trinity of Productive Potential

• Ideas
  – “Economic growth springs from better recipes, not just from more cooking.” (Paul Romer, Stanford)

• Capital
  – You can raise productivity by equipping workers with more capital—investing in more land, buildings or equipment.

• Workforce
  – Long term economic growth depends on the number and health of the workforce
  – Output/worker (worker productivity)
Availability of Workers

- **Population**: 316,617,000
- **Working Age Population**: 142,468,000
  - 7.3% -- U3 — Total unemployed
    - As % of civilian workforce
  - 13.7% -- U6 — Total unemployed
    - Plus total employed part time for economic reasons (as % of the civilian labor force)
    - Plus all persons *marginally* attached to the labor force
  - 5% on SSDI

- **Population Replacement**
  - Current fertility rate: 1.89 children/woman
  - Replacement fertility rate: 2.1 children/woman

The shrinking labor participation rate

As the most recent recession hits the workforce, larger numbers of baby boomers begin to retire. In April, it hits a 30-year low.

The rate begins to rise significantly in the late 1970s when women begin entering the labor force and technology allows Americans to work until an older age.

Labor force participation rate
Percentage of the available work force willing and able to work that is either employed or actively looking for employment, seasonally adjusted
Could Be Worse!

- Europe
  - ↑ Unemployment
  - ↑ Work intensity
  - ↑ Job insecurity

- Economic Pressures
  - Labor Markets
  - Public finances
  - Fiscal constraints
Growth in the Working-Age Population

Different Patterns of Growth by Age

Percent Growth in U.S. Population by Age: 2000-2010

1. Declining number of mid-career workers
2. Few younger workers entering
3. Rapid growth in the over-55 workforce

Age of Workers

Source: U.S. Census Bureau. 2000
Percent Growth in U.S. Workforce by Age: 2000-2020

Source: U.S. Census Bureau
Why?

The Boom Years: 1946-1964

Birth in Millions

Source: U.S. Census Bureau International Data Base
Drop in Birth Rates

Source: Age Wave

Total Fertility Rate: 1960 and 2000

- **US**: 3.3 (1960), 2.0 (2000)
- **UK**: 2.8 (1960), 1.7 (2000)
- **France**: 2.9 (1960), 1.7 (2000)
- **Canada**: 3.6 (1960), 1.6 (2000)
- **Japan**: 2.0 (1960), 1.4 (2000)
- **Germany**: 2.5 (1960), 1.3 (2000)
- **Italy**: 2.5 (1960), 1.2 (2000)
- **China**: 4.0 (1960), 1.8 (2000)
- **India**: 5.9 (1960), 3.1 (2000)

Source: Age Wave
Increase Life Expectancy

Life Expectancy at Birth: 1000 - 2000

Source: U.S. Census Bureau, 2000
## Expectations of Life at Birth 2010-2020

<table>
<thead>
<tr>
<th>Projections</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>76.3</td>
<td>76.7</td>
<td>80.8</td>
</tr>
<tr>
<td>2015</td>
<td>76.9</td>
<td>76.4</td>
<td>81.4</td>
</tr>
<tr>
<td>2020</td>
<td>79.5</td>
<td>77.1</td>
<td>81.9</td>
</tr>
</tbody>
</table>

- Source: U.S. Census Bureau [http://www.census.gov/compendia/statab/2012/tables/12s0104.pdf](http://www.census.gov/compendia/statab/2012/tables/12s0104.pdf)
Webster's Definition of Retirement

- to disappear
- to go away
- to withdraw

Source: Webster's New Twentieth Century Dictionary
More Years Spent in “Retirement” After First Career

Source: Age Wave, based on U.S. data, and The Concours Group
Remember These Demographic Facts

• In 1940, the life expectancy of a 65-year-old was almost 14 years; today it is more than 20 years.

• By 2033, the number of older Americans will increase from 45.1 million today to 77.4 million.

• There are currently 2.8 workers for each Social Security beneficiary. By 2033, there will be 2.1 workers for each beneficiary.

Selected Workforce Health

- Obesity
- Diabetes Mellitus
- COPD
- Age
Health Risks of Obesity

- Increase even within range of overweight
- BMI 30 confers 2-4 fold risk of HTN, CAD
- BMI 35 confers 90-fold risk of T2DM in women

Willet WC NEJM 1999
Colditz GA Ann Int Med 1995
Health Risks of Obesity: BMI and Mortality

Prospective Studies Collaboration *Lancet* 2009
 Obesity and Workplace Risks

• NIOSH is beginning to examine whether obesity increases the risk of various occupational health risks
  – Obesity and development of MSDs
  – Obesity and sleep apnea and work vigilance

• Obesity increases the risk of disabling workplace injuries
  – When obese and non-obese claims are for same injury type:
    • Range of medical treatments and costs, duration of treatment is greater for obese workers
    • Especially for physical therapy, complex surgery, drugs
  – *NCCI* (December, 2010)
## Indications for Weight Loss Therapy

<table>
<thead>
<tr>
<th>BMI</th>
<th>Diet and Exercise</th>
<th>Pharmacotherapy</th>
<th>Surgery</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMI ≥ 25</td>
<td>Prevention</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BMI ≥ 25 + comorbidity</td>
<td>+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BMI ≥ 27 + comorbidity</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>BMI ≥ 30</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>BMI ≥ 35 + comorbidity</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>BMI ≥ 40</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>
Bariatric Surgery: Indications

- **Roux-en-Y, Gastric Sleeve**: BMI >40; >35 with co-morbidities
- **LAGB**: BMI >35; >30 with co-morbidities

Mun EC  Gastroenterology 2001
## Efficacy of Bariatric Surgery

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Absolute Weight Loss (kg)</th>
<th>Initial Weight Loss (%)</th>
<th>Excess Weight Loss (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gastric Band</td>
<td>28.64</td>
<td></td>
<td>47.4</td>
</tr>
<tr>
<td>Gastric Bypass</td>
<td>43.48</td>
<td>34.9</td>
<td>61.6</td>
</tr>
</tbody>
</table>

Buchwald H *JAMA* 2004
Surgical Weight Loss is Sustained

SOS Study: Case-control, 10 year follow-up

Sjostrom *NEJM* 2004
Health Challenged Young Workers
Growth in Childhood Obesity, 1971 to Present

Source: CDC, National Center for Health Statistics, National Health and Nutrition Examination Surveys.
Note: Obesity is defined as BMI $\geq$ gender- and weight-specific 95th percentile from the 2000 CDC Growth Charts.
Diabetes and the Future Workforce

• 39 States with 40% of young adults considered to be overweight or obese in just last decade!
  – In Kentucky, Alabama and Mississippi, >50% young adults are overweight

• Medical Consequences:
  – High Blood Pressure
  – Elevated cholesterol
  – Increased Type 2 Diabetes (formerly called adult-onset)
  – Hepatic steatosis epidemic (fat deposits in the liver)
  – Sleep apnea (too much fat around the upper airway)

• Psychological stress

• Musculoskeletal disorders
  – What the mature and young worker share
Bending the Curve: Childhood Obesity, 1972 to 2030

Source: CDC, National Center for Health Statistics, National Health and Nutrition Examination Surveys.
Note: Obesity is defined as BMI ≥ gender- and weight-specific 95th percentile from the 2000 CDC Growth Charts.
The Diabetes Epidemic in the United States
1980 - 2009

Number Diagnosed with Diabetes (millions)

Global Projections for the Diabetes Epidemic: 2007-2025

M=million; AFR=Africa; EMME=Eastern Mediterranean and Middle East; EUR=Europe; NA=North America; SACASouth and Central America; SEA=South-East Asia; WP=Western Pacific.

Many (Costly) Complications

- Hypertension
- ↑ Lipids and Cardiovascular Disease
- Nephropathy
- Retinopathy
- Dementia
- Neuropathy
  - Gastrointestinal autonomic neuropathy
  - Genitourinary autonomic neuropathy
COPD Projected to be the Third-Leading Cause of Death by 2020

Proportion of 1965-1998 Rate, Percentage Change in Age-Adjusted Death (US)

- Coronary Heart Disease: -69%
- Stroke: -64%
- Other CVD: -35%
- COPD: +163%
- All Other Causes: -7%

Global Initiative for Chronic Obstructive Lung Disease teaching slide kit. Available at: www.goldcopd.com/slides/download.ppt
“What are my chances of getting COPD?”

- Approximately 30-40% of smokers develop COPD
  - Estimated 24 million in US have COPD
- Almost 1/6 people with COPD did not smoke
  - Second hand tobacco smoke
  - Environmental exposure
    - Dust/Particulate
    - Genetic factors
Estimating Cost of Smoking Employee

• Annual excess cost to employ a smoker is $5816
• Due largely to lost productivity from:
  – Absenteeism
  – Smoking breaks
  – Excess healthcare costs

• Do employers reap a death benefit?
  – Maybe, but only in defined-benefit plans

  – Berman M et al. Estimating the cost of a smoking employee. *Tobacco Control* 2013 (June 3 ePrint)
Outlook for Major Federal Health Program Spending


Source: Congressional Budget Office
Aging: A Balance of Factors

• Possible Limitations
  – Cognitive Limitations
  – Chronic Medical Conditions
  – Diminishing Physical Capacity

• Compensating Factors
  – Even Attitude
  – Experience and Judgment
  – Flexibility
  – Interest in learning
Age and Chronic Medical Conditions
Percentage of Adults age 55 and over (Total, Male & Female), with one or more, two or more, or three or more of a possible six chronic conditions: United States, 2008.

<table>
<thead>
<tr>
<th>Age 55 years and over</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>SE</td>
<td>%</td>
</tr>
<tr>
<td>(n=70,688,633)</td>
<td></td>
<td></td>
<td>(n=32,130,140)</td>
</tr>
<tr>
<td>1+ chronic conditions</td>
<td>78.0</td>
<td>0.6</td>
<td>75.3</td>
</tr>
<tr>
<td>2+ chronic conditions</td>
<td>47.0</td>
<td>0.7</td>
<td>41.8</td>
</tr>
<tr>
<td>3+ chronic conditions</td>
<td>19.0</td>
<td>0.5</td>
<td>16.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age 55 to 64 years</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>SE</td>
<td>%</td>
<td>SE</td>
<td>%</td>
<td>SE</td>
</tr>
<tr>
<td>(n=33,502,260)</td>
<td></td>
<td></td>
<td>(n=16,123,407)</td>
<td></td>
<td>(n=17,378,853)</td>
<td></td>
</tr>
<tr>
<td>1+ chronic conditions</td>
<td>69.5</td>
<td>1.0</td>
<td>67.7</td>
<td>1.4</td>
<td>71.1</td>
<td>1.2</td>
</tr>
<tr>
<td>2+ chronic conditions</td>
<td>37.1</td>
<td>1.0</td>
<td>32.3</td>
<td>1.4</td>
<td>41.5</td>
<td>1.3</td>
</tr>
<tr>
<td>3+ chronic conditions</td>
<td>14.4</td>
<td>0.7</td>
<td>11.1</td>
<td>0.9</td>
<td>17.4</td>
<td>1.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age 65 years and over</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>SE</td>
<td>%</td>
<td>SE</td>
<td>%</td>
<td>SE</td>
</tr>
<tr>
<td>(n=37,186,373)</td>
<td></td>
<td></td>
<td>(n=16,006,733)</td>
<td></td>
<td>(n=21,179,640)</td>
<td></td>
</tr>
<tr>
<td>1+ chronic conditions</td>
<td>85.6</td>
<td>0.6</td>
<td>83.0</td>
<td>1.0</td>
<td>87.6</td>
<td>0.7</td>
</tr>
<tr>
<td>2+ chronic conditions</td>
<td>56.0</td>
<td>0.9</td>
<td>51.4</td>
<td>1.4</td>
<td>59.4</td>
<td>1.1</td>
</tr>
<tr>
<td>3+ chronic conditions</td>
<td>23.1</td>
<td>0.7</td>
<td>21.2</td>
<td>1.2</td>
<td>24.6</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Source: CDC/National Center for Health Statistics: National Health Interview Survey.
FIG. 1-16
HEALTH CONDITIONS AMONG WORKERS AGE 55 AND OVER: 2002

- Arthritis
- Hypertension
- Heart Condition
- Diabetes
- Psychiatric/Emotional Problem
- Cancer
- Chronic Lung Disease
- Stroke
Mental (Cognitive) Retirement

• “Use it or lose it” (common in popular & scholarly literature)
  – Stave off normal cognitive aging or dementia by engaging in cognitively demanding activities
  – Converse: Un-demanding environment may fail to impede, or even accelerate, the process of cognitive decline

• Hypothesis that people can maintain their cognitive abilities through mental exercise is not proven…

• 2010 *Journal of Economic Perspectives*’ paper addresses the question—Does retirement leads to cognitive decline?
Figure 1
Drop in Cognitive Performance as a Function of Drop in Employment Rate between Men 50–54 and 60–64 Years Old
Engagement

- **What is it?**
  - Relates to emotional mental health (different than cognitive health)
  - Sense of well-being: what makes life or work worth doing

- **Related to new branch of psychology—positive psychology**
  - *Flourish* (Martin Seligman, 2011)

- **Why is engagement important?**
  - Engaged workers are more productive
    - Gallup tells us they are “more profitable, more customer-focused, safer, more likely to stay with organization.”
    - Disengaged workers erode organization effectiveness

- **How do you measure it?**
  - Has multiple elements
    - Gallup’s Q\textsuperscript{12} Employee Engagement Assessment
Federal Budget Deficits Will Reach Levels Never Seen Before in the U.S.

Recent budget deficits have reached unprecedented levels, but the future will be much worse. Unless entitlements are reformed, spending on Social Security, Medicare, and Medicaid will drive deficits to unsustainable levels.

Source: Congressional Budget Office (Alternative Fiscal Scenario).
National Debt Set to Skyrocket

In the past, wars and the Great Depression contributed to rapid but temporary increases in the national debt. Over the next few decades, runaway spending on Social Security, Medicare, and Medicaid will drive the debt to unsustainable levels.

DEBT AS A PERCENTAGE OF GDP

Social Security Facts

In 2013, almost 58 million Americans will receive $816 billion in Social Security benefits.

<table>
<thead>
<tr>
<th>June 2013 Beneficiary Data</th>
<th>Retired workers</th>
<th>dependents</th>
<th>Disabled workers</th>
<th>dependents</th>
<th>Survivors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>37 million</td>
<td>$47.4 billion</td>
<td>$1,269 average monthly benefit</td>
<td>2.9 million</td>
<td>$1.8 billion</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8.9 million</td>
<td>$10 billion</td>
<td>$1,129 average monthly benefit</td>
<td>2.1 million</td>
<td>$.69 billion</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6.2 million</td>
<td>$6.6 billion</td>
<td>$1,221 average monthly benefit</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Cost of Social Benefits

• **Social Security Retirement Benefits**
  – In 1935, average life span at birth was 62
    • So, retirement benefits started at 65!
    • Was designed to be program of limited application
  – Rising SS costs squeezes out discretionary spending

• **Medicare**
  – Rising costs due to aging population with chronic medical conditions related not to genetics, but to lifestyle, therefore to modifiable factors
  – Rising SS costs squeezes out discretionary spending

• Projected 75-year unfunded liabilities SSR and Medicare now total $40 trillion
Social Security Disability Insurance

- Cost of cash benefits for SSDI has increased dramatically since its inception.
- Since 1990,
  - Total disability cost has risen 93%
  - Number of disabled-worker beneficiaries has increased 84 percent
    - Disabled widow(er)s, 105 percent
    - Disabled adult children, 24 percent.
- Increase in the number of people collecting SSDI is 4x that expected from demographic trends

Billions of 2003 dollars

- Disabled workers
- Disabled widow(er)s
- Disabled adult children
- Children
- Spouses

“Fixing” Entitlement Programs

• What is the real problem?
  – Is the system the problem; or
  – Is the workforce the problem?

• System Solutions Involve Rule Tinkering
  – Reducing eligibility for benefits
    • Increasing the age for full benefits
      – Italy now indexed to life expectancy
  – Reducing benefit amounts
  – SSDI—Hotel California?
    • More sensible definition of disability
    • More frequent re-evaluations
Is There Another Fix?

- Healthier workforce
  - SSDI—Not disabled during working lives
  - SSA—Extend working life
  - Medicare—Healthier @ 65 years

- Present value of disability-insurance benefits, plus Medicare costs, per new disabled worker, is > $300,000

- $300 billion = cost of 1m new disabled-worker awards in last 12 months
  - Boskin (WSJ, July 15, 2013)
Keeping Healthy: While Working & Aging Productively
Healthier Workers Make Healthier Retirees

• Case-control study (yet to be done):

  – **Cases:** Workers exposed to employers who both protect the health of workers and actively promote worker health and wellness

  – **Controls:** Workers exposed to employers who do not protect and/or promote worker health and wellness

  – **Outcomes:**
     • Measure the cost to Medicare and SSDI of cases and controls over time
Employment-Based Wellness Programs

• Have been in use for a long time

• Can be divided into two general categories:

  • Participatory wellness
    – Do not require worker to meet a health-related standard to obtain a reward or do not offer a reward at all
    – Complies with non-discrimination requirements as long as participation is made available to all similarly-situated workers regardless of health status
    – No limit on financial incentives

  • Health-contingent
    – Require workers to satisfy a standard related to a health factor to obtain a reward
    – Activity-only wellness
      » No requirement to attain a specific health outcome
    – Outcome-based wellness
      » Requires worker to attain a specific health outcome
Along Comes the ACA

- ACA encourages WWPs related to group health coverage for plan years after 1 January 2014

- Concerns:
  - A type of stealth health status underwriting?
  - Paternalistic?
  - Wellness self-touting big industry?
  - Time-consuming obligations?
  - Employer invests, what’s the return on that investment?
  - Discrimination against the unhealthy?

- Regulations on that implement ACA’s nondiscrimination requirements for health-contingent WWPs (June 3, 2013)

- WWPs are just one prevention tool found in the ACA, but they have attracted the most attention of late
Wellness Wars Over ROI

- January 2013
  - Lewis. *Is it time to re-examine workplace wellness ‘get well quick’ schemes?*
  - Goetzel. *On workplace wellness: Don’t throw the baby out with the bathwater*

- March 2013
  - Horwitz. *Wellness incentives in the workplace: cost savings through cost shifting to unhealthy lifestyles*
  - Gowrisandkaran. *A hospital system’s wellness program linked to health plan enrollment cut hospitalizations but not overall costs*

- April 2013
  - Goetzel. *Structuring legal, ethical and practical workplace health incentives: A reply to Horwitz, Kelly and DiNardo*

- May 2013
  - Mattke. *Workplace wellness programs study: final report (RAND)*

- June 2013
  - Lewis. *Here comes Obamacare’s ‘workplace wellness’*
Scientific Evidence

• Hierarchy of Types of Evidence
  – Opinion, testimony, anecdote, small study, large study, prospective
  – Studies conforming to rules of science & whose limitations are clearly identified

• NIOSH TWH™
  – Supports scientific research & critical discourse on wellness
  – Interested in funding science to determine sound public policy

• Wellness Wars Discussion on Return on Investment:
  – Nature of return, timeframe for measurement depends on who is doing the investing
  – If measuring population health changes, ROI may have to be measured not in months or years, but in decades
  – For example, if smoking cessation and lowering risk of lung cancer is a goal of wellness…for former smokers, the risk of lung cancer takes several decades to match that of a lifetime non-smoker
Total Worker Health™

Comprehensive organizational strategy for the Nation that:

*Integrates* occupational health *protection* with wellness *promotion* to advance worker well-being in life *and* work.
Total Worker Health™: Strategic Goals

• Help reverse alarming trends in population health by concentrating on the proportion of Americans who are workers.

• Develop an evidence-based prevention framework for total worker health—using an integrated approach to protection and promotion (well-being).

• Promote and fund scientific research into what programs work best for which employers, establishments, workers

• Promote understanding of total worker health to the worker, the worker’s family, the employer & the insurer, and in doing so ensure the economic growth of the Nation.
## Issues Relevant to a TOTAL WORKER HEALTH™ Perspective*

### WORKPLACE

**Protecting Worker Safety & Health**

- Control of Hazards & Exposures:
  - Chemicals
  - Physical Agents
  - Biological Agents
  - Psychosocial Factors
  - Organization of Work

- Prevention of Injuries, Illness & Fatalities

- Promoting Safe & Healthy Work:
  - Management Commitment
  - Safety Culture/Climate
  - Culture of Health
  - Hazard Recognition Training
  - Worker Empowerment

- Risk Assessment & Control:
  - Making the Safety & Health Case
  - Assessing All Risks
  - Controlling All Risks
  - Root Cause Analysis
  - Leading/Lagging Indicators

### EMPLOYMENT

**Preserving Human Resources**

- New Employment Patterns:
  - Precarious Employment
  - Part-time Employment
  - Dual Employers
  - Changing Demographics
  - Increasing Diversity
  - Aging Workforce
  - Multigenerational Workforce
  - Global Workforce

- Health & Productivity:
  - Leadership Commitment to Health-Supportive Culture
  - Fitness-for-Duty
  - Reducing Presenteeism
  - Reducing Absenteeism
  - Workplace Wellness Programs

- Healthcare & Benefits:
  - Increasing Costs
  - Cost Shifting to Workers
  - Paid Sick Leave
  - Electronic Health Record
  - Affordable Care Act
  - HIPAA* Health Information Privacy

### WORKERS

**Promoting Worker Health & Well-Being**

- Optimal Well-Being:
  - Employee Engagement
  - Health & Well-Being Assessments
  - Healthier Behaviors
    - Nutrition
    - Tobacco Use Cessation
    - Physical Activity
    - Work/Life Balance
  - Aging Productively
  - Preparing for Healthier Retirement
  - Policy & Built Environment Supports

- Workers with Higher Health Risks:
  - Young Workers
  - Low-Income Workers
  - Migrant Workers
  - Workers New to a Hazardous Job
  - Differently-Abled Workers
  - Veterans

- Compensation & Disability:
  - Disability Evaluation
  - Reasonable Accommodations
  - Return-to-Work
  - Social Security Disability Insurance

---

*Issues in these lists are for illustrative purposes, are not meant to be exhaustive nor do they necessarily reflect equivalent importance.

*Health Insurance Portability and Accountability Act

**Updated:** August 2013
Who is responsible for worker health?

• Worker?
• Employer?
• Manufacturers?
• Healthcare provider?
• Health insurers?
• Workers’ compensation insurers?
• Government?
• Nobody?
• Everybody?
In Closing

• *Ida May Fuller*
  – 1st American to receive a monthly Social Security check
  – Ida paid in $24.75 and got out $22,288.92
  – She died at age 100!

• *Winston Churchill*
  – Reached age of 65 with a career regarded as a failure
  – Had he “retired” then, he would never become prime minister, never made world-famous speeches, never saved Britain from Hitler, or topped every poll since of the greatest Britons ever…
References

• Baicker K et al. Workplace wellness programs can generate savings. Health Affairs 2010;29(2):1-8
• Berman M et al. Estimating the cost of a smoking employee. Tobacco Control 2013 (June 3 ePrint)
• GAO. Older Workers: Enhanced Communication among Federal Agencies Could Improve Strategies for Hiring and Retaining Experienced Workers. GAO-09-206 (February 24, 2009).
• Gowrisankaran G. et al. A hospital system’s wellness program linked to health plan enrollment cut hospitalizations but not overall costs. Health Affairs 2013;32 (3):477-485
• Horwitz J. Wellness incentives in the workplace: cost savings through cost shifting to unhealthy workers. Health Affairs 2013;32(3):468-476
References

References